

THOMAS M. DESUTTER

North Dakota State University
School of Natural Resource Sciences: Soil Science
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EDUCATION

- Ph.D. Agronomy** May 2004. Kansas State University (KSU), Manhattan, KS.
Dissertation: Impacts of animal waste lagoons on the environment. Advisors: G.M. Pierzynski (Major Professor), J.M. Ham, G.J. Kluitenberg, A. Bhandhari.
- M.S. Plant Science** May 1998. South Dakota State University (SDSU), Brookings, SD.
Thesis: Agrichemical concentrations on wind and nonwind-erodible sediment sizes as influenced by time, sediment size, and sorption-desorption characteristics. Major Professor: Dr. S.A. Clay.
- B.S. Geography, Environmental Management** May 1994. SDSU. (minors in Soil Science and Chemistry)

EMPLOYMENT HISTORY

- 2025-present University Distinguished Professor of Soil Science, School of Natural Resource Sciences: Soil Science, North Dakota State University, Fargo, ND (NDSU)
- 2025-present Associate Director of the School of Natural Resource Sciences, NDSU
- 2018-2025 Professor-School of Natural Resource Sciences: Soil Science, NDSU
- 2023 Served as 0.4 FTE in the Provost Office to help answer questions on Promotion and Tenure Evaluation
- 2013-2018 Associate Professor with Tenure-Department of Soil Science within the School of Natural Resource Sciences, NDSU, Fargo, ND
- 2011-present Program Leader for Department of Soil Science, NDSU
- 2006-2013 Assistant Professor-Department of Soil Science, NDSU
- 2004-2006 Research Agronomist (Post-Doc)-USDA/ARS National Soil Tilth Laboratory, Ames, IA
- 2001-2004 Graduate Research Assistant – Department of Agronomy
KSU, Manhattan, KS
- 1997-2001 Assistant Scientist– Department of Agronomy
KSU, Manhattan, KS
- 1994-1997 Graduate Research Assistant – Plant Science Department
SDSU, Brookings, SD
- 1994 Field Projects Coordinator – Plant Science Department
SDSU, Brookings, SD
- 1993-1994 Laboratory Assistant – Plant Science Department
SDSU, Brookings, SD

RESEARCH INTERESTS

Environmental soil science; disturbances of soil from energy-extraction; feasibility of coal by-products for agricultural uses; soil salinity and sodicity; cation selectivity of soils, minerals, and by-products; the distribution and concentrations of mercury and other trace elements in soils; phosphorus concentration and distributions in soil.

TEACHING**Core Courses Taught**

SOIL 721, Environmental Field Instrumentation and Sampling, 2 credits (odd yrs, Fall).
 SOIL 410/610, Soil and Land Use, 3 credits (Spring 2007-2022).
 SOIL 444/644, Soil Genesis and Classification, 3 credits (even yrs, Fall)
 Soil and Watershed Management, 4 credits, Chulalongkorn University, Bangkok, Thailand
 (Fall, 2007; Spring, 2010; Fall 2012; Spring 2016, teach two weeks of soil management).
 SOIL 210, Introduction to Soil Science, 3 credits (Fall 2022)

ADVISING**Graduate Students Advised****Major or Co-Major Advisor (current)**

PhD	Beverly Alvarez-Torres
PhD	Chantel Mertz
PhD	Szilvia Yuja (with Kelsey Griesheim)
MS	Robert Sam
MS	Aaron Ostlund
MS	Violet Eagle (with Miranda Meehan)
MS	Amanda Jenkins (with Miranda Meehan)
MS	Patrick Rugamba

Major or Co-Major Advisor (completed; Soil Science unless otherwise noted)

Pensiri Akkajit, PhD (Co-advisor, Chulalongkorn Univ., Bangkok, Thailand)
 Shokhrukh Jalilov, MS, NRM (with Jay Leitch)
 Lee Briese, MS
 Adam Guy, MS
 Yangbo He, MS
 Yangbo He, PhD
 Kimberly Zitnick, MS (with Frank Casey)
 Skye Gabel, MS (with Jack Norland)
 Mikayla Boche, MS, NRM
 Sukhwinder Bali, MNRM
 Eric Schultz, MS (with David Franzen)
 Maria Breker, MS
 Heather Matthees, PhD
 Kirsten Butcher, MS (with Abbey Wick)
 Samantha Ritter, MS
 Peter O'Brien, PhD
 Samantha Croat, MS (with Caley Gasch)
 Aaron Green, MS, NRM (with Miranda Meehan)
 Megan Ostrand, MS (with Aaron Daigh)
 Hannah Ohm, MS (with Christina Hargiss)
 Jarrett Lardy, MS (with Miranda Meehan)
 Annalie Peterson, MS
 Hunter Ripplinger, MS
 Zachary Bartsch, MS
 Nicholas Birkhimer, MS
 Brady Goettl, PhD (with Dave Franzen)
 Audrey Rhodes, MS

PROFESSIONAL MEMBERSHIPS

Soil Science Society of America. 1998-present.
 American Society of Agronomy. 2013-present.
 American Society of Reclamation Sciences. 2021-present.
 Canadian Soil Science Society 2016-2021.
 The American Association for the Advancement of Science. 2009-2011.
 Clay Minerals Society. 2002-2004.
 American Water Resources Association. 2003.
 Professional Soil Scientists of South Dakota. 1995-1997.
 Gamma Sigma Delta, The Honor Society of Agriculture. 1997-present.
 Gamma Theta Upsilon, Geographic Honor Society. 1994-present.

AWARDS AND HONORS

2025 NDSU University Distinguished Professor
 2024 Recipient of the Soil Science Society of America Fellow Award
 2023 Recipient of American Society of Agronomy Fellow Award
 2020 Recipient of the NDSU Phi Kappa Phi Faculty Lectureship
 2020 Recipient of the NDSU College of Agriculture, Food Systems, and Natural Resources Eugene R. Dahl Excellence in Research Award
 2020 Finalist for the NDSU Faculty Lectureship Award
 2019 Recipient of the NDSU College of Agriculture, Food Systems, and Natural Resources H. Roald and Janet Lund Excellence in Teaching Award
 2019 Finalist for the NDSU Phi Kappa Phi Faculty Lectureship
 2019 Appointed by the Governor to serve on the ND Department of Environmental Quality Advisory Council
 2015 Teaching Award of Merit, North American Colleges and Teachers of Agriculture
 2015 Announcer for Recognition of Donors and Students, Scholarship Recognition Luncheon, CAFSNR
 2014 Guest Professor for the Coastal Agricultural Research Institute, Hebei Academy of Agricultural and Forestry Sciences
 2014 Adjunct status in the Plant Science Department at South Dakota State University
 2014 Nominated for the NDSU Awards for Excellence in Advising of Undergraduates
 2012 Recipient of the NDSU College of Agriculture, Food Systems, and Natural Resources Larson/Yaggie Excellence in Research Award
 2011 Nominated for the NDSU College of Agriculture, Food Systems, and Natural Resources William J. and Angelyn A. Austin Advising Award.
 2010 Nominated for the NDSU College of Agriculture, Food Systems, and Natural Resources William J. and Angelyn A. Austin Advising Award.
 2010 Citation for Excellence in Manuscript Review from the Soil Science Society of America
 2010 Education research "Integrating Field-based Research into the Classroom" highlighted in Crops, Soils, Agronomy News (October).
 2009 Nominated for the NDSU College of Agriculture, Food Systems, and Natural Resources Earl and Dorothy Foster Excellence in Teaching Award.
 2008 Nominated for the NDSU College of Agriculture, Food Systems, and Natural Resources Earl and Dorothy Foster Excellence in Teaching Award.
 2005 Emil Truog Soil Science Award presented by the Soil Science Society of America.
 2005 Certificate of Merit, United States Department of Agriculture. "For Superior Performance in the Development of a Soil Carbon Monitoring System."
 2003 Ray Throckmorton Graduate Scholarship, KSU, Department of Agronomy.
 2002 Neal F. and Florence E. Morehouse Graduate Scholarship, KSU, Department of Agronomy.
 2001 Roscoe Ellis, Jr. Graduate Scholarship, KSU, Department of Agronomy.

- 1995 Best poster award at Department of Environmental and Natural Resources 7th Annual Groundwater Quality Conference sponsored by South Dakota Association of Environmental Professionals.

COLLEGE ACTIVITIES

Agronomy Graduate Student Association (KSU). 2001-2004.
Vice President. 2002.
Plant Science Graduate Student Association (SDSU). 1994-1997.
Co-chairperson. 1995-1996.
Mentor. 1996-1997.
SDSU Students' Association Senator. 1996-1997.
Board of Directors. 1996-1997.

COMMITTEES

2025

Search Committee Chair for interim-Director of Vet. Diagnostic Laboratory
School of Natural Resource Sciences Awards and Nomination Committee
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Scholarship Committee
NDSU Faculty Senate Standing Committee of Faculty Rights (chair, until May)
State of North Dakota Dept. of Environmental Quality Environmental Review Advisory Council
CAFSNR Promotion and Tenure Committee (chair, until May)

2024

Editor for *Agricultural and Environmental Letters*
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
School of Natural Resource Sciences Scholarship Committee
NDSU Faculty Senate Standing Committee of Faculty Rights (chair)
State of North Dakota Dept. of Environmental Quality Environmental Review Advisory Council
NDSU Graduate Student Insurance Committee
NDSU Faculty Awards co-chair
CAFSNR Promotion and Tenure Committee (chair)

2023

Editor for *Agricultural and Environmental Letters*
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
School of Natural Resource Sciences Scholarship Committee
CAFSNR Promotion and Tenure Committee (chair)
NDSU Faculty Senate Standing Committee of Faculty Rights (chair)
State of North Dakota Dept. of Environmental Quality Environmental Review Advisory Council
CAFSNR Scholarship Committee
NDSU Graduate Student Insurance Committee

2022

Editor for *Agricultural and Environmental Letters*
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
School of Natural Resource Sciences Scholarship Committee
CAFSNR Promotion and Tenure Committee (chair)
NDSU Faculty Senate Standing Committee of Faculty Rights
NDSU Fishing Club Advisor
State of North Dakota Dept. of Environmental Quality Environmental Review Advisory Council
CAFSNR Scholarship Committee

2021

Editor for *Agricultural and Environmental Letters*

School of Natural Resource Sciences Assessment/Curriculum Committee

School of Natural Resource Sciences Graduate Committee

School of Natural Resource Sciences Scholarship Committee

School of Natural Resource Sciences Strategic Planning Committee (co-chair)

CAFSNR Promotion and Tenure Committee (chair)

CAFSNR research awards committee (chair)

NDSU Faculty Senate Standing Committee of Faculty Rights

NDSU Fishing Club Advisor

State of North Dakota Dept. of Environmental Quality Environmental Review Advisory Council

CAFSNR Scholarship Committee

2020

Editor for *Agricultural and Environmental Letters*

School of Natural Resource Sciences Assessment/Curriculum Committee

School of Natural Resource Sciences Graduate Committee

Chair for Department of Soil Science Scholarship Committee

CAFSNR Promotion and Tenure Committee

NDSU Faculty Senate

NDSU Fishing Club Advisor

State of North Dakota Dept. of Environmental Quality Environmental Review Advisory Council

2019

Editor for *Agricultural and Environmental Letters*

School of Natural Resource Sciences Assessment/Curriculum Committee

School of Natural Resource Sciences Graduate Committee

Chair of search committee for SNRS lecturer position

Soil Science Scholarship Committee (chair)

Search Committee for Associate Director of the North Dakota Agricultural Experiment Station

NDSU Faculty Senate

NDSU Fishing Club Advisor

State of North Dakota Dept. of Environmental Quality Environmental Review Advisory Council

2018

Technical Editor for *Agricultural and Environmental Letters*

Soil Science Scholarship Committee (chair)

School of Natural Resource Sciences Assessment/Curriculum Committee

School of Natural Resource Sciences Graduate Committee

NDSU Faculty Senate

2017

Advisory Board for Hettinger Research and Extension Center

Technical Editor for *Agricultural and Environmental Letters*

Faculty Senate Program Review Committee (chair)

Duncan Scholarship selection committee, CAFSNR

Soil Science Scholarship Committee (chair)

School of Natural Resource Sciences Assessment/Curriculum Committee

School of Natural Resource Sciences Graduate Committee

AES Strategic Planning Committee

2016

Chair for the American Society of Agronomy Environmental Quality Section

Nomination committee for ASA President-Elect and Finance Board Representative

Advisory Board for Hettinger Research and Extension Center

Technical Editor for *Agricultural and Environmental Letters*

Faculty Senate Program Review Committee (chair)

Duncan Scholarship selection committee, CAFSNR

Soil Science Scholarship Committee (chair)
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
Chair of search committee for SNRS AES faculty position
AES Strategic Planning Committee

2015

Vice Chair for the American Society of Agronomy Environmental Quality Section
Associate Editor for Soil Science Society of America Journal
Advisory Board for Hettinger Research and Extension Center
Technical Editor for *Agricultural and Environmental Letters*
Faculty Senate Program Review Committee
Dahl, and Larson/Yaggie research awards selection committee, CAFSNR
Soil Science Scholarship Committee (chair)
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
BSL2 Greenhouse Committee, CAFSNR

2014

Soil Science Scholarship Committee (chair)
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
Interim Chair Soil Science Society of America Science Policy Committee (S592)
Chair of Soil Science Society of America Lloyd R. Frederick Soil Teaching Travel Study Award Committee
Advisory Board for Hettinger Research and Extension Center
Council of College Faculties (NDSU and North Dakota University System)
Associate Editor for *Soil Science Society of America Journal*
Faculty Senate Faculty Affairs Standing Committee
Faculty Senate Program Review Committee
BSL2 Greenhouse Committee, CAFSNR

2013

NDSU Faculty Senate (spring)
NDSU Faculty Senate Executive Board (spring)
Soil Science Scholarship Committee (chair)
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
Soil Science Society of America Science Policy Committee (S592)
Chair of Soil Science Society of America Lloyd R. Frederick Soil Teaching Travel Study Award Committee
Advisory Board for Hettinger Research and Extension Center (NDSU)
Council of College Faculties (NDSU and North Dakota University System)
Associate Editor for *Soil Science Society of America Journal*
Faculty Senate Faculty Affairs Standing Committee
Dahl, and Larson/Yaggie research awards Selection Committee, CAFSNR

2012

NDSU Faculty Senate
NDSU Faculty Senate Executive Board (fall)
Space Allocation Committee, College of Agriculture, Food Systems, and Natural Resources
Soil Science Scholarship Committee (chair)
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
Chair of search committee for Soil Health AES faculty position
Co-Chair of search committee for Soil Health Extension faculty position and two Research and Extension Center Soil Health positions

Speakers Bureau Committee (Soil Science Society of America)
Soil Science Society of America Science Policy Committee (S592)
Advisory Board for Hettinger Research and Extension Center (NDSU)

2011

NDSU Faculty Senate (fall)
Space Allocation Committee, College of Agriculture, Food Systems, and Natural Resources
Soil Science Scholarship Committee (chair)
School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
Chair of search committee for Soil Health AES faculty position
Co-Chair of search committee for Soil Health Extension faculty position and two REC Soil Health positions
Ad-Hoc committee for SNRS Academic Roadmap
NDSU Bookstore Advisory Committee (spring)
Speakers Bureau Committee (Soil Science Society of America)
Soil Science Society of America Science Policy Committee

2010

School of Natural Resource Sciences Assessment/Curriculum Committee
School of Natural Resource Sciences Graduate Committee
Soil Science Scholarship Committee (chair)
NDSU Faculty Senate
NDSU Bookstore Advisory Committee (fall)

2009

Emil Truog Soil Science Award Committee, Soil Science Society of America
Space Allocation Committee, College of Agriculture, Food Systems, and Natural Resources
Soil Science Scholarship Committee (chair)
Natural Resources Management Steering Committee
College of Agriculture, Food Systems, and Natural Resources Curriculum Committee
College of Agriculture, Food Systems, and Natural Resources Awards Committee

2008

Chair for undergraduate curriculum redevelopment in the Department of Soil Science
Emil Truog Soil Science Award Committee, Soil Science Society of America
Space Allocation Committee, College of Agriculture, Food Systems, and Natural Resources
Soil Science Scholarship Committee (chair)
Search committee member for a Livestock Waste Engineer in the Department of Agricultural and Engineering
Search committee member for a Weed Biologist/Ecologist in the Department of Plant Sciences

LEADERSHIP TRAINING

LEAD21, Leadership for the 21st Century (Class 13) graduate. 2017-2018.

PUBLICATIONS

Peer-Reviewed

1. Batool, S.M., S.S. Batool, M. Ahmad, M.U. Hassan, M. Meehan, T. DeSutter, B.D. Braaten, and P.G. Oduor. 2026. Enhanced CO₂ detection using Schottky conduction mechanism in 2D MOF/MXene hybrid vertical sensing device. J. Mater. Sci. <https://doi.org/10.1007/s10853-025-12065-0>
2. Batool, S.S., S.M. Batool, T. DeSutter, M. Meehan, and P.G. Odour. 2026. Smart bioaerosol monitoring: Advanced sampling and sensing across environmental, clinical, and industrial domains. ACS Omega DOI: 10.1021/acsomega.5c09151

3. Khan, M.T., H. Yadav, H. Deng, M.H. Hasan, S. Fernando, T. DeSutter, N. Aich, M. Ateia, B. Xiong, and S.M. Iskander. 2026. Does crack morphology govern PFAS sorption in landfilled plastics? *J. Haz. Mat.* <https://doi.org/10.1016/j.jhazmat.2026.141234>
4. Daigh, A.L.M., U. Acharya, B. Maharjan, and T. DeSutter. 2025. Soil management legacy provides resiliency to salinization: Insights of soil processes and indicators from a case study. *Geod. Reg.*: 43, e01034. <https://doi.org/10.1016/j.geodrs.2025.e01034>
5. Goettl, B., H. Da Ros Carvalho, J. Heitman, and T. DeSutter. 2025. The impact of residue and cover crop management on soil water and temperature regimes in a loam soil in North Dakota. *Agrosyst. Geosci. Environ.* 2025;8:e70223. <https://doi.org/10.1002/agg2.70223>
6. Goos, R.J., and T.M. DeSutter. 2025. Soil cation exchange capacity: A new method for soil science laboratories. *Nat. Sci. Educ.* 54:e70014. <https://doi.org/10.1002/nse2.70014>
7. Maisha, R., D.D. Steele, A.L.M. Daigh, X. Jia, T. DeSutter, and C.M.U. Neale. 2025. Comparative analysis of four weather sensors for irrigation water management. *Agrosyst. Geosci. Environ.* 2025;8:e70268. <https://doi.org/10.1002/agg2.70268>
8. Saha, B., M. Ateia, S. Fernando, T. DeSutter, and S. Md Iskander. 2025. Leachate recirculation to reduce PFAS discharge from landfills. *Sci. Tot. Env.*: 1008, 181010. <https://doi.org/10.1016/j.scitotenv.2025.181010>
9. Peterson, A.R., T.M. DeSutter, A.L.M. Daigh, M.A. Meehan, and N. Derby. 2024. Effects of calcium amendments on hydraulic conductivity and sodium content of brine-impacted soils. *Agrosyst. Geosci. Environ.* 2024;7:e20556. <https://doi.org/10.1002/agg2.20556>
10. Goettl, B., T. DeSutter, H. Bu, A. Wick, and D. Franzen. 2024. Managing nitrogen to promote quality and profitability of North Dakota two-row malting barley. *Agron. J.* DOI: 10.1002/agj2.21538
11. Goettl, B., B. Anderson, T. DeSutter, D. Franzen, and A. Wick. 2024. Interseeded cover crops in wide-row corn: An opportunity for northern cropping systems. *Crop For. Turf. Mang.* 10:e20268. DOI: <https://doi.org/10.1002/cft2.20268>
12. O'Brien, P.L., T.M. DeSutter, F.X.M. Casey, A. Wick, Z.J. Bartsch, S.J. Croat, and S. Struffert. 2024. Oil spill soil remediation using thermal desorption: Project synthesis and outcomes. *Agro. Geosci. Env.* 7:e20463. DOI: 10.1002/agg2.20463
13. Ohm, H., T.M. DeSutter, C.L. Hargiss, K.A. Anderson, N.E. Derby, and B. Alvarez-Torres. 2024. Soil information for urban customers. *Urban Ag Reg. Food Syst.* <https://doi.org/10.1002/uar2.20054>.
14. Saha, B., M. Ateia, S. Fernando, J. Xu, T. DeSutter, and S. Md Iskander. 2024. PFAS occurrence and distribution in yard waste compost indicate potential volatile loss, downward migration, and transformation. *Env. Sci. Proc. Imp.* DOI: 10.1039/d3em00538k
15. Álvarez Torres, B., D.R. Sotomayor Ramírez, J.P. Castro Chacón, G. Martínez Rodríguez, L. R. Pérez Alegría, and T.M. DeSutter. 2023. An alternative method to measure electrical conductivity (EC) and sodium adsorption ratio (SAR) in salt-affected soil extracts. *Frontiers Env. Sci.* DOI 10.3389/fenvs.2023.1108272

16. Bais, J., H. Kandel, T. DeSutter, E. Deckard, and C. Keene. 2023. Soybean response to N fertilization compared with co-inoculation of *Bradyrhizobium japonicum* and *Azospirillum brasilense*. *Agronomy* 13: 2022.
17. Bartsch, Z., T. DeSutter, and C. Gasch. 2023. Microbial activity and hard red spring wheat growth improvement following biostimulant application. *Agro. Geosci. Env.* 6:e20332
18. Birkhimer, N., T. DeSutter, K. Jore, M. Meehan, and J. Staricka. 2023. Effects of pipeline and well-pad reclamation on topsoil properties: A meta-analysis. *Agro. Geosci. Env.* 6:e20387.
19. Lardy, J., T. DeSutter, M. Meehan, A. Daigh, J. Staricka, and N. Derby. 2023. Evaluation of land preparation methods for soil stabilization, revegetation, and renewed productivity in semi-arid climates. *Agro. Geosci. Env.* 6:e20442.
20. Bartsch, Z., T. DeSutter, C. Gasch, and F. Casey. 2022. Plant growth, soil properties, and microbial community four years after thermal desorption. *Agron. J.* 114:1011–1026.
21. DeSutter, T.M., and N. Derby. 2022. Water movement in sodic soils explained through hands-on demonstrations. *Nat. Sci. Educ.* 51:e20089
22. Green, A.W., T.M. DeSutter, M.A. Meehan, and A.L.M. Daigh. 2022. Brine spill remediation utilizing capillary transport and wicking materials in loam and silty clay soils. *Agro. Geosci. Env.* 5:e20237.
23. Lardy, J.M., T.M. DeSutter, A.L.M. Daigh, M.A. Meehan, and J.A. Staricka. 2022. Effects of soil bulk density and water content on penetration resistance. *Agric. Env. Lett.* 7:e20096
24. Almen, K., X. Jia, T. DeSutter, T. Scherer, and M. Lin. 2021. Impact of controlled drainage and subirrigation on water quality in the Red River Valley. *Water* 13:308.
25. Ostrand, M.S., T.M. DeSutter, D.D. Steele, R.F. Limb, and A.L.M. Daigh. 2021. Can a superabsorbent polymer help remediate compaction in frigid, semiarid soils?- a laboratory evaluation on soil physical processes. *Arid Land Res Mangt.* DOI:10.1080/15324982.2021.1887399
26. Casey, F.X.M., H. Hakk, and T.M. DeSutter. 2020. Free and conjugated estrogens detections in drainage tiles and wells beneath fields receiving swine manure slurry. *Env. Pollut.* 256: 113384. DOI: 10.1016/j.envpol.2019.113384
27. Cigelske, B.D., H. Kandel, and T.M. DeSutter. 2020. Soybean nodulation and plant response to nitrogen and sulfur fertilization in the Northern US. *Agric. Sci.* 11:592-607.
28. Croat, S.J., P.L. O'Brien, C.K. Gasch, F.X.M. Casey, and T.M. DeSutter. 2020. Crop production on heavily disturbed soils following crude oil remediation. *Agron. J.* 112: 130-138.
29. Croat, S.J., S.J. Croat, T.M. DeSutter, F.X.M. Casey, and P.L. O'Brien. 2020. Phosphorus sorption and desorption in soils treated by thermal desorption. *Wat. Soil Air Pollut.* 231: 216-224.
30. DeSutter, T.M., M. Breker, A. Chatterjee, P.L. O'Brien, and A. Wick. 2020. Influences of soil amendments on alfalfa production and soil properties. *Crop For. Turf. Mang.* DOI: 10.1002/cft2.20043

31. Gasch, C., S. Mathews, A. Deschene, K. Butcher, and T. DeSutter. 2020. Permanganate oxidizable carbon for soil health: Does drying temperature matter? *Agric. Env. Lett.* DOI: 10.1002/acl2.20019
32. Green, A., T. DeSutter, M. Meehan, and A. Daigh. 2020. The remediation of brine-impacted soils and the impact of brine on soil physical, chemical, and biological properties: A review. *Agro. Geosci. Env.* <https://doi.org/10.1002/agg2.20042>
33. Green, A., M. Meehan, and T. DeSutter. 2020. Seed germination of selected crop and graminoid species in response to treatment within NaCl and oil-field brine solutions. *Can. J. Plant Sci.* <https://doi.org/10.1139/cjps-2019-0261>
34. Kruger, M., S. Sigdel, C. Gasch, T. DeSutter, J. Harmon, and A. Chatterjee. 2020. Soil carbon dioxide efflux from amended saline and thermally desorbed oil-contaminated subsoil. *Agro. Geosci. Env.* DOI: 10.1002/agg2.20100
35. Ostrand, M.S., T.M. DeSutter, A.L.M. Daigh, R.F. Limb, D.D. Steele. 2020. Superabsorbent polymer characteristics, properties, and applications. *Agro. Geosci. Env.* DOI: 10.1002/agg2.20074
36. Boche, M.J., T.M. DeSutter, and R.K. Kolka. 2019. Factors affecting soil total mercury in seasonal pond basins within a northern hardwood forest in Minnesota, USA. *Soil Sci. Soc. Am. J.* 83: 1263-1274.
37. Breker, J.S., T. DeSutter, M.K. Rakkar, A. Chatterjee, L. Sharma, and D.W. Franzen. 2019. Potassium requirements for corn in North Dakota: Influence of clay mineralogy. *Soil Sci. Soc. Am. J.* 83: 429-436.
38. Casey, F.X.M., H. Hakk, and T.M. DeSutter. 2019. Free and conjugated estrogens detections in drainage tiles and wells beneath fields receiving swine manure slurry. *Env. Pollut.* DOI:10.1016/j.envpol.2019.113384
39. Franzen, D.W., E.C. Schultz, T.M. DeSutter, L.K. Sharma, R. Ashley, and H. Bu. 2019. Sunflower type influences yield prediction using active optical sensors. *Agron. J.* 111: 881-888.
40. Gnoisky, A., C.L.M. Hargiss, D.P. Voldseth, and T. DeSutter. 2019. Road dust fails to impact soybean physiology and production. *Agron. J.* 111:1760-1769.
41. Graber, K., C.L.M. Hargiss, T. DeSutter, Y. He, and J.E. Norland. 2019. Dispersion of gravel road fine-fractions as influenced by oil-well produced water and simulated solutions of various SAR, EC, and Ca/Mg ratios. *Water Air Soil Pollut.* <https://doi.org/10.1007/s11270-019-4111-3>
42. Green, A.W., T.M. DeSutter, A.L.M. Daigh, and M.A. Meehan. 2019. Wicking salts from brine-contaminated soils: A potential method for in situ remediation. *Agric. Environ. Lett.* 4:180069
43. O'Brien, P.L., T.M. DeSutter, and F.X.M. Casey. 2019. Natural degradation of low-level petroleum hydrocarbon contamination under crop management. *J. Soils Sed.* 19:1367-1373.

44. Breker, M.C., T.M. DeSutter, A. Chatterjee, and A.F. Wick. 2018. Microbial response to sodic soil amendments: Flue-gas gypsum, by-product lime, and langbeinite. *Comm. Soil Sci. Plant Anal.* <https://doi.org/10.1080/00103624.2018.1547391>.
45. Butcher, K., A. Wick, T. DeSutter, J. Harmon, and A. Chatterjee. 2018. Corn (*Zea mays*) and soybean (*Glycine max*) yield response to salinity influenced by soil texture. *Agron. J.* 110:1–11 doi: 10.2134/agronj2017.10.0619
46. Eichele-Nelson, J.L., T.M. DeSutter, A.F. Wick, E.L. Harmon, and J.P. Harmon. 2018. Salinity improves performance and alters distribution of soybean aphids. *Env. Ent.* doi: 10.1093/ee/nvy072
47. He, Y., T. DeSutter, J. Norland, A. Chatterjee, F. Casey, and D. Clay. 2018. Prediction of Na variability and the development of sodic soil management zones in low-relief sodic soils. *Prec. Agric.* 19:858–875 <https://doi.org/10.1007/s11119-018-9561-x>
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Meeting Papers and Reports

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Book Chapters

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4. DeSutter, T. M., Clay, D. E., Oster, J. D., Westhoff, S., & Alvarez-Torres, B. (2024). Laboratory Methods for Determining Salinity and Sodicity. *Salinity and Sodicity: A Growing Global Challenge to Food Security, Environmental Quality and Soil Resilience*, 31.
5. Westhoff, S., DeSutter, T. M., Oster, J. D., & Clay, D. E. (2024). Water Management and Chemical Amendments in the Remediation of Saline and Sodic Soils. *Salinity and Sodicity: A Growing Global Challenge to Food Security, Environmental Quality and Soil Resilience*, 99.
6. Westhoff, S., Clay, D. E., Osterloh, K., Clay, S. A., DeSutter, T. M., Nleya, T., ... & Sandhu, D. (2024). An Introduction to Salinity and Sodicity. *Salinity and Sodicity: A Growing Global Challenge to Food Security, Environmental Quality and Soil Resilience*, 1.

Book Editor

David E. Clay, Thomas M. DeSutter, Sharon A. Clay, Thandiwe Nleya (editors). 2024. Salinity and Sodicity: A Global Challenge to Food Security, Environmental Quality and Soil Resilience Print ISBN:9780891183983. Online ISBN:9780891183976. DOI:10.1002/9780891183976. American Society of Agronomy, Inc.

Newsletters

1. Hopkins, D., and T. DeSutter. 2016. The sharpshooter's revenge, or beginner's luck? Soil Morphology and Micromorphology, International Union of Soil Sciences. Vol 26, p. 13-15.

Extension

1. Peterson, A., T. DeSutter, B. Saini-Eidukat, and M. Meehan. 2023. Origination of Produced Water (Brine) in the Williston Basin. NDSU Extension Circular WQ2083.
2. Meehan, M., K. Sedivec, T. DeSutter, C. Augustin, and A. Daigh. 2017. Environmental impacts of brine (produced water). NDSU Extension Circular R1850.
3. Kalwar, N., T. DeSutter, D. Franzen, and C. Augustin. 2016. Soil testing unproductive areas. NDSU Extension Circular SF1809.
4. Carlson, G., D.E. Clay, D.D. Malo, C.L. Reese, R. Kerns, T. Kharel, G. Birru, and T. DeSutter. 2016. The management and identification of saline and sodic soils in the northern Great Plains. iGrow Corn: Best Management Practices, Chapter 32. South Dakota State University.

PROFESSIONAL PRESENTATIONS

Invited

1. DeSutter, T., 2026. A practical use of CEC. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 21.
2. DeSutter, T. 2025. Bison to the Bakken: From a phone call to a career path and from learning to teaching (or, the party never stops and the work never ends!). Department of Soil Science Fall Seminar Series, University of Manitoba. Nov. 19.

3. DeSutter, T. 2025. "Simple" approaches for soil reclamation in water-limited environments. 3rd SSSA-SBCS joint webinar: Restoration strategies that promote healthy soils. Online. Dec 2.
4. DeSutter, T. 2025. How geology impacts soil management. Presented at the Growing strong: managing salinity, fertility and weeds. LaMoure, ND. February 26.
5. DeSutter, T. 2025. The Story of the Prairies: How Geology Impacts Soil Management. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 22.
6. Eagle, V., T. DeSutter, and M. Meehan. 2025. Soil compaction and plant establishment. Presented at the North Dakota Reclamation Conference. Watford City, ND, March 4 and 5.
7. Meehan, M., and T. DeSutter. 2025. Beneficial reuse of produced waters. Presented at the North Dakota Reclamation Conference. Watford City, ND, March 4 and 5.
8. Sam, R., and T. DeSutter. Predicting clay mineralogy for determining amendment best management practices. 2025. Presented at the North Dakota Reclamation Conference. Watford City, ND, March 4 and 5.
9. DeSutter, T. 2024. Soil sampling, analysis, and interpretation. Presented at the Sustainable Agronomy Conference-Managing soil health and other conservation challenges. July 17. ASA-CSSA-SSSA Webinars.
10. DeSutter, T. 2024. Reclamation of Soils Post-Energy Extraction: Strategies and Partnerships. Presented at the School of Environment and Natural Resources, The Ohio State University. October 1.
11. DeSutter, T., and A. Rhodes. 2024. Plant responses to salinity and waterlogging. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 17.
12. Alvarez-Torres, B., T. DeSutter, and A. Ostlund. Methods of measuring chloride. 2023. Presented at the North Dakota Reclamation Conference. Dickinson, ND, February 27-28.
13. DeSutter, T. 2023. Soil remediation after pipelines. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 18.
14. DeSutter, T. 2023. Effects of soil bulk density and water on penetration resistance. Presented at the North Dakota Reclamation Conference. Dickinson, ND, February 27-28.
15. DeSutter, T. 2023. Salinity versus sodicity: A demonstration. Presented at the North Dakota Reclamation Conference. Dickinson, ND, February 27-28.
16. DeSutter, T. 2023. Soil salinity fixes: Quick or patient. Presented at the Manitoba Agronomists' Conference, Winnipeg, MB. December 13-14.
17. DeSutter, T. 2023. Saline and sodic soils of western North Dakota. National Cooperative Soil Survey National Meeting. July 9-13.
18. DeSutter, T., and N. Derby. 2023. How field research is done and the tools that we use. Presented at the NDSU Extension Soil Health Field Day, Logan Center, ND. August 30.

19. Meehan, M., and T. DeSutter. 2023. Evaluating swine manure impacts to soil health in ND. Presented at the Powered by Pork community event. Lisbon, ND. May 6.
20. Mertz, C.M., and T.M. DeSutter. 2023. Salinity and plant response. Presented at the 2023 North Dakota Reclamation Conference, Dickinson, ND, February 27-28.
21. DeSutter, T. 2022. Your burning soil salinity and sodicity questions answered. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 19
22. DeSutter, T. 2022. Modern thoughts on sodicity. Presented at the National Cooperative Soil Survey Technical Planning Workshop. April 12. Virtual.
23. DeSutter, T. and N. Birkhimer. 2022. The effects of pipeline and well-pad reclamation on topsoil properties. Presented at the North Dakota Reclamation Conference. Dickinson, ND, March 1
24. DeSutter, T., and C. Knox. 2022. Soil washing. Presented at the North Dakota Reclamation Conference. Dickinson, ND, March 1
25. DeSutter, T., and K. Rockeman. Panel discussion regarding surface protection, reclamation, and remediation. Northwest Landowners Association annual meeting. Bismarck, ND, March 16.
26. DeSutter, T. 2021. Cation exchange: What is it, how it is measured, and does it matter? Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 20. Virtual.
27. DeSutter, T. 2021. Soil reclamation strategies. Presented at the North Dakota Farm Bureau Young Farm and Ranch Conference. February 6.
28. DeSutter, T. 2021. Managing saline and sodic soils. Presented at the Oklahoma 2021 Spring CCA Session 2. Stillwater, OK. April 6. Virtual.
29. DeSutter, T. 2021. Remediation of a large oil spill using thermal desorption: Impacts on soil productivity. Presented at Huazhong Agricultural University, Wuhan, China. June 2. Virtual.
30. DeSutter, T. 2021. Improving water flow in sodium-rich oilfield produced water-impacted soils. Presented at the First IUSS Conference on Sodic Soil Reclamation. Changchun, China. July 30-August 1. Virtual.
31. T. DeSutter. 2021. Salinity, crop response and water management. Presented at the NDSU Extension Crop and Soil Center Bagg Farm Field Day. August 25.
32. DeSutter, T., and N. Leonardo Silva. 2021. Where Oil Meets Soil: The Science and Management of Spills in North Dakota Farmland. Presented at the University of California Santa Cruz Environmental Studies Seminar Series. November 1. Virtual.
33. DeSutter, T. 2021. The Do's and Don'ts of Managing Salinity. Presented at the Wells County Winter Show. December 9.

34. DeSutter, T. 2020. Transformative power of soil. Phi Kappa Phi Faculty Lectureship, NDSU. Dec. 8.
35. DeSutter, T. 2020. Current and Potential Remediation Strategies for Brine Spills. Keynote Address for the North Dakota Reclamation Conference. Dickinson, ND February 25-26.
36. DeSutter, T., P. O'Brien, S. Croat, C. Gasch, F. Casey, and A. Wick. 2020. Soil recommendations after the largest oil spill in US History-The Tioga Experience. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 22.
37. Croat, S., T. DeSutter, P. O'Brien, C. Gasch, and F. Casey. 2019. The 2013 Black Slough pipeline release in Mountrail County, North Dakota: A summary of research results. Presented at the North Dakota Chapter Soil and Water Conservation Society Summit. Medora, ND, September 18-19.
38. DeSutter, T. 2019. Smallholder farming: food security and soil health. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 23.
39. DeSutter, T. 2019. Taking the burn out of acid soils. Presented with Franzen and Clark at the Advanced Crop Advisers Workshop, Fargo, ND, February 12-13.
40. DeSutter, T., P. O'Brien, S. Croat, C. Gasch, and F. Casey. 2019. The 2013 Black Slough pipeline release in Mountrail County, North Dakota: A summary of research results. Presented at the 7th Annual ND Reclamation Conference, Dickinson, ND, February 25-26.
41. DeSutter, T. 2018. The gypsum requirement equation for sodic soils: What's the app about? Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 17.
42. DeSutter, T. 2018. Salty language. Presented at the Advanced Crop Advisers Workshop. Fargo, ND, February 13.
43. DeSutter, T. 2017. Soil and health. Presented at the Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 18.
44. DeSutter, T. 2016. Integrated research. Presented at the School of Natural Resources Sciences Graduate Student Research Symposium. NDSU. December 9.
45. DeSutter, T. 2016. Soils and health: Historical and modern perspectives. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
46. DeSutter, T. 2016. Gypsum use in agriculture. Presented at the Headwaters Resources breakfast. Washburn, ND. August 17.
47. DeSutter, T., and J. Harmon. 2016. Crop response to salinity and pest pressures. Presented at the Cass County Salinity Management Field Day. Embden, ND. August 30.
48. DeSutter, T. 2016. Sodium remediation strategies: Facts to gather, methods to correct and what to expect. Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 20.

49. DeSutter, T., and A. Chatterjee. 2016. Sodic soil management. Presented at the NDSU-UMN Extension Soil Health Tour. Delamere, ND. June 30.
50. DeSutter, T. 2016. Soil testing for saline/sodic soils. What should I ask for? What do the numbers mean? Tile these areas? Presented at the Saline and Sodic Soil Management Workshop and Field Tour. Mitchell, SD. July 7.
51. Kolars, K., X. Jia, D. Steele, T. Scherer, and T. DeSutter. 2016. Modifying the checkbook irrigation scheduling model for high water table conditions to manage subsurface drained and subirrigated fields. Presented at the 10th International Drainage Symposium, Minneapolis, MN. September 7-9.
52. O'Brien, P., T. DeSutter, S. Ritter, F. Casey, A. Wick, and E. Khan. 2016. Remediation of soils following an oil release in Mountrail County, North Dakota. Presented at the North Dakota Soil and Water Summit and Field Trip. Medora, ND. June 14-15.
53. Ripplinger, D., and T. DeSutter. 2016. Crop response on saline soils and the bottom line. Presented at the NDSU-UMN Extension Soil Health Tour. Barney, ND. June 29.
54. DeSutter, T. 2015. Opportunities and challenges for the reclamation of soil in North Dakota's oil-patch region. Presented to faculty, staff, and students at the Department of Plant Sciences at South Dakota State University, Brookings, SD. September 14.
55. DeSutter, T. 2015. Salts: Their solubility and movement in the soil. Presented at the AGVISE Fall Soil Testing Update. Northwood, ND. August 11.
56. DeSutter, T. 2015. Opportunities and challenges for the reclamation of soil in North Dakota's oil-patch region. Presented to faculty, staff, and students at the Department of Soil Science at North Carolina State University, Raleigh, NC. March 19.
57. DeSutter, T., and M. Breker. 2015. Identifying and managing sodic soils. Presented at the Managing for Soil Health Workshop. Havana, ND, March 5.
58. DeSutter, T., and F. Casey. 2015. Soil basics for remediating impacted soil. Chemistry of sodium-affected soils. Presented at the *Reclamation: Putting the pieces together*. Third annual North Dakota Reclamation Conference. February 23 and 24, Dickinson, ND.
59. DeSutter, T., A. Wick, F. Casey, P. O'Brien, S. Ritter. 2015. Soil and crop reestablishment after oil-cleanup. Presented at the *Reclamation: Putting the pieces together*. Third annual North Dakota Reclamation Conference. February 23 and 24, Dickinson, ND.
60. DeSutter, T., and A. Wick. 2015. Salty soils. Presented at the Advanced Crop Advisors Workshop. Fargo, ND, February 10 and 11.
61. DeSutter, T. 2015. Sodic soil sampling and analysis. Presented at the North Dakota Agricultural Consultants Association Annual Meeting. Fargo, ND, February 9.
62. DeSutter, T. 2015. Sodium and tile drainage: Sampling, soil test reports and what you should expect. Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension. Fargo, ND, January 21.

63. Franzen, D., and T. DeSutter. 2014. Recent China tour: Soybean production, business practices, etc. Presented at the Certified Crop Advisors annual meeting. Fargo, ND, January 20.
64. DeSutter, T. 2014. Chemistry of sodium-affected soils. Presented at the *Finding environmental synergy in the North Dakota oil field* Soil and Water Conference and Field Trip. Medora, ND, June 10 and 11.
65. DeSutter, T. 2014. Saline vs Sodic Soils. Presented at the *2nd Annual Grand Forks Soil Health Workshop*. Grand Forks, ND, March 11.
66. DeSutter, T. 2014. Sodium impacts water movement. Presented demonstration 10 times at the Best of the Best *In* Wheat and Soybean Research. Moorhead, MN, February 6.
67. DeSutter, T., L. Cihacek, A. Akyuz, J. Enz, and D. Franzen. 2014. Causes and effects of the Dust Bowl and the current impact of soil erosion. Panel Discussion at the NDSU Library. Fargo, ND, December 4.
68. DeSutter, T., and D. Franzen. 2014. Soil Conservation and Fertility of Soybeans. Presented two times to local farmers and government officials in Heilongjiang Province. August.
69. DeSutter, T. 2014. Saline and Sodic Soils. Presented to faculty at the Coastal Agricultural Research Institute, Hebei Academy of Agricultural Sciences. Tanghai, Hebei. August.
70. DeSutter, T., and Y. He. 2014. Chemistry of sodium-affected soils. Presented at the *What is Successful Reclamation?* Second annual North Dakota Reclamation Conference. February 24 and 25, Dickinson, ND.
71. DeSutter, T., and Y. He. 2014. Advances in our knowledge of dispersion and swelling with soil sodium and the interaction of sodium chemistry with soluble salts. Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension.
72. DeSutter, T. 2013. Saline and sodic soils of North Dakota. Presented at the Forum for Contemporary Geographic Issues, Geography Department, University of North Dakota, Grand Forks, ND.
73. DeSutter, T. 2013. Saline sodic soil studies: North Dakota. Presented at the Professional Soil Scientists Association of South Dakota Annual Meeting. Brookings, SD.
74. DeSutter, T. 2013. Soil water interactions with other soil characteristics with and without tile. Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension.
75. DeSutter, T. 2013. Soil salinity and sodicity. Presented at the West Central Spring Agronomy Update. Fargo, ND. February 26.
76. DeSutter, T. 2012. The chemistry of tiling and crusting. Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension.
77. DeSutter, T.M. 2012. The chemistry of tiling. Salinity corn project research discussion meeting. South Dakota Corn Utilization Council. July 12. Sioux Falls, SD.
78. DeSutter, T.M. 2012. Tile drainage basics. American Crystal Sugar Company Growers Seminar. Fargo, ND.

79. DeSutter, T.M. 2012. Tile drainage basics. American Crystal Sugar Company Growers Seminar. Grafton, ND.
80. DeSutter, T.M. 2012. Tile drainage basics. American Crystal Sugar Company Growers Seminar. Grand Forks, ND.
81. DeSutter, T.M. 2012. Tile drainage basics. Minn-Dak Farmers' Cooperative Growers Seminar. Wahpeton, ND.
82. DeSutter, T. 2011. Tile drainage and saline soils. Big Iron Show. Fargo, ND
83. DeSutter, T. 2011. The scientific method and experiential learning projects. WEBINAR Trainee Workshop presented to members of PROTECT: Puerto Rico Testsite for Exploring Contamination Threats. Sponsored by Northeastern University, Boston, MA.
84. Brown, S., and T. DeSutter. 2011. Evolution of philosophy and tools. Z-Series Symposium for the 75th Anniversary of the Soil Science Society of America. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
85. DeSutter, T. 2011. Liming chemistry and materials. Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension.
86. DeSutter, T. 2010. Application of industrial byproducts to North Dakota soils: Concerns and benefits. Greenbag Luncheon sponsored by the Environmental Conservation Sciences Program. 7 September.
87. DeSutter, T. 2010. Impacts of tile drainage: Soil dispersion. Richland County Soils Tour. 2 September, Wahpeton, ND.
88. DeSutter, T.M. 2010. Soils and civilization. Soil and Water Workshop sponsored by the NDSU Research and Extension.
89. Jia, X., and T. DeSutter. 2010. Drainage research at Fairmount. ND-MN Subsurface Drainage Forum. 2 February, Fargo, ND.
90. DeSutter, T.M., and L.J. Cihacek. 2009. FGD gypsum research in North Dakota. Agricultural Uses of FGD Gypsum Workshop. 17-19 November. Indianapolis, IN.
91. DeSutter, T., L. Cihacek, and J. Lukach. 2009. Sulfur fertility of canola (*Brassica napus*) using flue gas desulfurization gypsum. Symposium—Gypsum Use for Enhancing Agricultural Production and for Environmental Improvement. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
92. DeSutter, T.M. 2009. Application of industrial byproducts to North Dakota soils. Annual meeting of the North Dakota Chapters of the Soil and Water Conservation Society and the Professional Soil Classifiers Association. 15 October, Fargo, ND.
93. DeSutter, T.M. 2009. Demonstration and evaluation of dispersion: Evaluating salinity and sodicity in field labs. Natural Resources and Conservation Service's Dryland Saline and Sodic Soils Training on 28 September, Bismarck, ND.

94. DeSutter, T.M. 2009. Dusting off an old topic: Wind erosion and new conservation methods for control. Soil and Soil/Water Workshop sponsored by the NDSU Research and Extension.
95. DeSutter, T.M., and F.X. Casey. 2008. Acquisition of a direct mercury analyzer. NSF Funded Projects Poster Session. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
96. Casey, F.X., T.M. DeSutter, E. Khan, P. Odour, H. Hakk, and G.L. Larsen. 2008. Fate and transport of reproductive hormone. NSF Funded Projects Poster Session. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
97. DeSutter, T.M. 2008. Soil salinity: Impacts and management. Natural Resources and Conservation Service's Soil Salinity Field Workshop on July 14 at Grand Forks Co., ND.
98. DeSutter, T.M. 2008. Salinity and subsurface drainage. 2008 ND-MN Subsurface Drainage Forum. February 14 at North Dakota State University.
99. DeSutter, T.M. 2008. Managing soil salinity. Soil and Soil/Water Workshop sponsored by NDSU Research and Extension.
100. DeSutter, T.M., and L.J. Cihacek. 2007. National network for use of FGD gypsum in agriculture: North Dakota. Agricultural and Industrial Uses of FGD Gypsum Workshop. Atlanta, GA, Oct. 23-24.
101. DeSutter, T.M. 2007. Seepage rates and nitrogen movement beneath animal feeding operations (AFO) liquid/solid containment ponds. Soil and Soil/Water Workshop sponsored by NDSU Research and Extension.
102. DeSutter, T.M., J.M. Ham, and G.M. Pierzynski. 2006. Movement of nitrogen beneath animal-waste lagoons: Results and strategies. *In* Nitrate in California's groundwater: Are we making progress? Symposium sponsored by the Groundwater Resources Association of California. Modesto, CA. April 4-5.
103. DeSutter, T.M. 2005. Techniques for determining gaseous emissions from agricultural practices. USDA/ARS Northwest Irrigation and Soils Research Laboratory. Kimberly, ID.
104. Pierzynski, G.M., T. DeSutter, J. Ham, P. Barnes, and G. Vaillant. 2005. Environmental Impacts from Concentrated Animal Feeding Operations. KSU Environmental Engineering Seminar Series. Manhattan, KS.
105. Pierzynski, G.M., T. DeSutter, and J. Ham. 2004. Environmental impacts from concentrated animal feeding operations (CAFOs). Invited seminar, School of Natural Resources, The Ohio State University, Columbus, OH.

Volunteered

1. DeSutter, T., R.J. Goos. 2025. Soil cation exchange capacity: A new method for soil science laboratories. Canadian Soil Science Society annual meeting, Winnipeg, MB. July 21-23.
2. Maembe, B. B., Malone, L., DeSutter, T. M., & Steele, D. D. 2025. Residue management: evaluating planting strategies to de-risk no-till soybean production in corn-soybean rotations. CANVAS 2025, Salt Lake City, UT.

3. Mertz, C., A. Ostlund, C. Keene, M. Ostlie, M. Meehan, and T. DeSutter. 2025. Salty solutions: Exploring the phytoremediation potential of Kernza and common lambsquarters. Canadian Soil Science Society annual meeting, Winnipeg, MB. July 23.
4. Batool, S.M., M. Wickramage, T. DeSutter, M. Meehan, J. Xu, C. Augustin, A. Daigh, J. Staricka, S. Iskander, A. Ostlund, and P.G. Odour. 2024. Leveraging geoinformatics to determine carbon sequestration potential of brine impacted soils. Presented at the American Geophysical Union, Washington, D.C. December 9-13.
5. Derby, N., and T.M. DeSutter. 2024. Comparison of soil properties with and without long term swine application in North Dakota. Presented at the 2024 ASA, CSSA, SSSA International Annual Meeting, San Antonio, TX. November 10-13.
6. Goettl, B.J., J.L. Heitman, T.M. DeSutter. 2024. The impact of field management following barley on soil moisture, temperature, and surface energy factors. Presented at the 2024 ASA, CSSA, SSSA International Annual Meeting, San Antonio, TX. November 10-13.
7. Maembe, B.B., T.M. DeSutter, and L. Malone. 2024. Residue management of the future: Planting technology to de-risk no-till soybean production. Presented at the 2024 ASA, CSSA, SSSA International Annual Meeting, San Antonio, TX. November 10-13.
8. Mertz, C., K.A. Howitt, C. Keene, T.M. DeSutter, and M. Meehan. 2024. Evaluating the effects of herbicides on kernza: An assessment of Group 1 and Group 2 herbicides. Presented at the 2024 ASA, CSSA, SSSA International Annual Meeting, San Antonio, TX. November 10-13.
9. Odour, P.G., S.M. Batool, T. DeSutter, A. Ostlund, M. Meehan, J. Xu, C. Augustin, and S. Iskander. 2024. Augmenting eddy covariance carbon flux measurements with remote sensing and artificial intelligence. Presented at the American Geophysical Union, Washington, D.C. December 9-13.
10. Alvarez-Torres, B., and T.M. DeSutter. 2024. Use of artificial intelligence in enhancing soil science communication and education. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.
11. Derby, N., T. DeSutter, and M. Meehan. 2024. Comparison of soil properties with and without long term swine manure application in North Dakota. Poster. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.
12. DeSutter, T., and N. Derby. 2024. Water movement in solonetzic soils explained through hands-on demonstrations. 2024. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.
13. Goettl, B., D. Franzen, T. DeSutter, and A. Wick. 2024. What we have learned from five years of field scale soil health research. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.
14. Mertz, C., T. DeSutter, C. Keene, M. Ostlie, M. Meehan, and A. Ostlund. 2024. Exploring the impact of natural salinity on common lambsquarters and kernza. Poster. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.

15. Ostlund, A., T. DeSutter, and M. Meehan. 2024. Extension in reclamation: Building collaboration and engagement in reclamation sciences. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.
16. Rhodes, A., T. DeSutter, J. Osorno, and B. Geddes. 2024. Pinto bean '*Phaseolus vulgaris* L.' tolerance to salinity, waterlogging, and combined conditions. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.
17. Rhodes, A., T. DeSutter, J. Osorno, and B. Geddes. 2024. '*Phaseolus vulgaris* L.' tolerance to waterlogged conditions: 2023 North Dakota field study. Poster. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 1-2.
18. Alvarez-Torres, B., T.M. DeSutter, A. Ostlund, J.S. Breker, and H. Zhang. 2023. Comparative analysis of laboratory methods for determining soluble chloride (Cl). Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 2-3.
19. Alvarez-Torres, B., T.M. DeSutter, A. Ostlund, J.S. Breker, and H. Zhang. 2023. Comparative analysis of laboratory methods for determining soluble chloride (Cl⁻). Presented at the 2023 ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29-November 1.
20. Alvarez-Torres, B., N. Curbelo-Lopez, A. Peters, and T.M. DeSutter. 2023. Characterization of polyelectrolyte biopolymers (PEBs) for chloride remediation. Presented at the 2023 ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29-November 1.
21. Bott, W.D., M.A. Meehan, and T.M. DeSutter. 2023. Using inherent soil and climate properties to rate reclamation suitability of North Dakota soils. National Cooperative Soil Survey National Meeting. July 9-13.
22. Derby, N.E., and T.M. DeSutter. 2023. Working towards better land reclamation after pipeline construction in western North Dakota. Presented at the 2023 ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29-November 1.
23. DeSutter, T.M., N.E. Derby, J.L. Heitman, and A. Amoozegar. 2023. Effect of clay mineralogy on soil saturated hydraulic conductivity and water retention. Presented at the 2023 ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29-November 1.
24. Mertz, C., and T. DeSutter. 2023. Utilization of alternative plants for the remediation of brine affected soils. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 2-3.
25. Mertz, C.M., T.M. DeSutter, C.L. Keene, M.H. Ostlie, and A.M. Ostlund. 2023. Response of common lambsquarters and kernza to natural salinity: A field trial. Presented at the 2023 ASA, CSSA, SSSA International Annual Meeting, St. Louis, MO. October 29-November 1.
26. Ostlund, A., and T.M. DeSutter. 2023. Phytoremediation and biomass harvesting of brine impacted water: A plant potential to a salty problem. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 2-3.
27. Rhodes, A., T. DeSutter, J. Osorno, B. Geddes. 2023. Dry bean tolerance to both salinity and waterlogging conditions. BIC & NAPIA Biennial Meeting. Greenville, SC, November 5-9.
28. Alvarez-Torres, B., and T.M. DeSutter. 2022. Sci-comm tools for soil science in a digital era. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. Virtual.

29. Birkhimer, N., T. DeSutter, and K. Jore. 2022. The effects of oil and natural gas (ONG) reclamation projects on soil properties: A meta-analysis. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. Virtual.
30. Daigh, A.L.M., N.E. Derby, and T.M DeSutter. 2022. A history of subsurface drainage, no-till, and cover crops made a North Dakota field resilient to salinization: A case study. Presented at the International Meetings of the ASA-CSSA-SSSA. Baltimore, MD. November 6-9.
31. DeSutter, T.M., N. Birkhimer, K. Jore, and J. Staricka. 2022. The effects of oil and natural gas (ONG) reclamation projects on soil properties: A meta-analysis. Presented at the International Meetings of the ASA-CSSA-SSSA. Baltimore, MD. November 6-9.
32. Lardy, J., T. DeSutter, M. Meehan, and A. Daigh. 2022. An examination of pipeline site preparation methods for improving plant establishment. American Society of Reclamation Sciences. Duluth, MN.
33. Lardy, J., T. DeSutter. M. Meehan, K. Horsager, N. Derby, A. Daigh, and J. Staricka. 2022. An examination of pipeline site-preparation methods for improving plant establishment. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. Virtual.
34. Peterson, A., T. DeSutter, N. Derby, M. Meehan, and A. Daigh. 2022. Can calcium acetate be used as an alternative to gypsum for improving hydraulic conductivity in oilfield brine (produced water) impacted soils? Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. Virtual.
35. Peterson, A., T. DeSutter, N. Derby, M. Meehan, and A. Daigh. 2022. Can calcium acetate be used as an alternative to gypsum for improving hydraulic conductivity in oilfield brine (produced water) impacted soils? American Society of Reclamation Sciences. Duluth, MN.
36. Ripplinger, H., S. Kronberg, T. DeSutter, and S. Banerjee. 2022. Impact of regenerative agriculture fertilization practices on soil microbiota and biomass production. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. Virtual.
37. Birkhimer, N., T. DeSutter, M. Miller, J. Bergman, C. Gasch, and J. Staricka. 2021. Early implementation of amendment crops reduces long term yield loss in pipeline reclamation setting. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. Virtual.
38. Lardy, J., T. DeSutter, M. Meehan, N. Derby, K. Horsager, and A. Daigh. 2021. An examination of pipeline site-preparation methods for improving plant establishment. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. Virtual.
39. Peterson, A., T. DeSutter, N. Derby, A. Daigh, and M. Meehan. 2021. Use of gypsum and calcium acetate for improving water flow in oilfield produced water-impacted soils. Presented at the International Meetings of the ASA-CSSA-SSSA. Salt Lake City, UT. November 7-10.
40. Álvarez-Torres, B., J.P. Castro Chacón, D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, T. DeSutter 2020. Field-scale assessment of soil salinity and sodicity in the Lajas Valley, Puerto Rico. Presented at the International Meetings of the ASA-CSSA-SSSA. Virtual mode.
41. Álvarez-Torres, B., J.P. Castro Chacón, D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, T. DeSutter. 2020. An alternative method for the evaluation of soil salinity in the

Lajas Valley, Puerto Rico. Presented at the International Meetings of the ASA-CSSA-SSSA. Virtual mode.

42. Bartsch, Z., T. DeSutter, and C. Gasch. 2020. Microbial recovery in soils treated by ex-situ thermal desorption and mixing after crude oil spill in western North Dakota. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 6-7.
43. Birkhimer, N., T. DeSutter, J. Bergman, K. Horsager, K. Dragseth, M. Ramsey, and C. Wahlstrom. 2020. Response of root biomass on pipeline disturbed cropland to different cropping sequences in western North Dakota. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 6-7.
44. Castro Chacón, J.P., D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, B. Álvarez-Torres, T. DeSutter. 2020. Extrapolation models of apparent electrical conductivity (ECa): From the local to the regional scale, Lajas Valley, southwest, Puerto Rico. Presented at the International Meetings of the ASA-CSSA-SSSA. Virtual mode.
45. Castro Chacón, J.P., D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, B. Álvarez-Torres, T. DeSutter. 2020. Geomorphology of Lajas Valley, southwestern Puerto Rico. Presented at the International Meetings of the ASA-CSSA-SSSA. Virtual mode.
46. Castro Chacón, J.P., D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, B. Álvarez-Torres, T. DeSutter. 2020. Spatial Artificial Intelligence: Exploring machine learning for soil salinity mapping in the Lajas Valley. COHEMIS - PRSYIG. Mayaguez, Puerto Rico.
47. DeSutter, T. 2020. Research results from a five-year oil spill study: The secret hope of everyone! 2020. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 6-7.
48. Hopkins, D., and T. DeSutter. 2020. Natric soils of North Dakota: Does characterization legacy support our taxonomy? Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 6-7.
49. Álvarez-Torres, B., J.P. Castro Chacón, D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, T. DeSutter. 2019. Geo-edafological analysis of saline and sodium soils using electromagnetic induction in the Lajas Valley Agricultural Reserve, southwest of Puerto Rico. First Congress of Geography Eugenio María de Hostos. San Juan, Puerto Rico.
50. Castro Chacón, J.P., D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, B. Álvarez-Torres, T. DeSutter. 2019. Initial steps towards assessing soil salinity at regional scale in Lajas Valley. SIGMA XI. Mayaguez, Puerto Rico.
51. Castro Chacón, J.P., D. Sotomayor-Ramírez, L. Pérez-Alegría, G. Martínez, B. Álvarez-Torres, T. DeSutter. 2019. Regional mapping of saline and sodium soils in the Agricultural Reserve of the Valle de Lajas. First Congress of Geography Eugenio María de Hostos. San Juan, Puerto Rico.
52. DeSutter, T., and D. Franzen. 2019. Soil salinity, sodium adsorption ratio, and gypsum amendment. Presented at the NCERA-13 Workshop, Iowa City, IA.
53. DeSutter, T., P. O'Brien, S. Croat, C. Gasch, F. Casey, and A. Wick. 2019. Soil reclamation after a Bakken crude pipeline release: A summary of research results. Presented at the 2019

National Meeting of the American Society of Mining and Reclamation, Big Sky, MT. Welcome Back to Montana: The Land of Reclamation Pioneers, June 3–7.

54. Ohm, H., DeSutter, T., Hargiss, C. 2019. Manitoba Soil Science Society Meeting. Urban soil taxonomy as it relates to a recreational stormwater detention basin. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 7-9.
55. Ohm, H., DeSutter, T., Hargiss, C. 2019. Society of Wetland Scientists. Urban wetland soil mapping as it relates to a recreational stormwater detention basin. Poster, Baltimore, MD.
56. Ostrand, M., T. DeSutter, and A. Daigh. 2019. Super Absorbent Polymer effects on Soil Physical Properties as Functions of Application Rate and Soil Texture. Manitoba Soil Science Society Annual Meeting. Winnipeg, MB. February 7-9.
57. Ostrand, M., T. DeSutter, and A. Daigh. 2019. Super Absorbent Polymer effects on Soil Physical Properties as Functions of Application Rate and Soil Texture. Presented at the 2019 National Meeting of the American Society of Mining and Reclamation, Big Sky, MT. Welcome Back to Montana: The Land of Reclamation Pioneers, June 3–7, 2019.
58. Sotomayor-Ramírez, D., J.P. Castro Chacón, L. Pérez-Alegría, G. Martínez, B. Álvarez-Torres, T. DeSutter. 2019. Electromagnetic induction for the assessment of soil salinity in the Lajas Valley, southwest of Puerto Rico. XXII Latin American Congress of Soil Science. Montevideo, Uruguay.
59. Hargiss, C., Graber, K., Norland, J., DeSutter, T. 2018. North Dakota Water Quality Monitoring Conference. Use of brine for dust abatement: effectiveness and impacts on gravel roads. Poster, Bismarck, ND.
60. Green, A. W., Meehan, M., DeSutter, T. 2019. Society for Range Management Annual Meeting, Germination Thresholds of Grass and Crop Species in Response to NaCl and Brine Induced Salinity. Society for Range Management, Poster, Minneapolis, MN.
61. Green, A. W., Meehan, M., DeSutter, T, and A. Daigh. 2019. Wicking salts from brine contaminated soils: Potential method for in-situ remediation. Presented at the International Meetings of the ASA-CSSA-SSSA. San Diego, CA. January 6-9.
62. Croat, S., DeSutter, T., O'Brien, P., Gasch, C., Casey, F., Wick, A., Stuffert, S. 2019. Thermally-Desorbed Soil As a Potential Replacement for Topsoil: A Summary of Research Results. Presented at the International Meetings of the ASA-CSSA-SSSA. San Diego, CA. January 6-9.
63. Gasch, C., Harmon, J., DeSutter, T., Wick, A. International Meeting of the ASA-CSSA, Beyond salt chemistry: how the whole soil-plant-insect system responds to salinity and what it means for crop production and management. ASA-CSSA-SSSA, Oral Presentation, Baltimore, MD.
64. O'Brien, P., DeSutter, T., Casey, F. 2018. Manitoba Soil Science Society Meeting. Natural degradation of petroleum hydrocarbon in slightly contaminated soils in North Dakota. Oral Presentation, Winnipeg, MB.
65. Croat, S., Casey, F., DeSutter, T., Gasch, C., Harmon, J. 2018. Manitoba Soil Science Society Meeting. Phosphorus dynamics in soils treated by thermal desorption," Oral Presentation, Winnipeg, MB.

66. DeSutter, T. 2018. Manitoba Soil Science Society Meeting. Using trade books for graduate and undergraduate education: You can't win if you don't play!" Oral Presentation, Winnipeg, MB.
67. DeSutter, T. Soils and mental health. 2017. Presented at the 60th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 2-3.
68. O'Brien, P., T. DeSutter, R. Ritter, F. Casey, A. Wick, and E. Khan. 2017. Assessing variability of soil parameters in large-scale research plots. Presented at the 60th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 2-3.
69. Ritter, S., T. DeSutter, H. Dose, P. O'Brien, F. Casey, A. Wick, and E. Khan. 2017. Quantification and activity of nitrogen cycling organisms in highly disturbed soils. Presented at the 60th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 2-3.
70. Breker, M., T. DeSutter, A. Chatterjee, and A. Wick. 2016. Percent sodium, electrical conductivity, and alfalfa yield after amendment applications on saline-sodic and sodic soils. Presented at the 59th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 4-5.
71. Butcher, K., A. Wick, and T. DeSutter. 2016. Fluctuations in volumetric water content alter the salinity of the soil solution. Presented at the 59th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 4-5.
72. Daigh, A.L.M., A. Klaustermeier, R. Limb, T.M. DeSutter, and K. Sedivec. 2016. Salt efflorescence on brine-spill soils: a new approach to remediation. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
73. DeSutter, T.M., P. O'Brien, S. Ritter, N.E. Derby, K. Horsager, F.X.M. Casey, A.F. Wick, E. Khan, and H.L. Matthees-Dose. 2016. Construction of large-scale research plots at a remediation site using thermal desorption. 5-min rapid talk. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
74. DeSutter, T.M., P. O'Brien, S. Ritter, N.E. Derby, K. Horsager, F.X.M. Casey, A.F. Wick, E. Khan, and H.L. Matthees-Dose. 2016. Construction of large-scale research plots at a remediation site using thermal desorption. Poster. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
75. Dick, W., D. Kost, K. Ladwig, L. Chen, D. Smeal, H.A. Torbert, D. Watts, L.D. Norton, R. Wolkowski, and T. DeSutter. 2016. Gypsum effects on crop yield and chemistry of soil, crop tissue, and vadose zone water: A meta-analysis. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
76. Dose, H., T. DeSutter, A.M. Fortuna, and D. Clay. 2016. Microbial nitrifiers and denitrifiers as soil health indicators of saline soil amelioration. 2016. Presented at the 59th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 4-5.
77. Graber, K., C. Hargiss, J. Norland, T. DeSutter, and M. Strand. 2016. Abatement of road dust in western North Dakota. Presented at the Annual Meeting of the North Dakota Chapter of the Wildlife Society. Mandan, ND. February 10-12.

78. Graber, K., C. Hargiss, J. Norland, T. DeSutter, and M. Strand. 2016. Abatement of road dust in western North Dakota. Presented at the 4th Annual North Dakota Reclamation Conference. Dickinson, ND. February 22-23.
79. Graber, K., C. Hargiss, J. Norland, T. DeSutter, and M. Strand. 2016. Abatement of road dust in western North Dakota. Presented at the North Dakota Water Quality Monitoring Conference. Bismarck, ND. March 2-4.
80. Graber, K., C. Hargiss, J. Norland, T. DeSutter, and M. Strand. 2016. Abatement of road dust in western North Dakota. Presented at the North Dakota Northern Plains Biological Symposium. Fargo, ND. April 8.
81. Hopkins, D., T. DeSutter, J. Wrage, L. Tackett, K. Alme, and R. Utter. 2016. Emerging soil micromorphology capability and studies in North Dakota. Presented at the 59th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 4-5.
82. Kolars, K., X. Jia, D.D. Steele, T.F. Scherer, and T.M. DeSutter. 2016. Modifying the checkbook irrigation scheduling model for high water table conditions to manage subsurface drained and subirrigated fields. Presented at the 10th International Drainage Symposium. Minneapolis, MN. September 7-9.
83. O'Brien, P., T. DeSutter, F. Casey, A. Wick, and S. Ritter. 2016. Considerations when using thermal desorption to remediate crude oil spills in the northern Great Plains. Presented at the 59th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 4-5.
84. O'Brien, P., T.M. DeSutter, N.E. Derby, F.X.M. Casey, S. Ritter, A.F. Wick, and E. Khan. 2016. Surface energy balance over soils remediated using thermal desorption. 5-min rapid talk. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
85. O'Brien, P., T.M. DeSutter, N.E. Derby, F.X.M. Casey, S. Ritter, A.F. Wick, and E. Khan. 2016. Surface energy balance over soils remediated using thermal desorption. 5-min rapid talk. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
86. Ritter, S., T. DeSutter, P. O'Brien, F. Casey, A. Wick, and K. Horsager. 2016. Binary exchanges of calcium, magnesium, and potassium on thermally desorbed soil. Presented at the 59th Annual Manitoba Soil Science Society Meeting. Winnipeg, MB. February 4-5.
87. Ritter, S., H.L. Matthees-Dose, P. O'Brien, F.X.M. Casey, A.F. Wick, E. Khan. 2016. Biological soil health indicators in highly disturbed soils. 5-min rapid talk. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
88. Ritter, S., H.L. Matthees-Dose, P. O'Brien, F.X.M. Casey, A.F. Wick, E. Khan. 2016. Biological soil health indicators in highly disturbed soils. Poster. Presented at the International Meetings of the ASA-CSSA-SSSA. Phoenix, AZ. November 6-9.
89. Ritter, S., P. O'Brien, and T. DeSutter. 2016. Thermal desorption impacts on soil chemical, physical, and biological properties: Evaluation for agricultural production. Presented at Remediation Technologies Symposium. Oct. 12-14. Banff, AB.
90. Butcher, K., A.F. Wick, T. DeSutter, J. Harmon, and C. Heglund. 2015. Application of field research for land management decisions: Prevention and reclamation of soil salinity using

site-specific data. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.

91. Butcher, K., A.F. Wick, T. DeSutter, J. Harmon, and Deirdre Prishmann-Voldseth. 2015. Soybean yield response to natural soil salinity gradients in Richland County, North Dakota. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
92. Butcher, K., A.F. Wick, T. DeSutter, A. Chatterjee, and J. Harmon. 2015. Effect of soil salinity on labile carbon pools in a naturally saline, sandy loam soil. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
93. Breker, M., T.M. DeSutter, A. Chatterjee, and A.F. Wick. Microbial response to sodic soils amended with flue-gas desulfurization gypsum, sugar beet processing byproduct lime, and langbeinite. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
94. Derby, N.E., F.X.M. Casey, and T. DeSutter. 2015. Effects of oil field brine wastewater spills on soil hydraulic conductivity. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
95. Jia, X., T.F. Scherer, D.D. Steele, and T. DeSutter. 2015. Impact of controlled drainage on reducing nitrogen loss in the Red River Valley. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
96. Kolka, R.K., B. Sturtevant, J. Miesel, P. Townsend, P. Wolter, S. Fraver, and T.M. DeSutter. 2015. Post fire forest floor severity index relationships with soil carbon, nitrogen and mercury. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
97. Knudson, M., A.F. Wick, T.M. DeSutter, and C. Heglund. 2015. Salinity management, cover crops and tile drainage: Research and demonstration site in Grand Forks County, North Dakota. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
98. Matthees-Dose, H.L., T.M. DeSutter, A.M. Fortuna, and D.E. Clay. 2015. Effects of saline soil amelioration on soil nitrification. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
99. O'Brien, P., T.M. DeSutter, N.E. Derby, F.X.M. Casey, and A. Wick. 2015. Effect of thermal desorption on soil physical and hydraulic properties. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
100. O'Brien, P., T.M. DeSutter, K. Horsager, N.E. Derby, F.X.M. Casey, and A. Wick. 2015. Growth of hard red spring wheat in crude oil contaminated soils treated by thermal desorption. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
101. O'Brien, P., N. Derby, T. DeSutter, F. Casey, A. Wick, K. Horsager, and S. Ritter. 2015. Effects of thermal desorption on soil-water characteristics and plant-available nutrients. Presented at the Joint Annual Meetings of the Canadian Land Reclamation Association and Manitoba Soil Science Society. Winnipeg, MB. June 15-18.

102. Owen, R.K., L. Howe, D.D. Malo, C.L. Reese, D.E. Clay, and T.M. DeSutter. 2015. Developing spatial management zones for salt-affected soils in South Dakota using inherent soil properties and yield history. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
103. Reese, C.L., D.E. Clay, T.M. DeSutter, D.D. Malo, and S.A. Clay. 2015. Evaluating accuracy and precision of hand-held soil testing meters as compared to traditional soil test methods for potassium, calcium, sodium, electrical conductivity, and soil pH. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
104. Schultz, E.C., A. Chatterjee, T. DeSutter, and D. Franzen. 2015. Sodic soil reclamation potential of gypsum and biochar additions: Influence on chemical, physical, and biological parameters. Presented at the International Meetings of the ASA-CSSA-SSSA. Minneapolis, MN. November 15-18.
105. Wamono A.W., D.D. Steele, Z. Lin, T. DeSutter, and X. Jia. 2015. Effects of calcium amendments on infiltration rates of subsurface drained sodic soils. Written for presentation at the North Central American Society of Agricultural and Biological Engineers Conference, 10-11 April 2015, Fargo, North Dakota. Presentation No. RRV15-031.
106. Wrage, J., D. Hopkins, and T. DeSutter. 2015. Micromorphology of a salt affected soil near Fargo, North Dakota. Presented at Geological Society of America. Baltimore, MD. November 1-4.
107. Steele, D.D., A.W. Wamono, T. DeSutter, Z. Lin, and X. Jia. 2015. Measuring Chisel Plow Draft on a Sodium-Affected Soil. Written for presentation at the North Central American Society of Agricultural and Biological Engineers Conference, 10-11 April 2015, Fargo, North Dakota. Presentation No. RRV15-046.
108. DeSutter, T., J. Norland, and D. Hopkins. 2014. Incorporating Experiential Learning Projects into Graduate Courses. Presented at NDSU Pedagogical Luncheon, December.
109. Birru, G., D.D. Malo, D.E. Clay, C.L. Reese, C.G. Carlson, S.A. Clay, T.M. DeSutter, T.P. Kharel, and R.K. Owen. 2014. Reclamation of sodic soil and improving crop yield in northern Great Plains soils. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
110. Butcher, K., A.F. Wick, T.M. DeSutter, J. Harmon, and D. Prischmann. 2014. Corn and soybean responses to soil salinity gradients in Richland County, North Dakota. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
111. Calderon, F.J., A.M. Fortuna, H. Matthees-Dose, L.J. Cihacek, K.A. Anderson, T.M. DeSutter, and J. Bell. 2015. Using infrared spectroscopy to predict soil health indicators in sodic soils. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
112. Calderon, F.J., A.-M. Fortuna, H. Matthees-Dose, L.J. Cihacek, K.A. Anderson, T.M. DeSutter and J. Bell. 2014. Soil Health in sodic soils is determined by a suite of indicators that include several chemical, physical, and biological properties. SSSA, Long Beach, CA.
113. He, Y., T.M. DeSutter, F.X.M. Casey, L.J. Cihacek, D.E. Clay, D. Franzen, and D.D. Steele. 2014. Behaviors of Na-affected soils: Implications for subsurface drainage. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.

114. Kharel, T.P., D.E. Clay, T.M. DeSutter, D.D. Malo, C.G. Carlson, and C.L. Reese. 2014. Chemical amendments for sodium leaching in saline-sodic soils. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
115. Kolka, R.K., B. Sturtevant, J. Miesel, P. Townsend, P. Wolter, S. Fraver, and T. DeSutter. 2014. Post fire forest floor fire severity index relationships with soil mercury pools. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
116. Matthees-Dose, H.L., A.M. Fortuna, L.J. Cihacek, J. Norland, T.M. DeSutter, J. Bell, and D.E. Clay. 2014. Identifying soil health indicators for management of a sodic soil. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
117. Meyers, L., S. DeKeyser, J. Norland, C. Hargiss, and T. DeSutter. 2014. The NWCA intensification in North Dakota. Presented at the NWCA Joint Aquatic Sciences Meeting. Portland, OR. May 18-23.
118. Owen, R.K., T.M. DeSutter, C.L. Reese, D.D. Malo, T.P. Kharel, G. Birru, D.E. Clay, and C.G. Carlson. 2014. Spatial variability of saline and sodic soils in the northern Great Plains. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
119. Voirin, C., T.M. DeSutter, C. Vahl, and F.X.M. Casey. 2014. Mercury accumulation in *Eisenia hortensis* from FGDG and mercury chloride amended soils. Presented at the International Meetings of the ASA-CSSA-SSSA. Long Beach, CA. November 2-5.
120. Wamono, A.W., D.D. Steele, Z. Lin, Zhulu, T. DeSutter, and X. Jia. 2014. Effects of calcium based surface amendments and cover crops on the penetration resistance of subsurface drained sodic-saline soils. Presented at the 2014 Annual International Meeting of the American Society of Agricultural Engineers, 13-16 July, Montreal, Quebec Canada.
121. Wamono, A.W., D.D. Steele, Z. Lin, T. DeSutter and X. Jia. 2014. Penetration Resistance Measurements to Evaluate the Effects of Calcium Amendments and Water Management Strategies in Sodic-Saline Soils. Presented at the 2014 ASABE Intersectional Meeting, 28-29 March, Brookings, South Dakota, USA.
122. Hargiss, C.L.M., E.S. DeKeyser, L. Meyers, J. Norland, T. DeSutter, and M. Ell. 2013. The National Wetland Condition Assessment in North Dakota. Presented at the North Dakota Water Quality Monitoring Council Meeting. Fargo, ND. February 7.
123. Hargiss, C.L.M., J. Creuzer, J. Norland, T. DeSutter, E.S. DeKeyser, F. Casey, and M. Ell. 2013. The impact of dust and increased road use on wetlands in western North Dakota. Presented at the North Dakota Water Quality Monitoring Council Meeting. Fargo, ND. February 7.
124. He, Y., and T. DeSutter. 2013. Reducing sodification in high-risk North Dakota soils. Presented at the WRRF Fellowship Research Presentations. North Dakota State University, Fargo, ND. February 7.
125. Meyers, L.M., C.L.M. Hargiss, J. Creuzer, J. Norland, T. DeSutter, E.S. DeKeyser, F. Casey, S. Gabel, and M. Ell. 2013. Wetland research in North Dakota: Assessments, nutrients, and dust effect. Presented at the North Dakota River Watch Spring Workshop. Kathryn, ND. March 14.

126. Meyers, L.M., E.S. DeKeyser, C.L.M. Hargiss, J.E. Norland, T. DeSutter, M. Ell. 2013. The North Dakota intensification of the NWCA. Presented at the Association of State Wetland Managers Annual State/Tribal/Federal Coordination Meeting. Shepherdstown, WV. March 21.
127. Creuzer, J. F. Casey, E. DeKeyser, T. DeSutter, C. Hargiss, and J. Norland. 2013. Impact of dust on wetlands in western North Dakota from increased traffic due to energy development. Presented at the Annual Meetings of the Society of Wetland Scientists. Duluth, MN. June 2-6.
128. Gabel, S., L. Cihacek, E. DeKeyser, T. DeSutter, L. Meyers, and J. Norland. 2013. The use of sediment removal to reduce phosphorus levels in wetland soils. Presented at the Annual Meetings of the Society of Wetland Scientists. Duluth, MN. June 2-6.
129. Meyers, L., E. DeKeyser, J. Norland, C. Hargiss, T. DeSutter, and S. Gabel. 2013. Plant phosphorus and nitrogen dynamics in North Dakota wetlands. Presented at the Annual Meetings of the Society of Wetland Scientists. Duluth, MN. June 2-6.
130. DeSutter, T., D. Steele, and A-M. Fortuna. 2013. Sodic soil management. Presented at the Sodic Soil Field Day, Mooreton, ND. August 22.
131. DeSutter, T. 2013. Tiling and water management. Presented at the Grand Forks County Salinity Field Day, Grand Forks, ND. September 5.
132. Bali, S., D.G. Hopkins, T.M. DeSutter, and D. Wysocki. 2013. An evaluation of natric soil characterization data in North Dakota: A challenge for contemporary interpretation. Presented at the International Meetings of the ASA-CSSA-SSSA. Tampa, FL. November 3-6.
133. Chambers, K., F.X.M. Casey, H. Hakk, T.M. DeSutter, N. Shappell. 2013. Association of estradiol with manure and soil colloidal and dissolved fractions and potential bioactivity. Presented at the International Meetings of the ASA-CSSA-SSSA. Tampa, FL. November 3-6.
134. Dose, H., A-M Fortuna, S. Bali, L.J. Cihacek, T. DeSutter, J. Bell. 2013. Soil health, land management and remediation of sodicity. Presented at the International Meetings of the ASA-CSSA-SSSA. Tampa, FL. November 3-6.
135. Kharel, T.P., D.E. Clay, T. DeSutter, D. Malo, and C. Reese. 2013. Soil chemical treatment impact on Na leaching in northern Great Plains sodium-affected soils. Presented at the International Meetings of the ASA-CSSA-SSSA. Tampa, FL. November 3-6.
136. Kolka, R.K., M. Boche, and T.M. DeSutter. 2013. Soil total mercury, carbon and nitrogen within northern Minnesota forested basins in relation to landscape position, profile depth, and landscape characteristics. Presented at the International Meetings of the ASA-CSSA-SSSA. Tampa, FL. November 3-6.
137. Kolka, R., S. Fraver, P. Townsend, B. Sturtevant, P. Wolter, J. Miesel, and T. DeSutter. 2013. Canopy and forest floor fire severity index relationships with soil carbon, nitrogen and mercury pools. Presented at the North American Forest Soils Conference. Whitefish, MT. June 16-20.
138. Bali, S., T.M. DeSutter, D.G. Hopkins. 2013. An evaluation of natric soil characterization data in North Dakota: A challenge for contemporary interpretation. Presented at the CSSS/MSSS/CSAFM annual meetings, Winnipeg, MB. July 22-25.

139. DeSutter, T., J. Norland, D. Hopkins, and F. Casey. 2012. Incorporating experiential learning projects into graduate courses. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
140. Kolka, R., S. Fraver, P. Townsend, B. Sturtevant, P. Wolter, and T. DeSutter. 2012. Influence of wildfire severity on forest floor and upper soil carbon, nitrogen, and mercury pools. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
141. Paradeis, B., S. Lovas, A. Aipperspach, A. Kazmierczak, M. Boche, Y. He, P. Corrigan, K. Chambers, Y. Gao, J. Norland, and T. DeSutter. 2012. Dog-park soils: Concentration and distribution of urine-borne constituents. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
142. Hargiss, C.L.M., E.S. DeKeyser, J.E. Norland, T. DeSutter, L. Meyers, and M.J. Ell. 2012. The North Dakota intensification of the NWCA: An endeavor in collaboration. Society of Wetland Scientists International Meeting. Orlando, FL.
143. Meyers, L.M., E.S. DeKeyser, J.E. Norland, C.L.M. Hargiss, and T. DeSutter. 2012. Above and below ground nutrient cycling in Northern prairie wetlands. Society of Wetland Scientists International Meeting. Orlando, FL.
144. Meyers, L.M., E.S. DeKeyser, J.E. Norland, C.L.M. Hargiss, and T. DeSutter. 2012. Wetland assessment and ecosystem services. North Dakota Water Quality Monitoring Conference. Bismarck, ND.
145. Meyers, L.M., E.S. DeKeyser, J.E. Norland, C.L.M. Hargiss, and T. DeSutter. 2012. The North Dakota intensification of the national wetland condition assessment: Preliminary results. NDSU Graduate Research and Arts Forum. April 11.
146. Bai, X., F. Casey, H. Hakk, S. Shrestha, T. DeSutter, E. Khan, and P. Odour. 2011. Modeling sorption and degradation of 17 β -estradiol-17-sulfate in agricultural soils. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
147. Bai, X., F.X.M. Casey, H. Hakk, S.L. Shrestha, T. DeSutter, E. Khan, and P.G. Odour. 2011. Modeling sorption and degradation of 17 β -estradiol-17-sulfate in agricultural soils. AGU Fall Meeting, San Francisco, CA.
148. Bai, X., F.X.M. Casey, T.M. DeSutter, H. Hakk, P.G. Odour, and E. Khan. 2011. Sorption and degradation of 17 β -estradiol-17-sulfate in agricultural soils. 54th Annual Manitoba Soil Science Society Conference. Winnipeg, MB, Canada.
149. Chambers, K., F. Casey, H. Hakk, N.W. Shappell, T. DeSutter, and E. Khan. 2011. Bioavailability of colloidal organic carbon bound estrogen. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
150. DeSutter, T., and L. Cihacek. 2011. Application of flue gas desulfurization gypsum (FGDG) to two North Dakota soils and its impact on soil chemistry and wheat grain quality. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
151. Guy, A., T. DeSutter, F. Casey, R. Kolka, and J. Leitch. 2011. Impacts of major flooding on an urban environment. 54th Annual Manitoba Soil Science Society Conference. Winnipeg, MB, Canada.

152. He, Y., and T. DeSutter, L. Prunty, D. Hopkins, and X. Jia. 2011. Evaluation of EC1:5 soil to water extract methods. 54th Annual Manitoba Soil Science Society Conference. Winnipeg, MB, Canada.
153. He, Y., T. DeSutter, L. Prunty, D. Hopkins, X. Jia, and D. Wysocki. 2011. Evaluation of EC1:5 soil to water extract methods. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
154. Jia, X., T.F. Scherer, T.M. DeSutter, Z. Lin, and D.D. Steele. 2011. Controlled drainage and subirrigation effect on crop production and water quality. Eastern South Dakota Water Conference. Brookings, SD.
155. Bai, X., F. Casey, T. DeSutter, H. Hakk, P. Odour, and E. Khan. 2010. Sorption and degradation of 17 β -estradiol-17Sulfate in agricultural soils. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
156. Betemariam, H., J. Stone, L. Stetler, C. McCutcheon, S. Chipps, T. DeSutter, M. Penn, and N. Urban. 2010. Sediment mercury behavior in South Dakota lakes and impoundments. 62nd Annual Meeting of the Geological Society of America, 21-23 April, Denver, CO.
157. Betemariam, H., J.J. Stone, L. Stetler, C. McCutcheon, S. Chipps, T. DeSutter, M. Penn, and N. Urban. 2010. Sediment mercury behavior in South Dakota lakes and impoundments. 22nd Annual Environmental and Ground Water Quality Conference, Pierre, SD.
158. DeSutter, T., L. Prunty, P. Goosen-Alix, J. Bell, and K. Horsager. 2010. Characterization of concrete grinding residue and its impact on soils and plants. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
159. Jyoti, V., B. Saini-Eidukat, D. Hopkins, and T. DeSutter. 2010. Cadmium distribution in soils on the Pembina Escarpment, North Dakota. 56th Annual Institute on Lake Superior Geology, 18-23 May, International Falls, MN.
160. Jyoti, V., B. Saini-Eidukat, D. Hopkins and T. DeSutter. 2010. Geochemical characteristics of cadmium-rich soils of the Pembina Escarpment, North Dakota. Institute on Lake Superior Geology Proceedings, 56th Annual Mtg., Intl. Falls, MN, v. 56, part 1, p. 33-34.
161. Saini-Eidukat, B., D. Hopkins, T. DeSutter, V. Jyoti., T. Feit, and M. Ginsbach. 2010. Reconnaissance-scale Studies of Metal Enriched Soils in Northeastern North Dakota – Part 2. 2010 North Dakota INBRE Annual Symposium. October 28-29. Grand Forks, ND.
162. Betemariam, H., J.J. Stone, L. Stetler, C. McCutcheon, S. Chipps, T. DeSutter, and M. Penn. 2009. Sediment mercury concentration profiles in South Dakota lakes and impoundments. Eastern South Dakota Water Conference, Brookings, SD.
163. Betemariam, H., J.J. Stone, L. Stetler, C. McCutcheon, S. Chipps, T. DeSutter, and M. Penn. 2009. Sediment mercury concentration profiles in South Dakota lakes and impoundments. Western South Dakota Hydrology Conference, Rapid City, SD.
164. Briese, L., and T. DeSutter. 2009. An evaluation of electrical conductivity meters for making in-field soil salinity measurements. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.

165. Derby, N.E., T.M. DeSutter, F.X.M. Casey, H. Hakk, and W. Shelver. 2009. The effects of composting on swine manure nutrients and hormones. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
166. DeSutter, T., X. Jia, D. Steele, T. Scherer, D. Hopkins, and X. Pang. 2009. Impacts of tile drainage and sub irrigation on water quality in southeastern North Dakota. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
167. DeSutter, T., D. Franzen, F. Casey, D. Hopkins, B. Saini-Eidukat, A. Akyuz, and V. Jyoti. 2009. Distribution of total mercury in North Dakota soils. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
168. Guy, A., T. DeSutter, F. Casey, J. Leitch, R. Kolka, N. Derby, H. Hakk, and K. Horsager. 2009. The impact of rural and urban flooding on water and soil quality in the Red River Valley of the North. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
169. Jia, X., T.M. DeSutter, T.F. Scherer, and D. Steele. 2009. Simulation of water table and salinity changes in a subsurface drainage field using Hydrus-2D. American Society of Agricultural and Biological Engineers Annual International Meeting, June 21-24, 2009, Reno, NV.
170. Jyoti, V., B. Saini-Eidukat, D. Hopkins, and T. DeSutter. 2009. Cadmium distribution in soils within the Pembina Escarpment, North Dakota. ND EPSCoR State Conference.
171. Sawatzky, D.A., F.X.M. Casey, T.M. DeSutter, S.F. Korom, and X. Jia. 2009. Hydraulic efficiency in biofilm affected tile drains. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
172. Stone, J., C. McCutcheon, H. Betemariam, L. Stetler, M. Penn, T. DeSutter, and S. Chipps. 2009. A multimodal approach to develop a TMDL for mercury impaired lakes and impoundments in South Dakota. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
173. Zitnick, K., H. Hakk, F.X.M. Casey, T. DeSutter, N. Shappell and E. Khan. 2009. Effects of Liquid Swine Manure On Sorption of 17 β -Estradiol to Soil. *In* Annual Meetings Abstracts of the Manitoba Soil Science Society. Winnipeg, Manitoba.
174. Zitnick, K., H. Hakk, F. Casey, T. DeSutter, N. Shappell, and E. Khan. 2009. Effects of liquid swine manure on sorption of 17 β -estradiol to soil. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
175. DeSutter, T.M., and C.B. Godsey. 2008. Beet processing lime for use as a soil amendment. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
176. Casey, F.X., H. Hakk, G. Larsen, T. DeSutter, E. Khan, and P.G. Larsen. 2008. Reproductive hormones in the environment. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
177. Jia, X., T.F. Scherer, T.M. DeSutter, and D.D. Steele. 2008. Change of soil hardness and soil properties due to tile drainage in the Red River Valley of the North, ASABE Annual Meeting, June 30 – July 2, 2008, Providence, RI.

178. DeSutter, T.M., and L.J. Cihacek. 2007. Dissolution of FGD and commercial gypsum and their potential for remediating sodic soils in semi-arid environments. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
179. Heitman, J.L., R. Horton, T.J. Sauer, and T.M. DeSutter. 2007. Measuring soil-water evaporation in-situ. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
180. Heitman, J.L., R. Horton, T.J. Sauer, and T.M. DeSutter. 2007. Soil-water evaporation dynamics determined with measurement of sensible heat transfer. Annual Meeting of the American Geophysical Union. San Francisco, CA.
181. DeSutter, T.M., T.B. Parkin, T.C. Kaspar, T.J. Sauer, and J.L. Hatfield. 2006. Soil respiration in response to landscape position. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
182. Hatfield, J.L., J. Prueger, T.B. Parkin, T.J. Sauer, and T.M. DeSutter. 2006. Role of micrometeorological methods to quantify greenhouse gas fluxes in agricultural systems. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
183. Heitman, J.L., T.J. Sauer, R. Horton, and T.M. DeSutter. 2006. Estimation of bare-soil evaporation using a calorimetric approach with heat flux measured at multiple depths. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
184. Parkin, T.B., T.M. DeSutter, J. Prueger, T.C. Kaspar, T.J. Sauer. 2006. Field comparison of methods for measuring soil CO₂ flux. *In* Annual meeting abstracts [CD-ROM]. ASA, CSSA, and SSSA, Madison, WI.
185. Vaillant, G., G. Pierzynski, J. Ham, and T. DeSutter. 2006. Nutrient movement below cattle feedlots in Kansas. 232nd National American Chemical Society Meeting and Exposition, September 10-14, San Francisco, CA.
186. Pierzynski, G., T. DeSutter, G. Vaillant, and J. Ham. 2006. Nutrient movement below animal feeding operations. 18th World Congress of Soil Science Meeting, July 9-15, Philadelphia, PA.
187. DeSutter, T.M., T.J. Sauer, and T.B. Parkin. 2005. Continuous, long-term measurement of soil carbon dioxide fluxes using porous tubing. Annual Meeting of the American Society of Agronomy. Salt Lake City, UT.
188. Pierzynski, G.M., T.M. DeSutter, and P. Barnes. 2004. Poultry litter application timing effects on runoff losses of nutrients, sediments, and bacteria. Annual Meeting of the American Society of Agronomy. Seattle, WA.
189. DeSutter, T.M. and G.M. Pierzynski. 2004. Evaluation of soils for use as liner materials: A soil chemistry approach. Meeting of the Sustainable Land Application Conference. Lake Buena Vista, FL.
190. DeSutter, T.M. and G.M. Pierzynski. 2003. Evaluation of soils for use as liner materials: A soil chemistry approach. Annual Meeting of the American Society of Agronomy. Denver, CO.

191. Ham, J.M. and T.M. DeSutter. 2003. Standards for measuring seepage from anaerobic lagoons and manure storages. Meeting of the International American Society of Agricultural Engineers. Las Vegas, NV.
192. DeSutter, T.M., G.M. Pierzynski, and J.M. Ham. 2003. Nitrogen movement beneath animal waste lagoons. Meeting of the American Water Resources Association Spring Specialty Conference Agricultural Hydrology and Water Quality. Kansas City, MO.
193. Ham, J.M. and T.M. DeSutter. 2003. Standards for measuring seepage from anaerobic lagoons and manure storages. Meeting of the American Water Resources Association Spring Specialty Conference Agricultural Hydrology and Water Quality. Kansas City, MO.
194. DeSutter, T.M., G.M. Pierzynski, and J.M. Ham. 2002. Soil chemical properties beneath swine and cattle waste lagoons. Annual Meeting of the American Society of Agronomy. Indianapolis, IN.
195. DeSutter, T.M., G.M. Pierzynski, and J.M. Ham. 2002. Chemical movement beneath animal waste lagoons in Kansas. Annual Meeting of the Kansas Soil Classifiers. Hutchinson, KS.
196. Ham, J.M. and T.M. DeSutter. 2001. Measurement of seepage losses and chemical export from waste lagoons at animal feeding operations. Annual Meeting of the American Geophysical Union. Boston, MA.
197. DeSutter, T.M. and J.M. Ham. 2001. Methane and carbon dioxide emissions from a large-scale swine operation. Annual Meeting of the American Society of Agronomy. Charlotte, NC.
198. Ham, J.M. and T.M. DeSutter. 2000. Seepage rates and nitrogen losses from animal waste lagoons: Potential impacts on groundwater quality. Innovative technologies for planning animal feeding operations, sponsored by the NRCS. Denver, CO.
199. Murphy, J.P., J.M. Ham, and T.M. DeSutter. 2000. Kansas swine regulations and lagoon research. Innovative technologies for planning animal feeding operations, sponsored by the NRCS. Denver, CO.
200. DeSutter, T.M. and J.M. Ham. 1999. Seepage and nitrogen export from swine waste lagoons. Meeting of the 86th Annual Cattlemen's Day, Kansas State University. Manhattan, KS.
201. DeSutter, T.M. and J.M. Ham. 1999. Seepage and nitrogen export from swine waste lagoons. Annual Meeting of the Water and the Future of Kansas Conference. Manhattan, KS.
202. DeSutter, T.M. and J.M. Ham. 1998. Measuring seepage losses from livestock waste lagoons. Annual Meeting of the American Society of Agronomy. Baltimore, MD.
203. DeSutter, T.M., S.A. Clay, and D.E. Clay. 1997. Movement of herbicides by wind-erodible sediments. Meeting of the 9th Annual Ground Water Quality Conference. Pierre, SD.
204. Chang, J., D.E. Clay, C.G. Carlson, D.D. Malo, S.A. Clay, M. Ellsbury, D. Woodson, and T. DeSutter. 1997. Soil sampling for precision farming. Annual Meeting of the American Society of Agronomy. Anaheim, CA.
205. DeSutter, T.M., S.A. Clay, and D.E. Clay. 1996. Transport of agrichemicals by wind-eroded sediments. Annual Meeting of the North Central Weed Science Society. St. Louis, MO.

206. DeSutter, T.M., S.A. Clay, and D.E. Clay. 1996. Transport of agrichemicals by wind-eroded sediments to nontarget areas. Annual Meeting of the South Dakota Academy of Science. Brookings, SD.
207. DeSutter, T.M., S.A. Clay, and D.E. Clay. 1995. Agrichemical movement with wind-eroded sediment. Annual Meeting of the North Central Weed Science Society. Omaha, NE.
208. DeSutter, T.M., S.A. Clay, and D.E. Clay. 1995. Agrichemical movement with wind-eroded sediment. Meeting of the Soil and Water Conservation Society WEP/WEPPS Symposium. Des Moines, IA.
209. DeSutter, T.M., S.A. Clay, and D.E. Clay. 1995. Agrichemical movement with wind-eroded sediment. Meeting of the 7th Annual Ground Water Quality Conference. Pierre, SD.

University/Departmental

1. DeSutter, T. 2024. Soil reclamation research. Presented at the SNRS Seminar Series. September 27.
2. DeSutter, T. 2020. Transformative power of soil. Phi Kappa Phi Faculty Lectureship.
3. DeSutter, T. 2016. Integrated research. School of Natural Resource Sciences Seminar Symposium, North Dakota State University, Fargo, ND.
4. DeSutter, T., A. Guy, F. Casey, R. Kolka, and J. Leitch. 2011. Sediment quantity and quality following the 2009 flooding event in Fargo-Moorhead. School of Natural Resource Sciences Seminar Series, North Dakota State University, Fargo, ND.
5. DeSutter, T.M., X. Jia, T. Scherer. 2009. Water quality from a tile drained field. Presented to participants of the NDSU Tile Drainage Bus Tour.
6. DeSutter, T.M. 2009. Development of an environmental soil science research program: Recent projects and collaborations. Presented to NDSU Summer Science Seminar.
7. DeSutter, T.M. 2009. Defining and understanding the research problem. Presented to Mississippi Valley State University summer internship students.
8. DeSutter, T.M., and L.J. Cihacek. 2009. Potential agricultural uses of flue gas desulfurization gypsum in the Northern Great Plains. Presented during the spring Soil Science Seminar Series.
9. DeSutter, T.M. 2008. Defining and understanding the research problem. Presented to Mississippi Valley State University summer internship students.
10. DeSutter, T.M. 2008. The NDSU and Chulalongkorn University faculty exchange: A soil scientist's experience. Presented during the spring Soil Science Seminar Series.
11. DeSutter, T.M. 2007. The gradient-diffusion method for determining CO₂ efflux from soil: Pros and cons. Presented during the spring Soil Science Seminar Series.
12. DeSutter, T.M. 2007. A soil scientist's perspective on biomass harvesting. Presented during the NDSU Bioforum Meeting.

CONSULTING ACTIVITIES

Val Industries (2002-2003)

Smithfield Foods (2002-2003)

Agricultural Engineers and Associates (2000, 2001)

Kansas Livestock Association Environmental Services (2001)

Messerli Kramer (2022-present)

Lonabaugh and Riggs, LLP (2025)

COMMUNITY VOLUNTEERING

2008-present River Keepers

2009-2012 Board of Directors of River Keepers.

2010-2012 Vice President of the Board of Directors of River Keepers.

2008 Master Recreational Plan for the Otter Tail River of Minnesota.

2007-2016 Hospice of the Red River Valley.

2018-2023 Farm in the Dell of the Red River Valley