

CURRICULUM VITA

April 2014

NAME: Michael John Vepraskas
TITLE: William Neal Reynolds Distinguished Professor of Soil Science
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AREAS OF INTEREST: Wetland soils, Redoximorphic Features, Hydrology

EDUCATION: B.S. Geology, University of Wisconsin-Madison, 1973.
M.S. Soil Science, University of Wisconsin-Madison, 1975.
M.S. Water Resources Management, University of Wisconsin-Madison,
1975.
Ph.D. Soil Science, Texas A & M University, 1980.

PROFESSIONAL LICENSE: Licensed Soil Scientist-North Carolina (no. 1012)

EMPLOYMENT RECORD:

2008-Present	William Neal Reynolds Distinguished Professor, Dept. of Soil Science, North Carolina State University
1993-2008	Professor, Dept. of Soil Science, North Carolina State University.
1988-1989	Fulbright Fellow, Dept. of Soil Science and Geology, Agricultural University, Wageningen, The Netherlands.
1986-1993	Associate Professor, Dept. of Soil Science, North Carolina State University.
1980-1986	Assistant Professor, Dept. of Soil Science, North Carolina State University.

RESEARCH PROJECTS (Since 1991)

1. Dynamics of Critical Soil Processes and Indicators of Hydric Soils in Created Wetlands. Project Leader. U.S. Army Corps of Engineers: \$100,000. 1991-1994.
2. Predicting Contaminant Transport Along Veins and Fractures Above the Water Table. Project Leader. Water Resources Research Institute. \$67,000. 1992-1994.
3. Preferential Movement of Water and Solute Through Soil/Saprolite Sequences. Co-Director. USDA-CSRS. \$117,000.

4. Methodology for Determining the Reducing Capacity of a Hydric Soil. Co-Director. U.S. Forest Service. \$37,000. 1992 -1994.
5. Estimating Historic Water Table Fluctuations Using Redoximorphic Features and a Hydrologic Model. EPA. \$100,000, 1995-1998.
6. Restoration of Hydrology and Water Quality Functions on Prior Converted Wetlands. Co-Principal Investigator. USDA-CSRS. \$299,358. 1994 to 1997.
7. Predicting Long-Term Wetland hydrology Using Hydric Soil Field Indicators”. Project Director. NC Water Resources Research Instit., \$40,000. 1999-2001.
8. Methodology to Assess Soil, Hydrologic, and Site Parameters that Affect Wetland Restoration. Principle Investigator. Project Director. NC Dep. of Transportation, \$1,937,000. 2000-2009.
9. Wetland Restoration of North River Project. Co-Investigator. NC Wetland Restoration Program (Phase I), \$921,026. 2002-2005.
10. Assessment of Groundwater Flows at Juniper Bay and their Impact on the Surrounding Area. Co-Investigator. NC Dep. of Transportation, \$211,871. 2002-2005.
11. Evaluation of Electromagnetic Induction Techniques to assess Septic Plumes and Water Table Levels in Wetlands: Implications on Wetland Hydrology and Wetland Identification. Principle Investigator. US Forest Service, \$75,201. 2005-2006.
12. Phosphorus Release from Agricultural Lands Converted to Wetlands. Co-investigator. NC Agric. Foundation, \$8,000, 2005-2006.
13. Soil Productivity and Nutrient Management of Mid-rotation Sweetgum and Sycamore SRWC Plantations. Principle Investigator. US Forest Service, \$81,500.
14. Multi-scale Analysis of Mechanisms and Impact of Phosphorus Mobilization in Wetland Soils Created from Drained Agricultural Fields. Project Director, USDA-NRI, \$450,000, 2009-2013.
15. Predicting Climate-Change Impacts on the Hydrology of Benchmark Soils. Principal Investigator. USDA-NRCS, \$40,000, 20011-2013.
16. Evaluation of the P-Balance of a Restored, Previously Farmed Wetland. Principal Investigator. Water Resources Research Institute of NC, \$50,000, 2012-2013.

COURSES TAUGHT:

Semester-Long Courses

1. **"Principles of Soil Science"** (SSC 012), basic soils course for the 2-year Agricultural Institute, NCSU: Lectured and organized laboratories 1981-1986, 1991.
2. **"Soil Physical Properties and Crop Growth"** (SSC 461), introductory soil physics course, NCSU: 1991, 2003-8.
3. **"Soil Micromorphology"** (SSC 590), graduate level course on using the microscope to study soils, 1987.
4. **"Soil Classification"** (SSC 452), undergraduate course teaching soil morphology, soil classification, and mapping techniques. Laboratory instructor 1994-2006, Lecturer 1996.
5. **"Wetland Soils"** (SSC 470/570), graduate and undergraduate course dealing with the morphology, chemistry, and hydrology of wetland soils. Taught annually since 1996.

Short-Courses

1. "Hydric Soils" An In-depth, Two-Part Short Course for Wetland Professionals", co-organizer and lecturer. A 4-day short course, taught twice each year since 1998 in Raleigh, NC, Greenville, NC, Wilmington, NC, and Savannah, GA.
2. "Advanced Hydric Soils Class", Sponsored by USDA-NRCS, this 5-day course is taught to personnel from the NRCS, Corps of Engineers, EPA, Forest Service, and Fish and Wildlife Service. Vepraskas is the lead instructor lecturing on redox chemistry, redoximorphic features, HGM modeling, interpreting redox and temperature data, hydric soil technical standard, and strategies for handling problem soils. He also leads field exercises on installing and reading redox electrodes, wells, piezometers and thermocouples as well as on identifying field indicators of hydric soils. This course has been taught in: Lincoln, NE; Davis, CA; Amherst, MA; Greenville, NC; Coeur d' Alene, ID; Savannah, GA; Madison, WI (five times); Greenville, MS; Corvallis, OR, Toledo, OH, Houston, TX, Ellensburg, WA; Mt. Vernon, WA; Nebraska City, NE, and Albuquerque, NM, and Meridian, MS.

Distance Learning (Website: <http://courses.soil.ncsu.edu/ssc570/>)

"Wetland Soils" (SSC 470/570), a course for undergraduate and graduate students has been taught as an internet course (distance learning) since the January, 2000 semester. Students have come from the following states: NC, VA, PA, IN, WV, GA, OR, AK, and TN.

"Wetland Soils" and "Advanced Wetland Soils" (CSES 4984 and CSES 5984), were taught through Virginia Tech. University during the Spring semester, 2002 as distance learning courses. Twelve students were enrolled. These were listed as official Virginia Tech courses through the Crop & Soil Environmental Sciences Dep.

Distance Learning-- Masters of Soil Science

Developed, with J.L. Havlin, a nonthesis Masters of Soil Science program. Full approval by the UNC Administration is expected by the end of 2006. The first student in the program will graduate in Dec., 2006.

New Undergraduate Major

Led development of a new undergraduate major in Soil Science entitled: Soil and Land Development. The major is intended to train students to evaluate land for real estate development. A minor in business administration is an option for students who may be interested in starting their own business.

Field Courses

“**Soil Geomorphology and Land Use of North Carolina**”. Week-long field course where students examine soils and geomorphology across NC. May, 2002 to present.

NATIONAL FIELD TRIPS LED:

“Challenges of Living with the Changing Landscape”, 2001 Soil Geomorphology Tour for the Soil Science Society of America’s Annual Meeting. Three-day field tour for 40 participants. Organizer and co-leader.

“Soils and Geomorphology of the Blue Ridge Mountains”, 2001 Soil Science Society of America’s Pedology Field Tour. Organizer and co-leader.

“Soils and Geomorphology of the Southeastern U.S.” A 10-day trip being organized for the 2006 International Soil Science Congress, Philadelphia, PA. Organizer and leader of the trip which will travel through NC, VA, and PA. Was cancelled in 2006 due to low enrollment.

GRADUATE STUDENT ADVISING:

Served as major advisor or co-advisor to 30 M.S. students and five Ph.D. students. Committee member for 14 Ph.D. and M.S. students.

UNDERGRADUATE ADVISING:

Advised over 50 students in the Agricultural Institute, and B.S. students in Conservation, Agronomy, Natural Resources, and Environmental Science.

EDITORIAL SERVICE

1. Joint Editor-in-Chief, *Geoderma* (published by Elsevier), 2008+; Member of the Editorial Board, 1992+.
2. Technical Editor, *Soil Science Society of America Journal*, Divisions S-5, S-9, and S-10, 1999-2005.
3. Associate Editor, *Soil Science Society of America Journal*, Division S-5 (Pedology), 1992-1995, and Division S-10 (Wetlands), 1993-1998.
4. Associate Editor, *Wetlands*, 1999-2001.

5. Co-Editor of the SSSA Special Publication entitled "Aquic Conditions and Hydric Soils: The Problem Soils", published in 1997
6. Co-Editor of the text entitled "Wetlands and Hydric Soils" published by Ann Arbor Press, Inc. in 2001
7. Editor for the SSSA Publication: "Guidelines for Analysis and Description of Regolith Materials" by G. Stoops, 2003

SABBATICAL LEAVE:

Spent 12 months (1988-89) in the Netherlands at the Wageningen Agricultural University, Department of Soil Science and Geology. A teaching manual was prepared for the European Course on Soil Micromorphology. In addition, completed a research project evaluating water movement through saprolite using micromorphological techniques in cooperation with Johan Bouma which resulted in two refereed publications.

Developed a teaching manual (course text) for the European Intensive Course on Soil Micromorphology. This book was written for an international course on micromorphology which was taught in Wageningen in 1989 and 1991. Lectured at this course both times it was taught.

PROFESSIONAL SOCIETIES: American Association for the Advancement of Science, American Society of Agronomy, International Society of Soil Science, NC Water Resources Association, Soil Science Society of America, Soil Science Society of North Carolina, Society of Wetlands Scientists.

HONORS AND AWARDS:

- Elected to Gamma Sigma Delta, Phi Sigma, and Sigma Xi Honor Societies;
- Netherlands Ministry of Agriculture Fellowship (1988);
- Fulbright Scholar Award (1988) for sabbatical in the Netherlands;
- Elected President of the Soil Science Society of North Carolina, 1996.
- "Certificate of Appreciation" from the USDA for work on the Field Indicators of Hydric Soils (1995).
- NCSU Agronomy Club "Outstanding Instructor Award, 1996;
- Gamma Sigma Delta's "Certificate of Merit", 1996.
- Licensed Soil Scientist in NC (No. 1012), 1996.
- Elected "Fellow" of the Soil Science Society of America, 2000.
- Elected "Fellow" of the American Society of Agronomy, 2001.
- Soil Science Applied Research Award, Soil Science Society of America, 2004.
- Professional Achievement in Water Quality Award, 2006, Soil & Water Conservation Society, Hugh Hammond Bennett Chapter, NC.
- Soil Science Education Award, Soil Science Society of America, 2006
- Appointed William Neal Reynolds Professor, 2008

- Elected “Fellow” of the American Association for the Advancement of Science (AAAS) 2008
- Outstanding Graduate Instructor Award, NCSU College of Agriculture and Life Sciences, 2009
- Elected “Fellow”, Society of Wetland Scientists, 2010
- Annual Achievement Award, Soil Science Society of North Carolina, 2013

ADJUNCT PROFESSORSHIPS:

Adjunct Professor of Geology, University of Tennessee, Knoxville, 2000-present.

Adjunct Professor of Soil Science, Virginia Tech. University, Blacksburg, VA, 2002-present.

SERVICE TO THE PROFESSION:

1. American Society of Agronomy Student Speech Contest, member 1984 to 1986, Chairman, 1986
2. Co-chaired and organized the course "Practical Applications of Soil Micromorphology", held at the Soil Science Society of America Annual Meeting, in Minneapolis, MN, November 6, 1992.
3. Participated in revising the U.S. soil classification of wet soils (Soil Taxonomy). Chaired the committee that developed the new morphological criteria (redoximorphic features) that are used in Soil Taxonomy to identify wet soils. Also modified the "Keys to Soil Taxonomy" to include redoximorphic features.
4. Wrote a research bulletin at the request of the Soil Conservation Service that explains for soil mappers what redoximorphic features are, and how to identify, describe, and interpret them. Over 15,000 copies have been sold worldwide at \$5/copy.
5. Prepared a slide set to instruct soil mappers and field soil scientists on how to identify and interpret redoximorphic features.
6. Organized a SSSA symposium entitled "Aquic Conditions and Hydric Soils: The Problem Soils", held at the SSSA Annual Meeting, Seattle, WA.
7. Board member of the “North Carolina Registry of Certified Professionals in Soils”. Actively lobbied State Legislature to require licensing of professional soil scientists.
8. Member of the national ad hoc committee that has identified “Field Indicators of Hydric Soils” for the NRCS, EPA, Corps of Engineers, and U.S. Fish and Wildlife Service.
9. President, Soil Science Society of North Carolina, 1996; member Executive Committee, 1995-1997
10. Faculty Advisor, Agronomy Club, NCSU, 1995-1996
11. Chairman, SSSA subcommittee on Micromorphology. 1996-1998

12. Member Trisocieties (ASA, SSSA, CSSA) Wetlands Working Group, 1996
13. Member, SSSA Career Pathways Committee, 1996-1997
14. Co-organizer of the SSSA's Soil Micromorphology Workshop, Anaheim, CA, 1997
15. Member, SSSA Geomorphology Committee, 1998-1999, Chairman, 2000
16. Co-chaired the USDA-NRCS's "Sharkey Committee". This group of 22 scientists was asked to review the Sharkey series of the Lower Mississippi Valley and determine ways the soil could be studied to determine if it was a hydric soil. This review was requested by the U.S. Senate's Appropriations Committee. Vepraskas wrote the final report, presented it orally to the NRCS administration, and it was sent to the Appropriations Committee. Their review authorized further study of the problem to address problems raised.
17. Chair, SSSA Soil Geomorphology Committee, 2001, member 1999-2001
18. SSSA Board Representative, Div. S-10 (Wetland Soils), 1999-2002
19. ASA Board Representative, Div. S-10 (Wetland Soils), 1999-2002
20. Member, SSSA Outreach Committee, 1999-2002
21. Member, SSSA Editorial Affairs, Policies and Procedures, 2002-2005
22. Member, SSSA Editorial Board, 1992-1998, 1999-2005
23. Member, National Technical Committee for Hydric Soils—governing body determining how wetland soils will be defined and identified in the United States.
24. Member, SSSA Soil Science Distinguished Service Award Committee, 2002.
25. Member, SSSA Honorary Membership Committee, 2002.
26. Member, SSSA Membership, Identity and Visibility, 2003.
27. Elected chair Wetland Soils Division (S-10), Soil Science Society of America, 2012
28. Member (2012-13), Chair (2014-2015, SSSA Soil Science Education Award Committee, 2012-2013
29. NC Board for Licensing of Soil Scientists, Appointed by Governor, 2012, elected vice Chairman, 2012.

PRESENTATIONS AT PROFESSIONAL MEETINGS:

Invited Presentations, Seminars, and Lectures: Over 150 invited presentations have been made, selected titles are as follows:

1. Vepraskas, M.J. 1983. Review of common sesquioxide pedological features. SSSA Soil Micromorphology Workshop. Univ. of Maryland, Baltimore.
2. Vepraskas, M.J. 1987. Identification and management of soils that form tillage pans. W. Va. Assoc. of Professional Soil Scientists, Annual Meeting. Beckley, WV.
3. Vepraskas, M.J. 1988. Identification and management of soils that form tillage pans. Wageningen Agricultural University. Dep. of Soil Science and Geology, Netherlands.
4. Vepraskas, M.J. 1988. Identification and management of soils that form tillage pans. Meeting of the North Carolina Area Agronomists, Raleigh.
5. Vepraskas, M.J. 1990. Water movement through saprolite. First International Intensive Course on Soil Micromorphology, held at the Agricultural University, Wageningen, The Netherlands.
6. Vepraskas, M.J., and W.R. Guertal. 1990. Morphological indicators of soil wetness. Presented to the Eighth Intern. Soil Correlation Meeting on Wet Soils, sponsored by the USDA-SCS, Baton Rouge, LA.
7. Vepraskas, M.J., L.P. Wilding, and L.R. Drees. 1992. Micromorphology of soils with aquic conditions. Keynote paper for the Ninth Intern. Working Meeting on Soil Micromorphology, July 12-17, 1992, Townsville, Australia.
8. Vepraskas, M.J. 1992. Hydromorphic soils: The U.S. Perspective. Presented to the Geological Institute of the Royal University of Ghent, Belgium.
9. Vepraskas, M.J. 1992. Soil water and nutrient movement through soils. Two lectures and two laboratory exercises for the 2nd International Intensive Course on Soil Micromorphology, held at the Agricultural University, Wageningen, The Netherlands.
10. Vepraskas, M.J. 1992. How to describe thin sections. Lecture and laboratory exercise for the SSSA workshop, "Practical Application of Soil Micromorphology". Soil Sci. Soc. Am. Annual Meeting, Minneapolis, MN.
11. Vepraskas, M.J. 1992. Wetlands and redoximorphic features. Lecture and laboratory exercise for the SSSA workshop, "Practical Application of Soil Micromorphology". Soil Sci. Soc. Am. Annual Meeting, Minneapolis, MN.
12. Vepraskas, M.J. 1993. Redoximorphic features for identifying aquic conditions. Int. Paleopedology Symposium, sponsored by the Int. quaternary Geolog. Assoc., and Int. Soil Science Soc. held at the Univ. of IL Conf. Center, Monticello, IL.

13. Vepraskas, M.J. 1993. Redoximorphic features for identifying hydric soils. Hydric soils symposium, Soil Sci. Soc. Am. Ann. Meeting, Cincinnati, OH.
14. Vepraskas, M.J. 1994. Redoximorphic features for identifying aquic conditions. National meeting of the Association of Professional Consulting Soil Scientists.
15. Vepraskas, M.J. 1994. Current status of wetlands evaluation in the U.S., Univ. of Calif.-Riverside, Dep Of Soil and Environmental Sciences, Riverside, CA.
16. Vepraskas, M. J. 1994. Techniques for identifying relict features in soils. Washington State Univ., Dep. of Agronomy.
17. Vepraskas, M. J. 1994. Redoximorphic features for identifying aquic conditions. Univ. of Idaho, Dep. of Soil, Plant, and Entomological Sciences, Moscow.
18. Vepraskas, M. J. 1994. Development of redoximorphic features in soils used to construct a wetland for mitigation. Presented at the "Hydric Soils Workshop", Soil Science Society of America, Annual Meeting, Seattle, WA.
19. Vepraskas, M. J. 1995. Redoximorphic features for identifying hydric soils. Florida Assoc. of Environmental Scientists, St. Augustine, FL.
20. Vepraskas, M. J. 1995. Redoximorphic features for identifying hydric soils. Penn. Assoc. of Prof. Soil Scientists, Hershey, PA.
21. Vepraskas, M. J. 1995. Oxidation-reduction reactions and the formation of hydric soil indicators. National Tech. Comm. on Hydric Soils Annual Meeting, Gurnee, IL.
22. Vepraskas, M. J. 1995. Techniques for identifying waterlogged soils. Virginia Environ. Health Assoc. Fall Educational Workshop., Virginia Beach, VA.
23. Vepraskas, M. J. 1995. Development of redoximorphic features in soils used to construct a wetland for mitigation. Presented at the "Hydric Soils Workshop" at the Soil Science Soc. Ann. Meeting, St. Louis, MO.
24. Vepraskas, M. J. 1996. Field indicators of hydric soils. Second Annual National Wetland Delineators Conf., Minneapolis, MN.
25. Vepraskas, M.J. 1997. Basic oxidation-reduction chemistry; Identifying redoximorphic features; strategies for problem situations (3 hrs. of lecture). Ohio Water Quality and Management Conf., Columbus, OH.
26. Vepraskas, M. J. 1998. Predicting historic water table levels using soil morphology. National Society of Consulting Soil Scientists, Savannah, GA.

27. Vepraskas, M. J. 1998. Status of the Sharkey Soils in the Lower Mississippi Valley. Southern Regional Cooperative Soil Survey Conference, Baton Rouge, LA.
28. Vepraskas, M. J. 1998. How water moves through saprolite. Virginia Assoc. of Professional Soil Scientists, Frederick, MD.
29. Vepraskas, M. J. 1998. Calibrating soil colors to long term water table dynamics. Soil Science Society of America, Special Symposium, Baltimore, MD.
30. Vepraskas, M.J. 1998. Redox reactions: types, dynamics, and simple tests for field verification. Society of Wetland Scientists Annual Meeting, Anchorage, AK.
31. Vepraskas, M.J. 1998. Evaluating hydric soil conditions in the Sharkey Vertisol: recommendations. NRCS, National Tech. Comm. Hydric Soils, Techn. Standard, Working Group, Baton Rouge, LA.
32. Vepraskas, M.J. 2000. Wetland soil identification and wetland construction: Do geologists have a role? Geology Dep., University of Tennessee, Knoxville.
33. Vepraskas, M.J. 2001. Application of biogeochemistry to hydric soil identification. Seventh International Symposium on the Biogeochemistry of Wetlands. Duke Univ., Durham, NC.
34. Vepraskas, M.J. 2001. Genesis and function of pore structures in saprolite from metamorphic rock. Deep Regolith Symposium, Soil Sci. Soc. Am. Annual Meeting, Charlotte, NC.
35. Vepraskas, M.J. 2001. Basic requirements of technical standards. Symposium on Interpreting Water Table Data. Soil Sci. Soc. Am. Annual Meeting, Charlotte, NC.
36. Zanner, C.W., D.A. Wysocki, and M.J. Vepraskas. 2001. Carolina Bay Evolution: can deep soil investigations shed light on a Coastal Plain enigma? Soil Sci. Soc. Am. Annual Meeting, Charlotte, NC.
37. Williams, J., D.L. Lindbo, and M.J. Vepraskas. 2001. A suggested water table monitoring method based on soil color patterns. Soil Sci. Soc. Am. Annual Meeting, Charlotte, NC.
36. Vepraskas, M.J. 2002. Strategies for restoring Carolina Bays and other freshwater water wetlands. Soil Science Dep., NC State University, Raleigh.
37. Vepraskas, M.J., J.G. White, J.M. Ewing, J. Jenkins, and S.C. Luginbuhl. 2002. Methodologies to characterize sediment stratigraphy of a Carolina bay wetland prior to restoration. Water Resources Res. Conf., "Setting the Agenda for Water Resources Research", NC State University, Raleigh.

38. Vepraskas, M.J. 2002. Seasonal saturation-morphology relationships. Southern Regional Coop. Soil Survey Conf., Tybee Island, GA.
39. Vepraskas, M.J. 2002. Soil micromorphology: concepts, techniques, and applications. Soil Science Soc. Ann. Meeting, Indianapolis, IN.
40. Vepraskas, M.J. 2002. Strategies for restoring Carolina Bays and other freshwater wetlands. Soil Science Dep., NC State University, Raleigh.
41. Vepraskas, M.J., G.S. Kreiser, and R.L. Huffman. 2003. Application of water budgets to landscape hydrology analysis. Geological Soc. Am. Ann. Meeting, Seattle, WA.
42. Vepraskas, M.J., G.S. Kreiser, and R.L. Huffman. 2003. Application of hydrologic models to soils investigations. Soil Sci. Soc. Ann. Meeting, Denver, CO.
43. Vepraskas, M.J. 2003. Formation of redoximorphic features and hydric soil field indicators. Florida Assoc. Envir. Soil Sci. Ann. Meeting, Jacksonville, FL.
44. Vepraskas, M.J., H.C. Smith, and T.C. Morris. 2004. Using soil color to evaluate wetland functions. Soils and Watershed Assessment Symposium, Soil Sci. Soc. Am. Annual Meeting, Seattle, WA.
45. Vepraskas, M.J. 2005. Redoximorphic feature formation and interpretation. Conference on Redoximorphic Features. University of Minnesota, Duluth, MN.
46. Vepraskas, M.J. 2006. Using soil color to evaluate wetland hydrology. National Society of Consulting Soil Scientists, Annual Meeting, Marietta, GA.
47. Vepraskas, M.J. 2006. Interpreting morphological features in wetland soils using hydrologic models. Keynote address for the Hydropedology Symposium, World Congress of Soil Science, Philadelphia, PA, July 2006.
48. Hesterberg, D.H. and M.J. Vepraskas. 2006. Spatially variable redox processes in soils. Soil Sci. Soc. Ann. Meeting, Indianapolis, IN.
49. Vepraskas, M.J. 2007. Interpreting morphological features in wetland soils using hydrologic models. Keynote address for the Hydropedology Symposium, European Geophysical Union, Vienna, Austria.
50. Vepraskas, M.J., D.G. Schultze, X. Gao, and S. Abit. 2007. Soil minerals as tracers of hydrology. Soil Sci. Soc. Ann. Meeting, New Orleans, LA.
51. Vepraskas, M.J. and D. G. Crouse. 2007. New directions for academic programs in soil science. Soil Sci. Soc. Ann. Meeting, New Orleans, LA.
52. Vepraskas, M.J., D.G. Crouse, and E. Driscoll. 2008. New undergraduate frontiers in soil

- science. National Society of Consulting Soil Scientists Annual Meeting, Myrtle Beach, SC.
53. Vepraskas, M.J. 2008. Interpreting soil morphological features. National Society of Consulting Soil Scientists Annual Meeting, Myrtle Beach, SC.
 54. Vepraskas, M.J., J.L. Heitman, and R.E. Austin. 2008. Future directions for hydrogeology: quantifying the impacts of global change on wetlands and public health. First Intern. Conference on Hydrogeology, Penn. State Univ., State College, PA.
 55. Vepraskas, M.J. and D.S. Jennings. 2008. Interpreting Redoximorphic Features in Paleosols: What they can and cannot tell us about ancient climates. Pardee Symposium, Geological Society of America, Houston, TX.
 56. Vepraskas, M.J. 2008. Reading redoximorphic features: what do mottled soil colors mean to you. O2WA National On-Site Wastewater Conference, Roseburg, OR.
 57. Vepraskas, M.J. 2008. Method to identify wetland hydrology for the EPA's National Wetlands Condition Assessment Program in 2011. Western Ecology Division, USEPA, Corvallis, OR.
 58. Vepraskas, M.J., M. Wilson, and D.L. Lindbo. 2009. History of micromorphology and applications to land use regulation. Soil Sci. Soc. Am. Annual Meeting, History of Soil Mineralogy Symposium, Pittsburgh, PA.
 59. Vepraskas, M.J. and C.J. Moorberg. 2010. Phosphorus mobilization in restored isolated wetlands. Land Grant and Sea Grant National Water Conference, Hilton Head, SC.
 60. Vepraskas, M.J. 2010. Overview of the Distance Learning Program at NC State, Distance Education Symposium, Soil Sci. Soc. Am. Annual Meeting, Long Beach, CA.
 61. Vepraskas, M.J., J.L. Heitman, J. Shaw, A. Amoozegar, and D.L. Lindbo. 2010. Climate-change predictions of hydrology across regions using soil and landscape data. Hydrogeology Symposium, Soil Sci. Soc. Am. Annual Meeting, Long Beach, CA.
 62. Vepraskas, M.J. 2010. Redox reactions for hydric soil formation and delineation. Hydric Soils Symposium, Society of Wetland Soils Annual Meeting, Salt Lake City, UT.
 63. Vepraskas, M.J. and J.R. White. 2011. Wetland soils research and applications: past, present, and future. Symposium entitled: "75 years of the SSSA while looking Toward the Future", Soil Sci. Soc. Am. Annual Meeting, San Antonio, TX.
 64. Vepraskas, M.J. and D.L. Lindbo. 2011. Role of wetland soils short courses in post graduate training. Symposium entitled: "Wetland Soils Education", Soil Sci. Soc. Am. Annual Meeting, San Antonio, TX.

65. Vepraskas, M.J. 2012. Relationship of hydric soil field indicators to wetland hydrology. 9th INTECOL International Wetlands Conference, Orlando, FL.
66. Vepraskas, M.J. 2012. Applications of DRAINMOD in Soils Studies. Soil Science Society of Amer. Annual Meeting, Cincinnati OH.
67. Vepraskas, M.J. 2013. Climate change impacts on wetlands: regional comparisons across the U.S. Soil Sci. Soc. Amer. Annual Meeting, Tampa, FL.
68. Moorberg, C.J., M.J. Vepraskas, and C.P. Niewoehner. 2013. Water quality impacts of wetland restoration: what's the source of all of that phosphorus. **Live Streaming Session:** Soil Sci. Soc. Amer. Annual Meeting, Tampa, FL.

REFEREED PUBLICATIONS:

1. Vepraskas, M. J., F. G. Baker, and J. Bouma. 1974. Soil mottling and drainage in a Mollic Hapludalf as related to suitability for septic tank construction. *Soil Sci. Soc. Am. Proc.* 38:497-500.
2. Veneman, P. L. M., M. J. Vepraskas, and J. Bouma. 1976. The physical significance of soil mottling in a Wisconsin toposequence. *Geoderma* 15:103-118.
3. Vepraskas, M. J., and J. Bouma. 1976. Model experiments on mottle formation simulating field conditions. *Geoderma* 15:217-230.
4. Vepraskas, M. J., and L. P. Wilding. 1983. Albic neoskeletons in argillic horizons as indices of seasonal saturation and iron reduction. *Soil Sci. Soc. Am. J.* 47:1202-1208.
5. Vepraskas, M. J., and L. P. Wilding. 1983. Aquic moisture regimes in soils with and without low chroma colors. *Soil Sci. Soc. Am. J.* 47:280-285.
6. Vepraskas, M. J., and L. P. Wilding. 1983. Deeply weathered soils in the Texas Coastal Plain. *Soil Sci. Soc. Am. J.* 47:293-300.
7. Wilding, L. P., M. H. Milford, and M. J. Vepraskas. 1983. Micromorphology of deeply weathered soils in the Texas Coastal Plains. In: P. Bullock and C. P. Murphy (ed.) *Soil Micromorphology. Volume 2: Soil Genesis.* p. 567-574. A. B. Academic Publ., Ltd. Berkhamsted, U. K.
8. Oates, K. M., J. Camberato, and M. J. Vepraskas. 1984. A laboratory exercise using the microcomputer to determine nutrient recommendations and least-cost fertilizer blends. *J. Agron. Ed.* 13:50-53.
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