

## REFERENCES

- Armstrong, W. 1967. The oxidizing activity of roots in water-logged soils. *Physiologia Plantarum*. 20:920-926.
- Atkinson, R.B. 1991. An Analysis of Palustrine Forested Wetland Compensation Effectiveness in Virginia. Ph.D. dissertation, Virginia Poly. Inst. and State Univ., Blacksburg, VA.
- Atkinson, R.B., W.L. Daniels, and J. Cairns, Jr. 1998. Hydric soil development in depressional wetlands: A case study from surface mined landscapes. p. 182-196. *In* S.K. Majumdar, E.W. Miller, and F.J. Brenner (ed.) *Ecology of Wetlands and Associated Systems*. The Pennsylvania Academy of Science. Easton, PA, USA.
- Blake, G.R. and K.H. Hartge. 1986. Bulk Density. p. 365-375. *In* A. Klute (ed.) *Methods of Soil Analysis, Part 1: Physical and mineralogical methods*. 2<sup>nd</sup> Edition. ASA, SSSA. Madison, WI.
- Bishel-Machung, L., R.P. Brooks, S.S. Yates, and K.L. Hoover. 1996. Soil properties of reference wetlands and wetland creation projects in Pennsylvania. *Wetlands* 16:532-541.
- Boettinger, J. 1997. Aquasalids (salorthids) and other wet saline and alkaline soils: Problems identifying aquic conditions and hydric soils. p. 79-99. *In* M.J. Vepraskas and S.W. Sprecher (ed.) *Aquic Conditions and Hydric Soils: The Problem Soils*. SSSA Spec. Publ. 50. ASA, CSSA, and SSSA, Madison, WI.
- Bohn, H. 1971. Redox potential. *Soil Sci.* 112:39-45.
- Bouma, J. 1983. Hydrology and soil genesis of soils with aquic moisture regimes. p. 253-281. *In* L.P. Wilding et al. (ed.) *Pedogenesis and Soil Taxonomy: I. Concepts and Interactions*. Elsevier Science Publ., Amsterdam.
- Bremner, J.M. and C.S. Mulvaney. 1982. Nitrogen - total. p. 595-622. *In* A.L. Page (ed.) *Methods of Soil Analysis. Part 2: Chemical and Microbiological Properties*. 2<sup>nd</sup> Edition. ASA, SSSA. Madison, WI.
- Buol, S.W. and R.A. Rebertus. 1988. Soil formation under hydromorphic conditions. p. 253-260. *In* D.D. Hook et al. (ed.) *The Ecology and Management of Wetlands*. Vol. 1: *Ecology of Wetlands*. Timber Press, Portland, OR.
- Calmon, M.A., R.L. Day, E.J. Ciolkosz, and G.W. Petersen. 1998. Soil morphology as an indicator of soil hydrology on a hillslope underlain by a fragipan. p. 129-150. *In* M.L. Rabenhorst, et al., (ed.) *Quantifying Soil Hydromorphology*. SSSA/ASA Special Publication. Soil Sci. Soc. Am., Madison, WI

- Childs, C.W. 1981. Field test for ferrous iron and ferric-organic complexes (on exchange sites in water-soluble forms) in soils. *Austr. J. Soil Res.* 19:175-180.
- Clark, J.R. and Benforado, J. (ed.). 1981. *Wetlands of Bottomland Hardwood Forests: Proceedings of a Workshop on Bottomland Hardwood Forest Wetlands of the Southeastern United States.* Elsevier Scientific Publ. Co. New York.
- Confer, S.R. and W.A. Niering. 1992. Comparison of created and natural freshwater emergent wetlands in Connecticut. *Wetlands Ecology and Management* 2:143-156.
- Couto, W., C. Sanzonowicz, and A. De O. Barcellos. 1985. Factors affecting oxidation-reduction processes in an Oxisol with a seasonal water table. *Soil Sci. Soc. Am. J.* 49:1245-1248.
- Coventry, R.J. and J. Williams. 1984. Quantitative relationships between morphology and current soil hydrology in some Alfisols in semiarid tropical Australia. *Geoderma* 33:191-218.
- Crocker, R.L. and J. Major. 1955. Soil development in relation to vegetation surface age at Glacier Bay, Alaska. *J. Ecol.* 43:427-448.
- Dahl, T.E. and C.E. Johnson. 1991. Status and Trends of Wetlands in the Conterminous United States: Mid-1970's to Mid-1980's. U.S. Fish Wildl. Serv. Publ., Washington, DC. <http://www.nwi.fws.gov/reports.htm>.
- Daniels, R.B., E.E Gamble, and L.A Nelson. 1971. Relations between soil morphology and water-table levels on a dissected North Carolina coastal plain surface. *Soil Sci. Soc. Am. Proc.* 35:781-784.
- Daniels, W.L., M. Stolt, M. Fitch, and S. Nagle. 1996. *Wetlands Creation and Restoration Research Report – 1995/1996.* Virginia Dept. of Transportation, Transportation Res. Council. Charlottesville, VA.
- Environmental Laboratory. 1987. *Corps of Engineers Wetland Delineation Manual.* Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.
- Evans, C.V. and D.P. Franzmeier. 1986. Saturation, aeration, and color patterns in a toposequence of soils in north-central Indiana. *Soil Sci. Soc. Am. J.* 50:975-980.
- Faulkner, S.P. and W.H Patrick. 1992. Redox processes and diagnostic wetland indicators in bottomland hardwood forests. *Soil Sci. Soc. Am. J.* 56:856-865.

- Faulkner, S.P., W.H. Patrick, Jr., and R.P. Gambrell. 1989. Field techniques for measuring wetland soil parameters. *Soil Sci. Soc. Am. J.* 53:883-890.
- Federal Register. 1980. 40 CFR Part 230: Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material. p. 85352-85353. Vol 45. No. 249. US Government Printing Office, Washington, DC
- Federal Register. 1982. Title 33: Navigation and Navigable waters. Chapter II. Regulatory Programs of the Corps of Engineers. p. 31810. Vol 47. No. 138. US Government Printing Office, Washington, DC
- Franzmeier, D.P., J.E. Yahner, G.C. Steinhardt, and H. R. Sinclair, Jr. 1983. Color patterns and water table levels in some Indiana soils. *Soil Sci. Soc. Am. J.* 47:1196-1202.
- Frost, I.G., P.E. Johnson, J.R. McClain, S.C. Russell, and E.D. Whedbee. 1989. Draft wetlands compensation report. Environmental Div., VA Dept. Of Transportation, Richmond, VA.
- Gambrell, R.P. and, W.H Patrick. 1978. Chemical and microbiological properties of anaerobic soils and sediments. p. 375-423. *In* D.D. Hook and R.M. Crawford (ed.) *Plant life in Anaerobic Environments.* Ann Arbor Sci. Publ. Ann Arbor, MI.
- Gee, G.W. and J.W. Bauder. 1986. Particle Size Analysis. p. 383-409. *In* A.L. Page (ed.) *Methods of Soil Analysis. Part 2: Chemical and Microbiological Properties.* 2<sup>nd</sup> Edition. ASA, SSSA. Madison, WI.
- Genther, M.H., W.L. Daniels, R.L. Hodges, and P.J. Thomas. 1998. Redoximorphic features and seasonal water table relations, Upper Coastal Plain, Virginia. p. 43-76. *In* M.L. Rabenhorst, et al., (ed.) *Quantifying Soil Hydromorphology.* SSSA/ASA Special Publication. Soil Sci. Soc. Am., Madison, WI.
- Griffin, R.W., S.M. Starowitz, and L.P. Wilding. 1998. Wetness conditions and redoximorphic features in a microtoposequence on the Texas coast prairie. p. 151-172. *In* M.L. Rabenhorst, et al., (ed.) *Quantifying Soil Hydromorphology.* SSSA/ASA Special Publication. Soil Sci. Soc. Am., Madison, WI.
- Haering, K.C., W.L. Daniels, and J.A. Roberts. 1993. Changes in mine soil properties resulting from overburden weathering. *J. Environ. Qual.* 22:194-200.
- Haering, K., M. Genthner, W.L. Daniels, M. Stolt, and S. Nagle. 1994. The Development of Effective Strategies for the Restoration and Creation of Non-Tidal Wetlands by VDOT: 1993/1994 Research report. Virginia Dept. of Transportation, Transportation Res. Council. Charlottesville, VA.

- Hollander, M.A. and D.A. Wolfe. 1973. *Nonparametric Statistical Methods*. John Wiley and Sons, Inc. New York.
- Hoppe, D. 1989. Soil Survey of Essex County, VA. USDA, SCS in cooperation with Virginia Polytechnic Institute and State Univ. U.S. G.P.O, Washington, DC.
- Johnson, R.L. 1979. Timber harvests from wetlands. p.598-605. *In* P.E. Greeson et al. (ed.) *Wetland Functions and Values: The State of Our Understanding*. American Water Resources Assn., Minneapolis, MN.
- Kuehl, R.J., N.B. Comeford. and R.B. Brown. 1997. Aquods and psammaquents: Problems in hydric soil identification. p. 41-61. *In* M.J. Vepraskas and S.W. Sprecher (ed.) *Aquic Conditions and Hydric Soils: The Problem Soils*. SSSA Spec. Publ. 50. ASA, CSSA, and SSSA. Madison, WI.
- Kunze, G.W. and J.B. Dixon. 1986. Pretreatment for Mineralogical Analysis. p. 91-99. *In* A. Klute (ed.) *Methods of Soil Analysis, Part 1: Physical and Mineralogical Methods*. 2<sup>nd</sup> Edition. ASA, SSSA. Madison, WI.
- Kusler, J.A. 1990. Views on scientific issues relating to the restoration and creation of wetlands. p. 217-230. *In* G. Bingham et al. (ed.) *Issues in Wetlands Protection*. The Conservation Foundation, Washington, DC.
- Latimer, W.A. 1952. *Oxidation Potentials*, 2<sup>nd</sup> Ed. Prentice-Hall, Englewood Cliffs, NJ.
- Lindbo, D.L. 1997. Entisols-fluvents and fluvaquents: Problems recognizing aquic and hydric conditions in young, flood plain soils. p. 133-153. *In* M.J. Vepraskas and S.W. Sprecher (ed.) *Aquic Conditions and Hydric Soils: The Problem Soils*. SSSA Spec. Publ. 50. ASA, CSSA, and SSSA. Madison, WI.
- Lynn, W. and W. Austin. Oxymorphic manganese (iron) segregations in a wet soil catena in the Willamette Valley, OR. 1998. p. 209-226. *In* M.L. Rabenhorst, et al., (ed.) *Quantifying Soil Hydromorphology*. SSSA/ASA Special Publication. Soil Sci. Soc. Am., Madison, WI.
- Megonigal, J.P., W.H. Patrick., and, S.P. Faulkner. 1993. Wetland identification in seasonally flooded forest soils: Soil morphology and redox dynamics. *Soil Sci. Soc. Am. J.* 57:140-149.
- Mendelsohn, I.A. 1993. *Factors Controlling the Formation of Oxidized Root Channels: A Review and Annotated Bibliography*. Technical Report WRP-DE-5. Wetlands Research Program. US Army Corps of Engineers. Environmental Laboratory, Vicksburg, MS.

- Mitsch, W.J. and J.K. Cronck. 1992. Creation and restoration of wetlands: Some design consideration for ecological engineering. p. 217-259. *In* R. Lal and B.A. Stewart. (ed.) *Advances in Soil Science*. Vol. 17: Soil Restoration. Springer-Verlag, NY.
- Mitsch, W.J. and J.G. Gosselink. 1993. *Wetlands*. pp. 168-181. Van Nostrand Reinhold, New York, NY.
- Mixon, R.B., C.R. Berquist Jr., W.L. Newell, G.H. Johnson. 1989. Geologic map and generalized cross sections of the Coastal Plain and adjacent parts of the Piedmont, Virginia. USGS. Misc. Investigation Series, Map I-2033.
- Nash, C.M. and M. Cotten. 1997. Wetland mitigation: An early effort. *Public Roads*. 61:51-55.
- National Technical Committee for Hydric Soils. 1995. Hydric soils of the United States. URL: <http://www.statlab.iastate.edu/soils/hydric/national.html>.
- National Wetlands Policy Forum. 1988. *Protecting America's Wetlands: An Action Agenda*. Conservation Foundation, Washington, D.C.
- Natural Resources Conservation Service. 1996. *Field Indicators of Hydric Soils in the United States*. G.W. Hurt et al. (ed.) USDA-NRCS. Fort Worth, TX.
- Nelson, D.W. and L.E. Sommers. 1982. Total carbon, organic carbon, and organic matter. p. 539-579. *In* A.L. Page (ed.) *Methods of Soil Analysis*. Part 2: Chemical and Microbiological Properties. 2<sup>nd</sup> Edition. Soil Sci. Soc. Am. Madison, WI.
- Novitzki, R.P. 1979. Hydrologic characteristics of Wisconsin's wetlands and their influence on floods, stream flow, and sediment. p. 377-388. *In* P.E. Greeson et al. (ed.) *Wetland Functions and Values: The State of Our Understanding*. American Water Resources Assn. Minneapolis, MN.
- Pritchett, W.L. and R.F. Fisher. 1987. Properties and Management of Forest Soils. p. 55-63. John Wiley and Sons, Inc. New York.
- Ponnamperuma, F.N. 1972. The chemistry of submerged soils. *Adv. Agron.* 24:29-96.
- Roberts, J.A., W.L. Daniels, J.C. Bell, and J.A. Burger. 1988. Early stages of mine soil genesis as affected by topsoiling and organic amendments. *Soil Sci. Soc. Am. J.* 52:730-738.
- Sall, J. and A. Lehman. 1996. *JMP Start Statistics*. Duxbury Press, Belmont, CA.
- Salvesen, D. 1990. *Wetlands: Mitigating and regulating development impacts*. The Urban Land Institute, Washington, DC

- Sather, J.H. and R.D. Smith. 1984. An Overview of Major Wetland Functions and Values. Western Energy and Land Use Team. U.S. Fish and Wildl. Serv., FWS/OBS-84/18, Washington DC
- Schelling, J. 1960. New aspects of soil classification with particular reference to reclaimed hydromorphic soils. *Int. Congr. Soil Sci., Trans 7<sup>th</sup>. IV:218-224.* Madison, WI.
- Schwertmann, U. and D.S. Fanning. 1976. Iron-manganese concretions in hydrosequences of soils in loess in Bavaria. *Soil Sci. Soc. Am. J.* 40:731-738.
- Simonson, G.H. and L. Boersma. 1972. Soil morphology and water table relations: II. Correlation between annual water table fluctuations and profile features. *Soil Sci. Soc. Amer. Proc.* 36:649-653.
- Soil Conservation Service. 1981. Soil Survey of City of Suffolk, VA. USDA, SCS in cooperation with Virginia Polytechnic Institute and State Univ. U.S. G.P.O., Washington, DC.
- Soil Conservation Service. 1985a. Soil Survey of Prince George County, VA. USDA, SCS in cooperation with Virginia Polytechnic Institute and State Univ. U.S. G.P.O., Washington, DC.
- Soil Conservation Service. 1985b. Hydric soils of the United States. USDA-SCS National Bulletin No. 430-5-9, U.S. G.P.O., Washington, DC.
- Soil Survey Staff. 1994. National Soil Survey Handbook. USDA-SCS. Washington, DC.
- Soil Survey Staff. 1999. Keys to Soil Taxonomy, 8<sup>th</sup> edition. USDA-SCS. Washington, DC.
- Stevenson, F.J. 1982. Humus Chemistry. John Wiley and Sons, Inc. New York.
- Stolt, M.H., M.H. Genthner, W.L. Daniels, V.A. Groover, S. Nagle, and K.C. Haering. 1999. Comparison of constructed and adjacent natural wetlands. *Wetlands.* (In Review)
- Stolt, M.H., M.H. Genthner, W.L. Daniels, V.A. Groover, and S. Nagle. 1998. Quantifying Fe, Mn, and carbon fluxes in palustrine wetlands. p. 25-42. *In* M.L. Rabenhorst, et al., (ed.) *Quantifying Soil Hydromorphology.* SSSA/ASA Special Publication. Soil Sci. Soc. Am., Madison, WI.
- Sweeny, L.R. 1979. Soil Genesis on Relatively Young Surface Mined Lands in Southern West Virginia. Masters Thesis, Virginia Poly. Institute and State Univ., Blacksburg, VA.

- Taylor, G.J., A.A. Crowder, and R. Rodden. 1984. Formation and morphology of an iron plaque on the roots of *Typha latifolia* L. grown in solution culture. *Am. J. of Botany*. 71:5:666-675.
- Tiner, R.W. 1984. Wetlands of the United States: Current Status and Recent Trends. National Wetlands Inventory. Fish and Wildlife Service. U.S. Department of Interior. Washington, DC
- 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.
- Vepraskas, M.J. 1994. Redoximorphic Features for Identifying Aquic Conditions. North Carolina Agric. Res. Ser. Tech. Bull. 301.
- Vepraskas, M.J., and J. Bouma. 1975. Model experiments on mottle formation simulating field conditions. *Geoderma* 15:217-230.
- 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.
- Vepraskas, M.J. and S.W. Sprecher. 1997. Overview of aquic conditions and hydric soils. p. 1-21. *In* M.J. Vepraskas and S.W. Sprecher (ed.) *Aquic Conditions and Hydric soils: The problem soils*. SSSA Spec. Publ. 50. ASA, CSSA, and SSSA. Madison, WI.
- Vepraskas, M.J., S.J. Teets, J.L. Richardson, and J.P. Tandarich. 1995. Development of Redoximorphic Features in Constructed Wetland Soils. Technical Paper No. 5. Wetlands Research, Inc. Chicago, IL.
- Vepraskas, M.J., S.J. Teets, J.L. Richardson, and J.P. Tandarich. 1999. Dynamics of hydric soil formation across the edge of a created deep marsh. *Wetlands* 19:78-89.
- Wharton, C.H., W.M. Kitchens, E.C. Pendleton, and T. W. Sipe. 1982. The Ecology of Bottomland Hardwood Swamps of the Southeast: A Community Profile. U.S. Fish and Wildl. Serv. Biological Services Program FWS/OBS-81/37.
- Whittecar, G.R. and W.L. Daniels. 1999. Use of hydrogeomorphic concepts to design created wetlands in southeastern Virginia. *In* R. Giardina (ed.) *Engineering Geomorphology: Working with the Earth*. Elsevier, New York/Amsterdam.
- Wilding, L.P., M.H. Milford, and M.J. Vepraskas. 1983. Micromorphology of deeply weathered soils in the Texas coastal plains. p. 567-574. *In* P. Bullock and C.P. Murphy (ed.) *Soil Micromorphology*. Vol. 2: Soil Genesis. A.B. Academic Publ. Co. Berkhamsted, Herts., U.K.

Zampella, R.A. 1994. Morphologic and color pattern indicators of water table levels in sandy pineland soils. *Soil Sci.* 157:312-317.