



Charles Wax

Professor
Meteorology & Climatology

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Charles L Wax is Professor of Geography and State Climatologist with teaching and research interests in climatology, meteorology, hydrology, and natural resources. He is active in several state, regional, and national organizations, among which are the Mississippi Geographic Alliance and the Association of American Geographers. He served on and chaired the U.S.D.A.'s Southern Region Research Committee for Climatology in Agricultural Production, and has served as President of the American Association of State Climatologists. He has been presented the Outstanding Faculty Award by the University Honors Council at Mississippi State University, and a Research Award by the Mississippi Agricultural and Forestry Experiment Station.

As State Climatologist for Mississippi, he monitors climate events and impacts in the state and often speaks or presents workshops or shortcourses on weather and climate. He served as Head of the Department of Geosciences from 1989 to 2001. His current research projects investigate climatological effects on land application of municipal wastewater and large hog farm wastewater, climatological potential for groundwater conservation in aquaculture, climatic water balance in Southern forests, climatic variability, and the effects of weather on phenological stages of soybeans in Mississippi. His hobbies include exercising, gardening, woodworking, and restoring and maintaining antiques.

He serves as Chairman of the Board of Trustees of the Starkville First United Methodist Church and as Secretary/Treasurer of the Board of Directors of Oktibbeha County District Five Volunteer Fire Department.

Education

Ph.D.(physical geography: climatology), Louisiana State University, 1977

M.S.(physical geography: geomorphology), Louisiana State University, 1974

B.A.(political science), Delta State University, 1969

A.A., Miss. Delta Jr. College, 1967

Experience

Professor of Geography, Mississippi State University, 1987-present;

Professor and Head of the Department of Geosciences, Mississippi State University, 1989-2001;

State Climatologist for Mississippi, 1983-present;

Part-time Professor of Geography, Mississippi University for Women, 1985-1987;

Research Climatologist, Miss. Ag. and Forestry Experiment Station, Dept. of Ag. and

Bio.Engineering, Mississippi State University, part-time 1984-1990;

Associate Professor of Geography, Mississippi State University, 1983-1987;

Assistant Professor of Geography, Mississippi State University, 1978-1983;

Associate Scientist, Coastal Environments, Inc., Baton Rouge, LA, 1977;

Graduate Research Assistant, Center for Wetland Resources, LSU, 1975-1977;

Research Associate, Coastal Studies Institute, LSU, summer 1973;

Selected Publications

- In Press. C.L. Wax. "Mississippi's Climate." The Mississippi Encyclopedia, Ed. Charles R. Wilson. University Press of Mississippi, Oxford, MS.
2008. Cooke, W.H., K. Grala and C.L. Wax. "A Method for Estimating Pan Evaporation for Inland and Coastal Regions of the Southeastern U.S." Southeastern Geographer, 48(2) pp 149-171.
2008. C.L. Wax. "Late Freeze Impacts in Mississippi." In, The Easter Freeze of April 2007: A Climatological Perspective and Assessment of Impacts and Services. NOAA/USDA Technical Report 2008-01. <http://www1.ncdc.noaa.gov/pub/data/techrpts/tr200801/tech-report-200801.pdf>
2008. _____, J.W. Pote and M.E. Brown. "Integrating the Natural Climate Regime Into Management Plans for Swine Wastewater Lagoons." Journal of Service Climatology, Vol. 2, No. 4, pp 1-10.
2007. T.P. Cathcart, C.L. Wax, J.W. Pote and Sugeng Triyono. "A Climatological Basis for Conserving Groundwater and Reducing Overflow in Aquaculture Ponds in the Southeast United States." Aquacultural Engineering, 36(2007)225-232.
2007. Brown, M.E. and C.L. Wax. "Temperature as an Indicator of the Influence of Landforms on Atmospheric Processes." Physical Geography, 28(2), pp 148-157.
2006. _____. "Climate of Mississippi." Climatology of The United States No. 60, National Oceanic and Atmospheric Administration, National Climatic Data Center, Asheville, NC. Online at: http://www5.ncdc.noaa.gov/climatenormals/clim60/states/Clim_MS_01.pdf
2005. Beasley, R., D. Schmitz and C.L. Wax. "A Peer Teaching Exercise Using Rachael Carlson's Book, Silent Spring: Increasing Self-esteem and Achievement." National Tech-Prep Network Journal, 18: 4-5.
2003. Schmitz, D.W., C.L. Wax and C.E. Peacock. "Water Resource Controls on Human Habitation in the Black Prairie of North Central Mississippi." In Blackland Prairies of the Gulf Coastal Plain: Culture, Nature, and Sustainability, Ed. Evan Peacock and Timothy Schauwecker. University of Alabama Press, Tuscaloosa, AL.
2001. Schmitz, D.W., C.L. Wax and C.E. Peacock. "Water Resource Controls on Human Habitation Along the Blackland Prairie in North Central Mississippi." Submitted, University of Alabama Press.
2000. Pote, J.W., C.L. Wax and B.L. Karr. "Effects of Climate and Soil Type Interactions on Probable Work Days with Harvest Equipment in Mississippi and Alabama Forests". Southern Journal of Applied Forestry, 24: 4(213-218).
1996. Tucker, C.S., S.K. Kingsbury, J.W. Pote and C.L. Wax. "Effluents from Channel Catfish Ponds in Northwest Mississippi." Aquaculture, 147: 59-67.
1996. _____. "Geography of Mississippi." In Microsoft Encarta 96 Encyclopedia. Microsoft Corporation, Redmond, WA.
1996. _____ and J.W. Pote. "The Influence of Climate on Design of Systems for Land Application of Wastewater." Climate Research, 6: 71-78.
1995. Pote, J.W. and C.L. Wax. "Climatic Criteria for Land Application of Municipal Wastewater Effluent". Water Research, Vol 29, No.1, pp. 323-328.
1993. Pote, J.W. and C.L. Wax. "Modelling the Climatological Potential for Water Conservation in Aquaculture." Transactions of the American Society of Agricultural Engineers, Volume 36 (5), 1343-1348.
1990. _____. "General Climatology of Mississippi--Floods and Droughts." In National Water Summary 1988-Hydrologic Events and Floods and Droughts, USGS Water Supply Paper 2375. U. S. Geological Survey, Reston VA.
1990. _____ and J.W. Pote. "A Derived Climatology of Water Temperatures for the Mississippi Catfish Industry." Journal of the World Aquaculture Society, 21(1), pp. 63-89.
1989. _____. "The Weather Factor in Preparing for a Presidential Visit." The State Climatologist, V. 13(4). U.S. Department of Commerce, NOAA, National Climatic Data Center, Asheville, NC.
1987. _____. "Narrative Summary of Geographical and Climatological Characteristics." In Local Climatological Data, Annual Summary with Comparative Data, 1986, Tupelo, MS. NOAA, National Climatic Data Center, Asheville, NC.
1985. _____, and J.C. Walker. "Climatological Patterns and Probabilities of Weekly Precipitation in Mississippi." Mississippi Agricultural and Forestry Experiment Station Information Bulletin 79, Mississippi State University, Mississippi State, MS. Nine figures, 112 tables, 165 pp.
1982. _____. Atlas of the Climatic Water Balance in Mississippi: Normals and Variability, 1951-1980. Water Resources Research Institute Technical Publication DO 18. Mississippi State University, Mississippi State, MS, 82 pp.
1982. _____. "Modelling Climatic Aspects of Pearl River Flooding." In Applying Research to Hydraulic Practice, Peter E. Smith, ed. American Society of Civil Engineers, New York. pp. 340-349.
1981. Wax, C.L. and J.L. Tingle. "The Pearl River Flood of Easter 1979: A Water Balance Explanation." Water Resources Research Institution Bulletin, Mississippi State University, Mississippi State, MS, 33 pp.

1977. Muller, R.A. and C.L. Wax. "Comparative Climatic Baseline for Coastal Louisiana." In *Geoscience and Man*, Vol. 18: 121-129. School of Geoscience, LA State University, Baton Rouge, LA.

[Honors/Awards/Memberships](#)

Charles L. Wax is active in several state, regional, and national organizations, among which are the Mississippi Geographic Alliance and the Association of American Geographers. He served on and chaired the U.S.D.A.'s Southern Region Research Committee for Climatology in Agricultural Production, and has served as President of the American Association of State Climatologists. He has been presented the Outstanding Faculty Award by the University Honors Council at Mississippi State University.

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