

Updated April 22, 2014 by Patrick M. Colgan

- Acomb, L. J., Mickleson, D. M., and Evenson, E. B. (1982). Till stratigraphy and late glacial events in the Lake Michigan lobe of eastern Wisconsin. *Geological Society of America Bulletin* **93**, 289-296.
- Albert, D. A., Wilcox, D. A., IngraM, J. W., and Thompson, T. A. (2005). Hydrogeomorphic classification for Great Lakes coastal wetlands. *Journal of Great Lakes Research* **31**, 129-146.
- Allender, J. H., and Ditmars, J. D. (1981). Field measurements of longshore currents on a barred beach. *Coastal Engineering* **5**, 295-309.
- Alley, R. B. (1991). Deforming-Bed Origin for Southern Laurentide Till Sheets. *Journal of Glaciology* **37**, 67-76.
- Anderton, J. B., and Loope, W. L. (1995). Buried soils in a perched dunefield as indicators of Late Holocene Lake-level change in the Lake Superior basin. *Quaternary Research* **44**, 190-199.
- Arbogast, A. F. (2000). Estimating the time since final stabilization of a perched dune field along Lake Superior. *Professional Geographer* **52**, 594-606.
- Arbogast, A. F., Bookout, J. R., Schrotenboer, B. R., Lansdale, A., Rust, G. L., and Bato, V. A. (2008). Post-glacial fluvial response and landform development in the upper Muskegon River valley in North-Central Lower Michigan, USA. *Geomorphology* **102**, 615-623.
- Arbogast, A. F., Hansen, E. C., and Van Oort, M. D. (2002). Reconstructing the geomorphic evolution of large coastal dunes along the southeastern shore of Lake Michigan. *Geomorphology* **46**, 241-255.
- Arbogast, A. F., and Loope, W. L. (1999). Maximum-limiting ages of Lake Michigan coastal dunes: their correlation with holocene lake level history. *Journal of Great Lakes Research* **25**, 372-382.
- Arbogast, A. F., and Packman, S. C. (2004). Middle-Holocene mobilization of aeolian sand in western upper Michigan and the potential relationship with climate and fire. *Holocene* **14**, 464-471.
- Arbogast, A. F., Schaetzl, R. J., Harrison, J., Jameson, T. P., and Crozier, S. (1997). Concurrent stabilization of some interior dune fields in Michigan. *Physical Geography* **18**, 63-79.
- Arbogast, A. F., Wintle, A. G., and Packman, S. C. (2002). Widespread middle Holocene dune formation in the eastern Upper Peninsula of Michigan and the relationship to climate and outlet-controlled lake level. *Geology* **30**, 55-58.
- Argast, A. (2002). The lower Proterozoic Fern Creek Formation, northern Michigan: mineral and bulk geochemical evidence for its glaciogenic origin. *Canadian Journal of Earth Sciences* **39**, 481-492.
- Argyilan, E. P., Forman, S. L., Johnston, J. W., and Wilcox, D. A. (2005). Optically stimulated luminescence dating of late holocene raised strandplain sequences adjacent to Lakes Michigan and Superior, upper peninsula, Michigan, USA. *Quaternary Research* **63**, 122-135.
- Argyilan, E. P., Forman, S. L., and Thompson, T. A. (2010). Variability of Lake Michigan water level during the past 1000 years reconstructed through optical dating of a coastal strandplain. *The Holocene* **20**, 723-731.

- Assel, R. A., Quinn, F. H., Leshkevich, G. A., and Bolsega, S. J. (1983). "Great Lakes Ice Atlas." Great Lakes Environmental Research Laboratory.
- Baedke, S. J., and Thompson, T. A. (2000). A 4,700-year record of lake level and isostasy for Lake Michigan. *International Association of Great Lakes Research* **26**, 416-426.
- Bahner, E. W., and Naguib, A. M. (1998). Design and construction of a deep soil mix retaining wall for the Lake Parkway Freeway extension. In "1998 Annual Convention of the American-Society-of-Civil-Engineers (Geo-Congress 98)." (A. Maher, and D. S. Yang, Eds.), pp. 41-58, Boston, Ma.
- Bain, G. W. (1975). Geology and Exploration of Southern Province of Canadian Shield in Wisconsin-Michigan-Discussion. *Cim Bulletin* **68**, 102-103.
- Bajema, C. (1999). Historic Sites & Natural Features—selected Descriptions Grand River Greenway Corridor, Kent County, Michigan unpublished manuscript.
- Bajema, C. J. (1991). The First Logging Railroads in the Great Lakes Region. *Forest & Conservation History* **35**, 76-83.
- Baker, M. E., and Wiley, M. J. (2004). Characterization of woody species distribution in riparian forests of Lower Michigan, USA using map-based models. *Wetlands* **24**, 550-561.
- Barillis, W. (1989). Michigan's Pioneers and the Destruction of the Hardwood Forest. *The Michigan Historical Review* **15**, 1-22.
- Barnes, P. W., Fleischer, G. W., Gardner, J. V., and Lee, K. M. (2002). Using laser technology to characterize substrate morphology and geology of selected lake trout spawning habitat in northern Lake Michigan. In "Symposium on Effects of Fishing Activities on Benthic Habitats." (B. W. Barnes, and J. P. Thomas, Eds.), pp. 165-169, Tampa, FL.
- Barnes, P. W., Fleischer, G. W., Gardner, J. V., and Lee, K. M. (2005). Using laser technology to characterize substrate morphology and geology of selected lake trout spawning habitat in northern Lake Michigan. In "Benthic Habitats and the Effects of Fishing." (B. W. Barnes, and J. P. Thomas, Eds.), pp. 165-169. American Fisheries Society Symposium. Amer Fisheries Soc, Bethesda.
- Barnett, L. (1997). A Union List of Publications from Michigan's Mineral Springs, Mineral Wells, and Mineral Baths. *The Michigan Historical Review* **23**, 167-187.
- Barnhardt, W. A., Jaffe, B. E., Kayen, R. E., and Cochrane, G. R. (2004). Influence of near-surface stratigraphy on coastal landslides at sleeping Bear Dunes National Lakeshore, Lake Michigan, USA. *Journal of Coastal Research* **20**, 510-522.
- Barrett, L. R., Liebens, J., Brown, D. G., Schaetzl, R. J., Zuwerink, P., Cate, T. W., and Nolan, D. S. (1995). Relationships Between Soils and Presettlement Forests in Baraga County, Michigan. *American Midland Naturalist* **134**, 264-285.
- Barrett, L. R., and Schaetzl, R. J. (1993). Soil development and spatial variability on geomorphic surfaces of different age. *Physical Geography* **14**, 39-55.
- Beget, J. E. (1986). Modeling the Influence of Till Rheology on the Flow and Profile of the Lake-Michigan Lobe, Southern Laurentide Ice-Sheet, USA. *Journal of Glaciology* **32**, 235-241.
- Berkson, J. M., Lineback, J. A., and Gross, D. L. (1975). A Side-Scan Sonar Investigation of Small-Scale Features on the Floor of Southern Lake Michigan. *Illinois State Geological Survey*.

- Bianchi, T. H., and Heinrich, P. V. (1992). Geoarchaeological evidence of the Lake Nipissing high lake phase in the Kalamazoo River Valley of southwestern Michigan. *The Michigan Archaeologist* **38**, 189-206.
- Bierman, P. R., Caffee, M. W., Davis, P. T., Marsella, K., Pavich, M., Colgan, P., Mickelson, D., and Larsen, J. (2002). Rates and timing of earth surface processes from in situ-produced cosmogenic Be-10. In "Beryllium: Mineralogy, Petrology, and Geochemistry." pp. 147-205. Reviews in Mineralogy & Geochemistry.
- Black, R. F. (1980). Valders-Two Creeks, Wisconsin, revisited: The Valders Till is most likely post-Twocreekan. *Geological Society of American Bulletin* **91**, 713-723.
- Black, T. J. (1997). Evaporite karst of northern lower Michigan. *Carbonates and Evaporites* **12**, 81-83.
- Black, T. J. (2003). Evaporite karst in Michigan. In "Sinkholes and the Engineering and Environmental Impacts of Karst." (B. F. Beck, and P. E. LaMoreaux, Eds.), pp. 141-149. Geotechnical Special Publication.
- Blewett, W. L. (1991). Characteristics, correlations, and refinements of Leverett and Taylor's Port Huron Moraine in Michigan. *The Great Lakes Geographer* **26**, 52-60.
- Blewett, W. L., and Winters, H. A. (1995). The importance of glaciofluvial features within Michigan's Port Huron moraine. *Annals of the Association of American Geographers* **85**, 306-319.
- Blewett, W. L., Winters, H. A., and Rieck, R. L. (1993). New age control on the Port Huron moraine in northern Michigan. *Physical Geography* **14**, 131-138.
- Booth, R. K., Brewer, S., Blaauw, M., Minckley, T. A., and Jackson, S. T. (2012). Decomposing the mid-Holocene Tsuga decline in eastern North America. *Ecology* **93**, 1841-1852.
- Booth, R. K., and Jackson, S. T. (2003). A high-resolution record of late-Holocene moisture variability from a Michigan raised bog, USA. *Holocene* **13**, 863-876.
- Booth, R. K., Jackson, S. T., and Gray, C. E. D. (2004). Paleoecology and high-resolution paleohydrology of a kettle peatland in upper Michigan. *Quaternary Research* **61**, 1-13.
- Booth, R. K., Jackson, S. T., and Thompson, T. A. (2002). Paleoecology of a northern Michigan lake and the relationship among climate, vegetation, and Great Lakes water levels. *Quaternary Research* **57**, 120-130.
- Booth, R. K., Notaro, M., Jackson, S. T., and Kutzbach, J. E. (2006). Widespread drought episodes in the western Great Lakes region during the past 2000 years: Geographic extent and potential mechanisms. *Earth and Planetary Science Letters* **242**, 415-427.
- Breckenridge, A. (2013). An analysis of the late glacial lake levels within the western Lake Superior basin based on digital elevation models. *Quaternary Research* **80**, 383-395.
- Breckenridge, A., and Johnson, T. C. (2009). Paleohydrology of the upper Laurentian Great Lakes from the late glacial to early Holocene. *Quaternary Research* **71**, 397-408.
- Breckenridge, A., Johnson, T. C., Beske-Diehl, S., and Mothersill, J. S. (2004). The timing of regional lateglacial events and post-glacial sedimentation rates from

- Lake Superior. *Quaternary Science Reviews* **23**, 2355-2367.
- Bretz, J. H. (1907). Glacial Features of Genesee County. *The Schoolmaster* **cont. from February**, 531-539.
- Bretz, J. H. (1933). How Chicagoland was made. *The Western Society of Engineers* **XXXVIII**, 135-141.
- Bretz, J. H. (1950). Causes of the glacial lake stages in Saginaw Basin, Michigan. 244-258.
- Bretz, J. H. (1951). The stages of Lake Chicago: Their causes and correlations. *American Journal of Science* **249**, 401-429.
- Bretz, J. H. (1953). Glacial Grand River, Michigan. *Michigan Academy of Science, Arts, and Letters, Papers* **38**, 359-382.
- Bretz, J. H. (1964). Correlation of glacial lake stages in the Huron-Erie and Michigan Basins. *The Journal of Geology* **72**, 618-627.
- Broecker, W. S., and Farrand, W. R. (1963). Radiocarbon age of the Two Creeks Forest Bed, Wisconsin. *Geological Society of American Bulletin* **74**, 795-802.
- Brubaker, L. B. (1975). Postglacial Forest Patterns Associated with Till and Outwash in North-Central Upper Michigan. *Quaternary Research* **5**, 499-527.
- Brugam, R. B., and Johnson, S. M. (1997). Holocene lake-level rise in the Upper Peninsula of Michigan, USA, as indicated by peatland growth. *Holocene* **7**, 355-359.
- Brugam, R. B., Owen, B., and Kolesa, L. (2004). Continental-scale climate forcing factors and environmental change at Glimmerglass Lake in the Upper Peninsula of Michigan. *Holocene* **14**, 807-817.
- Bruno, P. W., Larson, G. J., and Coleman, S. M. (1989). Great Lakes Section SEPM mid-year field conference guide.
- Bryson, R. A., Wendland, W. W., Ives, J. D., and Andrews, J. T. (1986). Radiocarbon isochrones on the disintegration of the Laurentide ice sheet. *Arctic and Alpine Research* **1**, 1-14.
- Buckler, W. R. (1979). "Dune Type Inventory and Barrier Dune Classification Study of Michigan's Lake Michigan Shore."
- Burgis, W. A., and Eschman, D. F. (1981). Late-Wisconsinan History of Northeastern Lower Michigan. *30th Annual Field Conference*.
- Calcote, R. (2003). Mid-Holocene climate and the hemlock decline: the range limit of *Tsuga canadensis* in the western Great Lakes region, USA. *Holocene* **13**, 215-224.
- Campbell, I. D., and McAndrews, J. H. (1991). Cluster-analysis of Late Holocene pollen trends in Ontario. *Canadian Journal of Botany-Revue Canadienne De Botanique* **69**, 1719-1730.
- Capps, D. K., Thompson, T. A., and Booth, R. K. (2007). A post-Calumet shoreline along southern Lake Michigan. *Journal of Paleolimnology* **37**, 395-409.
- Carlson, A. E., Mickelson, D. M., Principat, S. M., and Chapel, D. M. (2005). The genesis of the northern Kettle Moraine, Wisconsin. *Geomorphology* **67**, 365-374.
- Case, E. C., and Robinson, W. I. (1915). The geology of Limestone Mountain and Sherman Hill in Houghton County, Michigan. *Journal of Geology* **23**, 256-260.
- Chase, R. B. (2003). Lake Michigan Coastal Bluff Erosion: Slump Models and Dewatering Strategies.

- Chase, R. B., Chase, K. E., Kehew, A. E., and Montgomery, W. W. (2001). Determining the kinematics of slope movements using low-cost monitoring and cross-section balancing. *Environmental and Engineering Geoscience* **7**, 193-203.
- Chase, R. B., Kehew, A. E., and Montgomery, W. W. Determining of slope displacement mechanisms and causes using new geometric modeling techniques and climate data, in. *In "Landscape Erosion and Evolution Modeling."* Kluwer Academic Plenum Publishers.
- Chrzastowski, M. J., Pranschke, F. A., and Shabica, C. W. (1991). Discovery and preliminary investigations of the remains of an early Holocene forest on the floor of southern Lake Michigan. *Journal of Great Lakes Research* **17**, 543-552.
- Chrzastowski, M. J., and Thompson, T. A. (1994). Late Wisconsinan and Holocene geologic history of the Illinois-Indiana coast of Lake Michigan. *Journal of Great Lakes Research* **20**, 9-26.
- Chrzastowski, M. J., Thompson, T. A., and Trask, C. B. (1994). Coastal Geomorphology and Littoral Cell Divisions Along the Illinois-Indiana Coast of Lake Michigan. *Journal of Great Lakes Research* **20**, 27-43.
- Clark, J. A., Hendriks, M., Timmermans, T. J., Struck, C., and Hilverda, K. J. (1994). Glacial isostatic deformation of the Great Lakes region. *Geological Society of America Bulletin* **106**, 19-31.
- Clark, J. A., Pranger, H. S., II, Walsh, J. K., and Primus, J. A. (1990). "A numerical model of glacial isostasy in the Lake Michigan basin."
- Clark, J. A., Zylstra, D. J., and Befus, K. M. (2007). Effects of great lakes water loading upon glacial isostatic adjustment and lake history. *Journal of Great Lakes Research* **33**, 627-641.
- Clark, P. U. (1992). Surface Form of the Southern Laurentide Ice-Sheet and its Implications to Ice-Sheet Dynamics. *Geological Society of America Bulletin* **104**, 595-605.
- Clark, P. U., and Johnson, W. H. (1989). Modelling the Influence of Till Rheology on the Flow and Profile of the Lake-Michigan Lobe, Southern Laurentide Ice-Sheet, USA - Discussion. *Journal of Glaciology* **35**, 284-285.
- Clotts, R. A., McCambridge, C. E., Barrera, E., Saylor, B. Z., Palmer, D. F., and Coakley, J. P. (2005). Middle Holocene hydrologic change and hypolimnion formation in Lake Erie. *Journal of Great Lakes Research* **31**, 296-308.
- Coakley, J. P., Crowe, A. S., and Huddart, P. A. (1998). Subsurface sediment profiles below Point Pelee: indicators of postglacial evolution in western Lake Erie. *Canadian Journal of Earth Sciences* **35**, 88-99.
- COHMAP Members. (1988). Climate Changes of the Last 18,000 years: Observations and model simulations. *Science* **241**, 1043-1052.
- Coleman, S. M., Clark, J. A., Clayton, L., Hansel, A. K., and Larsen, C. E. (1994). Deglaciation, lake levels and meltwater discharge in the Lake Michigan basin. *Quaternary Science Reviews* **13**, 879-890.
- Coleman, S. M., Forester, R. M., Reynolds, R. L., Sweetkind, D. S., King, J. W., Gangemi, P., Jones, G. A., Keigwin, L. D., and Foster, D. S. (1994). Lake-level history of Lake Michigan for the past 12,000 years: The record from deep lacustrine sediments. *International Association of Great Lakes Research* **20**, 73-92.

- Colgan, P. M. (1999). Early middle pleistocene glacial sediments (780000-620000 BP) near Kansas City, northeastern Kansas and northwestern Missouri, USA. *Boreas* **28**, 477-489.
- Colgan, P. M. (1999). Reconstruction of the Green Bay Lobe, Wisconsin, United States, from 26,000 to 13,000 radiocarbon years BP. In "Meeting of the North-Central-Geological-Society-of-America/Midwest Glaciology." (D. M. Mickelson, and J. W. Attig, Eds.), pp. 137-150, Madison, Wi.
- Colgan, P. M., Bierman, P. R., Mickelson, D. M., and Caffee, M. (2002). Variation in glacial erosion near the southern margin of the Laurentide Ice Sheet, south-central Wisconsin, USA: Implications for cosmogenic dating of glacial terrains. *Geological Society of America Bulletin* **114**, 1581-1591.
- Colgan, P. M., and Mickelson, D. M. (1997). Genesis of streamlined landforms and flow history of the Green Bay lobe, Wisconsin, USA. In "Vth International Drumlin Symposium at the XIVth INQUA Congress." pp. 7-25, Berlin, Germany.
- Colgan, P. M., and Stark, J. M. (2005). Quaternary geology of the Muskegon East, Michigan 7.5 minute Quadrangle. Michigan Department of Environmental Quality.
- Colgan, P. M., and Stark, J. M. (2005). Quaternary geology of the Muskegon West, Michigan 7.5 minute Quadrangle. Michigan Department of Environmental Quality.
- Colgan, P. M., and Tort, C. (2006). Quaternary geology of the Muskegon East, Michigan 7.5 minute Quadrangle. Michigan Department of Environmental Quality.
- Colman, S. M., Forester, R. M., Reynolds, R. L., Sweetkind, D. S., King, J. W., Gangemi, P., Jones, G. A., Keigwin, L. D., and Foster, D. S. (1994). Lake-level history of Lake Michigan for the past 12,000 years - The records from deep lacustrine sediments. *Journal of Great Lakes Research* **20**, 73-92.
- Colman, S. M., King, J. W., Jones, G. A., Reynolds, R. L., and Bothner, M. H. (2000). Holocene and recent sediment accumulation rates in Southern Lake Michigan. *Quaternary Science Reviews* **19**, 1563-1580.
- Craddock, J. P., Anziano, J., Wirth, K., Vervoort, J. D., Singer, B., and Zhang, X. F. (2007). Structure, geochemistry and geochronology of a penokean lamprophyre dike swarm, Archean wawa terrane, little presque isle, Michigan, USA. *Precambrian Research* **157**, 50-70.
- Croley, T. E., and Lewis, C. F. M. (2006). Warmer and drier climates that make terminal great lakes. *Journal of Great Lakes Research* **32**, 852-869.
- Curry, B. B., Konen, M. E., Larson, T. H., Yansa, C. H., Hackley, K. C., Helena, A., and Lowell, T. V. (2010). The DeKalb mounds of northeastern Illinois as archives of deglacial history and postglacial environments. *Quaternary Research* **74**, 82-90.
- Curry, B. B., and Pavich, M. J. (1996). Absence of glaciation in Illinois during marine isotope stages 3 through 5. *Quaternary Research* **46**, 19-26.
- Cutler, P. I., Mickelson, D. M., Colgan, P. M., MacAyeal, D. R., and Parizek, B. R. (2001). Influence of the Great Lakes on the dynamics of the Southern Laurentide ice sheet: Numerical experiments. *Geology* **29**, 1039-1042.
- Cutler, P. M., Colgan, P. M., and Mickelson, D. M. (2002). Sedimentologic evidence for outburst floods from the Laurentide Ice Sheet margin in Wisconsin, USA: implications for tunnel-channel formation. *Quaternary International* **90**, 23-40.
- Cutler, P. M., MacAyeal, D. R., Mickelson, D. M., Parizek, B. R., and Colgan, P. M. (2000). A numerical investigation of ice-lobe-permafrost interaction around the

- southern Laurentide ice sheet. *Journal of Glaciology* **46**, 311-325.
- Dean, W. E., Forester, R. M., and Bradbury, J. P. (2002). Early Holocene change in atmospheric circulation in the Northern Great Plains: an upstream view of the 8.2 ka cold event. *Quaternary Science Reviews* **21**, 1763-1775.
- Delcore, M. R., and Larson, G. J. (1987). Application of the Tritium Interface Method for Determining Recharge Rates To Unconfined Drift Aquifers: 2 Nonhomogeneous Case. *Journal of Hydrology* **91**, 73-81.
- Delcourt, P. A., Nester, P. L., Delcourt, H. R., Mora, C. I., and Orvis, K. H. (2002). Holocene lake-effect precipitation in northern Michigan. *Quaternary Research* **57**, 225-233.
- Derouin, S. A., Lowell, T. V., and Hajdas, I. (2007). Landscape evolution and deglaciation of the Upper Peninsula, Michigan: An examination of chronology and stratigraphy in kettle lake cores. *Journal of Great Lakes Research* **33**, 875-886.
- Dibajnia, M., Nairn, R. B., and Ross, P. (2004). Analysis of long-term sand accumulation at a harbor using 2DH numerical simulation. *Coastal Engineering* **51**, 863-882.
- Dodson, R. L. (1985). "Topographic and sedimentary characteristics of the Union streamlined plain and morainic areas." Unpublished Unpublished Ph.D. thesis thesis, Michigan State University, East Lansing, Michigan.
- Dodson, R. L. (1993). Reinterpretation of the Northwest Portion of the Tekonsha Moraine, South-Central Michigan. *Physical Geography* **14**, 139-153.
- Dodson, R. L., and Winters, H. A. (1977). Fluting and Till Fabric Relationships in a Portion of South-Central, Michigan. *Professional Geographer* **29**, 166-170.
- Dolan, B. J., and Parker, G. R. (2005). Ecosystem classification in a flat, highly fragmented region of Indiana, USA. *Forest Ecology and Management* **219**, 109-131.
- Drake, R. H. (1980). Late Wisconsinan history of Michigan thumb. *Michigan Academician* **13**, 181-197.
- Dreimanis, A. (1951). STUDIES OF PLEISTOCENE STRATIGRAPHY ALONG LAKE ERIE IN SOUTHWESTERN ONTARIO. *Geological Society of America Bulletin* **62**, 1432-1433.
- Dreimanis, A. (1953). 2 LATE WISCONSIN INTERSTADIAL DEPOSITS FROM ONTARIO, CANADA. *Geological Society of America Bulletin* **64**, 1414-1414.
- Dreimanis, A. (1953). STUDIES OF FRICTION CRACKS ALONG SHORES OF CIRBUS LAKE AND KASAKOKWOG LAKE, ONTARIO. *American Journal of Science* **251**, 769-&.
- Dreimanis, A. (1957). DEPTHS OF LEACHING IN GLACIAL DEPOSITS. *Science* **126**, 403-404.
- Dreimanis, A. (1957). STRATIGRAPHY OF THE WISCONSIN GLACIAL STAGE ALONG THE NORTHWESTERN SHORE OF LAKE ERIE. *Science* **126**, 166-168.
- Dreimanis, A. (1958). BEGINNING OF THE NIPISSING PHASE OF LAKE HURON. *Journal of Geology* **66**, 591-594.
- Dreimanis, A. (1958). BEGINNING OF THE NIPISSING PHASE OF LAKE HURON. *Journal of Geology* **66**, 591-594.
- Dreimanis, A. (1959). CORRECTION. *Journal of Geology* **67**, 477-477.

- Dreimanis, A. (1964). LAKE WARREN AND THE 2 CREEKS INTERVAL. *Journal of Geology* **72**, 247-250.
- Dreimanis, A., and Gibbard, P. (2005). Stratigraphy and sedimentation of the stratotype sections of the Catfish Creek Drift Formation between Bradtville and Plum Point, north shore, Lake Erie, southwestern Ontario, Canada. *Boreas* **34**, 101-122.
- Drzyzga, S. A. (2007). Relict shoreline features at Cockburn Island, Ontario. *Journal of Paleolimnology* **37**, 411-417.
- Duthie, H. C., Yang, J. R., Edwards, T. W. D., Wolfe, B. B., and Warner, B. G. (1996). Hamilton Harbour, Ontario: 8300 years of limnological and environmental change inferred from microfossil and isotopic analyses. *Journal of Paleolimnology* **15**, 79-97.
- Dworkin, S. I., Larson, G. J., and Monaghan, W. G. (1985). Late Wisconsin ice-flow reconstruction for the central Great Lakes region. *Canadian Journal of Earth Science* **22**, 935-940.
- Dyke, A. S., Andrews, J. T., Clark, P. U., England, J. H., Miller, G. H., Shaw, J., and Veillette, J. J. (2002). The Laurentide and Innuitian ice sheets during the Last Glacial Maximum. *Quaternary Science Reviews* **21**, 9-31.
- Erdosh, G. (1975). Geology and Exploration of Southern Province of Canadian Shield in Wisconsin-Michigan. *Cim Bulletin* **68**, 130-132.
- Eschman, D. F. (1980). Some evidence of mid-Wisconsinan events in Michigan. *Michigan Academician* **13**, 423-436.
- Eschman, D. F. (1982). AN UNUSUAL BALL AND PILLOW STRUCTURE LOCALITY IN MICHIGAN. *Journal of Geology* **90**, 742-744.
- Eschman, D. F. (1985). SUMMARY OF THE QUATERNARY HISTORY OF MICHIGAN, OHIO AND INDIANA. *Journal of Geological Education* **33**, 161-167.
- Eschman, D. F., and Farrand, W. R. (1970). Glacial History of the Glacial Grand Valley. *Geological Society of America Guidebook*, 131-157.
- Eschman, D. F., and Farrand, W. R. (1974). Glaciation of the Southern Peninsula of Michigan: A review. *The Michigan Academician* **7**, 31-56.
- Eschman, D. F., and Karrow, P. F. (1985). Huron Basin Glacial Lakes: A Review. **Quaternary Evolution of the Great Lakes**, 80-93.
- Eschman, D. F., and Mickelson, D. M. (1986). Correlation of glacial deposits of the Huron, Lake Michigan and Green Bay lobes in Michigan and Wisconsin. *Quaternary Science Reviews*, 53-57.
- Eschman, D. F., and Mickelson, D. M. (1986). CORRELATION OF GLACIAL DEPOSITS OF THE HURON, LAKE-MICHIGAN AND GREEN BAY LOBES IN MICHIGAN AND WISCONSIN. *Quaternary Science Reviews* **5**, 53-&.
- Evenson, E. B. (1973). Late Pleistocene Shorelines and Stratigraphic Relations in the Lake Michigan Basin. *Geological Society of American Bulletin* **84**, 2281-2298.
- Evenson, E. B. (1973). A reevaluation of the "Valders" limit in the Lake Michigan Basin.
- Evenson, E. B., Eschman, D. F., and Farrand William, R. (1973). The "Valderan" Problem: Lake Michigan Basin. *Friends of the Pleistocene Field Trip Guidebook*.
- Evenson, E. B., Eschman, D. F., and Farrand, W. R. (1973). Late Glacial History of the Pere Marquette River, Mason and Lake Counties, Michigan. *Michigan Basin Geological Society*, 19-25.
- Evenson, E. B., Eschman, D. F., Farrand, W. R., Maher, L. J., Mickelson, D. M.,

- Morgan, A. V., and Morgan, A. (1980). COMMENT ON THE FOSSIL COLEOPTERA OF THE 2 CREEKS FOREST BED, WISCONSIN. *Quaternary Research* **14**, 377-378.
- Evenson, E. B., Farrand, W. R., and Eschman, D. F. (1974). LATE PLEISTOCENE SHORELINES AND STRATIGRAPHIC RELATIONS IN LAKE-MICHIGAN BASIN - REPLY. *Geological Society of America Bulletin* **85**, 661-664.
- Evenson, E. B., Farrand, W. R., and Eschman, D. F. (1974). Late Pleistocene shorelines and stratigraphic relations in the Lake Michigan Basin: Reply. *Geological Society of American Bulletin* **85**, 661-664.
- Evenson, E. B., Farrand, W. R., Eschman, D. F., Mickelson, D. M., and Maher, L. J. (1976). GREATLAKEAN SUBSTAGE - REPLACEMENT FOR VALDERAN SUBSTAGE IN LAKE-MICHIGAN BASIN. *Quaternary Research* **6**, 411-424.
- Evenson, E. B., Farrand, W. R., Eschman, D. F., Mickelson, D. M., and Maher, L. J. (1976). Greatlakean Substage: A Replacement for Valderan Substage in the Lake Michigan Basin. *Quaternary Research* **6**, 411-424.
- Evenson, E. B., Farrand, W. R., Eschman, D. F., Mickelson, D. M., and Maher, L. J. (1978). GREAT-LAKEAN SUBSTAGE - REPLACEMENT FOR VALDERAN SUBSTAGE IN LAKE-MICHIGAN BASIN - REPLY. *Quaternary Research* **9**, 123-129.
- Evenson, E. B., and Taylor, L. D. (1981). The "Valders" problem. *East Central Section of National Association of Geology Teachers: GVSU Field Trip Guide*.
- Ewing, H. A. (2002). The influence of substrate on vegetation history and ecosystem development. *Ecology* **83**, 2766-2781.
- Ewing, H. A., and Nater, E. A. (2002). Holocene soil development on till and outwash inferred from lake-sediment geochemistry in Michigan and Wisconsin. *Quaternary Research* **57**, 234-243.
- Farrand, W. R. (1962). Postglacial uplift in North America. *American Journal of Science* **260**, 181-199.
- Farrand, W. R. (1976). Was there really a Valders? *The Michigan Academician* **8**, 477-486.
- Farrand, W. R. (1977). Revision of Two Rivers ("Valders") & fluted points in Michigan. *Anthropological Papers*, 74-84.
- Farrand, W. R. (1982). Quaternary Geology of Michigan, pp. Map Scale 1:2,000,000. State of Michigan Department of Natural Resources.
- Farrand, W. R., and Drexler, C. W. (1985). Late Wisconsinan and Holocene history of the Lake Superior basin. *Quaternary Evolution of the Great Lakes*, 17-32.
- Farrand, W. R., and Eschman, D. F. (1974). Glaciation of the Southern Peninsula of Michigan: A Review. *Michigan Academician* **7**, 31-56.
- Farrand, W. R., Mickelson, D. M., and Cowan, W. R. A. G. J. E. (1984). Quaternary Geologic Map Of the Lake Superior 4 x 6 Quadrangle, United States and Canada. scale 1:2,000,000.
- Farrand, W. R., Zahner, R., and Benninghoff, W. S. (1969). Cary-Port Huron Interstade: Evidence from a buried bryophyte bed, Cheboygan County, Michigan. *U.S. Contributions to Quaternary Research*, 249-262.
- Farrand, W. R., and Zahner, R. A. B. W. S. (1969). Cary-Port Huron Interstade: Evidence from a buried bryophyte bed, Cheboygan County, Michigan. *Geological*

Society of America Special Paper 123, 249-262.

- Finkelstein, S. A., and Davis, A. M. (2006). Paleoenvironmental records of water level and climatic changes from the middle to late Holocene at a Lake Erie coastal wetland, Ontario, Canada. *Quaternary Research* **65**, 33-43.
- Finkelstein, S. A., Gajewski, K., and Viau, A. E. (2006). Improved resolution of pollen taxonomy allows better biogeographical interpretation of post-glacial forest development: analyses from the North American Pollen Database. *Journal of Ecology* **94**, 415-430.
- Fisher, T. G. (2004). Vibracoring from lake ice with a lightweight monopod and piston coring apparatus. *Journal of Paleolimnology* **31**, 377-382.
- Fisher, T. G., and Loope, W. L. (2005). Aeolian sand preserved in Silver Lake: a new signal of Holocene high stands of Lake Michigan. *Holocene* **15**, 1072-1078.
- Fisher, T. G., Loope, W. L., Pierce, W., and Jol, H. M. (2007). Big lake records preserved in a little lake's sediment: an example from Silver Lake, Michigan, USA. *Journal of Paleolimnology* **37**, 365-382.
- Fisher, T. G., and Taylor, L. D. (2002). Sedimentary and stratigraphic evidence for subglacial flooding, south-central Michigan, USA. *Quaternary International* **90**, 87-115.
- Fisher, T. G., Taylor, L. D., and Jol, H. M. (2003). Boulder-gravel hummocks and wavy basal till contacts: products of subglacial meltwater flow beneath the Saginaw Lobe, south-central Michigan, USA. *Boreas* **32**, 328-336.
- Fisher, T. G., and Whitman, R. L. (1999). Deglacial and lake level fluctuation history recorded in cores, Beaver Lake, Upper Peninsula, Michigan. *Journal of Great Lakes Research* **25**, 263-274.
- Flakne, R. (2003). The holocene vegetation history of Isle Royale National Park, Michigan, USA. *Canadian Journal of Forest Research-Revue Canadienne De Recherche Forestiere* **33**, 1144-1166.
- Fleck, W. B., and McDonald, M. G. (1978). 3-Dimensional Finite-Difference Model of Groundwater System Underlying Muskegon County Wastewater Disposal System, Michigan. *Journal of Research of the Us Geological Survey* **6**, 307-318.
- Flint, R. F. (1945). Glacial Map of North America.
- Foster, D. S., and Folger, D. W. (1994). The Geologic Framework of Southern Lake-Michigan. *Journal of Great Lakes Research* **20**, 44-60.
- Fraser, G. S., Thompson, T. A., Kvale, E. P., Carlson, C. P., Fishbaugh, D. A., Gruver, B. L., Holbrook, J., Kairo, S., Kohler, C. S., Malone, A. E., Moore, C. H., Rachmanto, B., and Rhoades, L. (1991). Sediments and Sedimentary Structures of a Barred, Nontidal Coastline, Southern Shore of Lake Michigan. *Journal of Coastal Research* **7**, 1113-1124.
- Frye, J. C. (1971). A geologist views the environment. *Environmental Geology Notes*.
- Fuks, K. H., and Wilkinson, B. H. (1998). Holocene sedimentation in two western Michigan estuaries. *Journal of Great Lakes Research* **24**, 822-837.
- Fullerton, D. S. (1980). Preliminary correlation of post-Erie Interstadial events (16,000-10,000 radiocarbon years before present). *Geological Survey Professional Paper* **1089**.
- Fullerton, D. S. (1986). Stratigraphy and correlation of glacial deposits from Indiana to New York and New Jersey. *Quaternary Science Reviews* **5**, 23-37.

- Grimley, D. A. (2000). Glacial and nonglacial sediment contributions to Wisconsin Episode loess in the central United States. *Geological Society of America Bulletin* **112**, 1475-1495.
- Hansel, A. K., and Johnson, H. W. (1993). Fluctuations of the Lake Michigan lobe during the late Wisconsin subepisode: State of Illinois. 133-144.
- Hansel, A. K., and Mickelson, D. M. (1988). A reevaluation of the timing and causes of high lake phases in the Lake Michigan Basin. *Quaternary Research* **29**, 113-128.
- Hansel, A. K., Mickelson, D. M., Schneider, A. F., and Larsen, C. E. (1985). Late Wisconsinan and Holocene history of the Lake Michigan basin: Quaternary Evolution of the Great Lakes. *Geological Society of America Special Paper*.
- Hansen, E. C., Arbogast, A. F., Packman, S. C., and Hansen, B. (2003). Post-Nipissing origin of a backdune complex along the southeastern shore of Lake Michigan. *Physical Geography* **23**, 233-244.
- Hansen, E. C., Arbogast, A. F., and Yurk, B. (2004). The history of dune growth and migration along the southeastern shore of Lake Michigan: A perspective from Green Mountain beach. *Michigan Academician* **35**, 455-78.
- Heath, A. J., and Karrow, P. F. (2007). Northernmost (?) glacial Lake Algonquin series shorelines, Sudbury Basin, Ontario. *Journal of Great Lakes Research* **33**, 264-278.
- Heath, A. J., and Karrow, P. F. (2007). Northernmost (?) glacial Lake Algonquin series shorelines, Sudbury Basin, Ontario. *Journal of Great Lakes Research* **33**, 264-278.
- Hendrickson, G. E. (1966). Michigan's Au Sable River—Today and Tomorrow. *Michigan Geological Survey Bulletin*.
- Henne, P. D., and Hu, F. S. (2010). Holocene climatic change and the development of the lake-effect snowbelt in Michigan, USA. *Quaternary Science Reviews* **29**, 940-951.
- Henne, P. D., Hu, F. S., and Cleland, D. T. (2007). Lake-effect snow as the dominant control of mesic-forest distribution in Michigan, USA. *Journal of Ecology* **95**, 517-529.
- Hinze, W. J., Kellogg, R. L., and Ohara, N. W. (1975). Geophysical Studies of Basement Geology of Southern Peninsula of Michigan. *Aapg Bulletin-American Association of Petroleum Geologists* **59**, 1562-1584.
- Hoaglund, J. R., Huffman, G. C., and Grannemann, N. G. (2002). Michigan basin regional ground water flow discharge to three Great Lakes. *Ground Water* **40**, 390-405.
- Hoaglund, J. R., Kolak, J. J., Long, D. T., and Larson, G. J. (2004). Analysis of modern and Pleistocene hydrologic exchange between Saginaw Bay (Lake Huron) and the Saginaw Lowlands area. *Geological Society of America Bulletin* **116**, 3-15.
- Holman, J. A. (1991). New Records of Michigan Pleistocene Vertebrates with Comments on the Mason-Quimby Line. *Michigan Academician* **23**, 273-283.
- Holman, J. A. (1992). Late Quaternary Herpetofauna of the central Great Lakes region, U.S.A.: Zoogeographical and paleoecological Implications. *Quaternary Science Reviews* **11**, 345-351.
- Hooyer, T. S., and Iverson, N. R. (2000). Clast-fabric development in a shearing granular material: Implications for subglacial till and fault gouge. *Geological*

- Society of America Bulletin* **112**, 683-692.
- Hooyer, T. S., and Iverson, N. R. (2000). Diffusive mixing between shearing granular layers: constraints on bed deformation from till contacts. *Journal of Glaciology* **46**, 641-651.
- Hooyer, T. S., and Iverson, N. R. (2002). Flow mechanism of the Des Moines lobe of the Laurentide ice sheet. *Journal of Glaciology* **48**, 575-586.
- Hooyer, T. S., Iverson, N. R., Lacroix, F., and Thomason, J. F. (2008). Magnetic fabric of sheared till: A strain indicator for evaluating the bed deformation model of glacier flow. *Journal of Geophysical Research-Earth Surface* **113**.
- Host, G. E., Pregitzer, K. S., Ramm, C. W., Hart, J. B., and Cleland, D. T. (1987). Landform-mediated differences in successional pathways among upland forest ecosystems in northwestern Lower Michigan. *Forest Science* **33**, 445-457.
- Host, G. E., Pregitzer, K. S., Ramm, C. W., Lusch, D. P., and Cleland, D. T. (1988). Variation in overstory biomass among glacial landforms and ecological land units in northwestern Lower Michigan. *Canadian Journal of Forest Research* **18**, 659-668.
- Hough, J. L. (1958). "Geology of the Great Lakes." University of Illinois Press, Urbana.
- Hough, J. L. (1962). The prehistoric Great Lakes of North America. *Sigma Xi-RESA National Lecture*, 84-109.
- Howard, J. L. (2010). Late Pleistocene glaciolacustrine sedimentation and paleogeography of southeastern Michigan, USA. *Sedimentary Geology* **223**, 126-142.
- Howard, J. L., Clawson, C. R., and Daniels, W. L. (2012). A comparison of mineralogical techniques and potassium adsorption isotherm analysis for relative dating and correlation of Late Quaternary soil chronosequences. *Geoderma* **179**, 81-95.
- Huang, X. W., Senthilkumar, S., Kravchenko, A., Thelen, K., and Qi, J. G. (2007). Total carbon mapping in glacial till soils using near-infrared spectroscopy, Landsat imagery and topographical information. *Geoderma* **141**, 34-42.
- Hubbard, H. A. (1975). Geology of Porcupine Mountains in Carp River and White-Pine Quadrangles, Michigan. *Journal of Research of the US Geological Survey* **3**, 519-528.
- Hunckler, R. V., and Schaetzl, R. J. (1997). Spodosol development as affected by geomorphic aspect, Baraga County, Michigan. *Soil Science Society of America Journal* **61**, 1105-1115.
- Hunter, R. D., Panyushkina, I. P., Leavitt, S. W., Wiedenhoeft, A. C., and Zawiskie, J. (2006). A multiproxy environmental investigation of Holocene wood from a submerged conifer forest in Lake Huron, USA. *Quaternary Research*.
- Hupy, C. M., and Yansa, C. H. (2009). Late Holocene Vegetation History of the Forest Tension Zone in Central Lower Michigan, USA. *Physical Geography* **30**, 205-235.
- Iverson, N. R., Baker, R. W., and Hooyer, T. S. (1997). A ring-shear device for the study of till deformation: Tests on tills with contrasting clay contents. *Quaternary Science Reviews* **16**, 1057-1066.
- Iverson, N. R., Hooyer, T. S., Thomason, J. F., Graesch, M., and Shumway, J. R. (2008). The experimental basis for interpreting particle and magnetic fabrics of sheared till. *Earth Surface Processes and Landforms* **33**, 627-645.
- Jackson, S. T., and Booth, R. K. (2002). The role of Late Holocene climate variability in

- the expansion of yellow birch in the western Great Lakes region. *Diversity and Distributions* **8**, 275-284.
- Jenson, J. W., Clark, P. U., MacAyeal, D. R., Ho, C., and Vela, J. C. (1995). Numerical modeling of advective transport of saturated deforming sediment beneath the Lake Michigan Lobe, Laurentide Ice Sheet. *Geomorphology* **14**, 157-166.
- Jenson, J. W., MacAyeal, D. R., Clark, P. U., Ho, C. L., and Vela, J. C. (1996). Numerical modeling of subglacial sediment deformation: Implications for the behavior of the Lake Michigan Lobe, Laurentide Ice Sheet. *Journal of Geophysical Research-Solid Earth* **101**, 8717-8728.
- Jepsen, R., McNeil, J., and Lick, W. (2000). Effects of gas generation on the density and erosion of sediments from the Grand River. *Journal of Great Lakes Research* **26**, 209-219.
- Johengen, T. H., Biddanda, B. A., and Cotner, J. B. (2008). Stimulation of Lake Michigan plankton metabolism by sediment resuspension and river runoff. *Journal of Great Lakes Research* **34**, 213-227.
- Johnson, E. A., and Miyanishi, K. (2008). Testing the assumptions of chronosequences in succession. *Ecology Letters* **11**, 419-431.
- Johnson, M. D. (1999). Spooner Hills, northwest Wisconsin: High-relief hills carved by subglacial meltwater of the Superior Lobe. In "Meeting of the North-Central-Geological-Society-of-America/Midwest Glaciology." (D. M. Mickelson, and J. W. Attig, Eds.), pp. 83-92, Madison, Wi.
- Johnson, W. H. (1986). Stratigraphy and Correlation of the Glacial Deposits of the Lake Michigan Lobe Prior to 14 ka BP. *Quaternary Science Reviews*, 17-22.
- Johnson, W. H., and Hansel, A. K. (1999). Wisconsin Episode glacial landscape of central Illinois: A product of subglacial deformation processes? In "Meeting of the North-Central-Geological-Society-of-America/Midwest Glaciology." (D. M. Mickelson, and J. W. Attig, Eds.), pp. 121-135, Madison, Wi.
- Johnson, W. H., Hansel, A. K., Bettis, E. A., II, Karrow, P. F., Larson, G. J., Lowell, T. V., and Schneider, A. F. (1997). Late Quaternary temporal and event classifications, Great Lakes Region, North America. *Quaternary Research* **47**, 1-12.
- Johnston, J. W., Baedke, S. J., Booth, R. K., Thompson, T. A., and Wilcox, D. A. (2004). Late Holocene lake-level variation in southeastern Lake Superior: Tahquamenon Bay, Michigan. *Journal of Great Lakes Research* **30**, 1-19.
- Johnston, J. W., Thompson, T. A., Wilcox, D. A., and Baedke, S. J. (2007). Geomorphic and sedimentologic evidence for the separation of Lake Superior from Lake Michigan and Huron. *Journal of Paleolimnology* **37**, 349-364.
- Karrow, P. F. (1980). The Nipissing transgression around southern Lake Huron. *Canadian Journal of Earth Sciences* **17**, 1271-1274.
- Karrow, P. F., Appleyard, E. C., and Endres, A. L. (2007). Geological and geophysical evidence for pre-Nipissing (> 5,000 years BP) transgression infilled valleys in the Lake Huron basin, Ontario. *Journal of Paleolimnology* **37**, 419-434.
- Karrow, P. F., and Calkin, P. E. (1985). "Quaternary Evolution of the Great Lakes." Geological Association of Canada, St. John's.
- Karrow, P. F., and Calkin, P. F. (1985). Quaternary Evolution of the Great Lakes. *Geological Association of Canada, Special Paper* **30**, 258.

- Karrow, P. F., Dreimanis, A., and Barnett, P. J. (2000). A proposed diachronic revision of late Quaternary time-stratigraphic classification in the eastern and northern Great Lakes area. *Quaternary Research* **54**, 1-12.
- Karrow, P. F., Seymour, K. L., Miller, B. B., and Mirecki, J. E. (1997). Pre-Late Wisconsinan Pleistocene biota from southeastern Michigan, U.S.A. *Palaeogeography, Palaeoclimatology, Palaeoecology* **133**, 81-101.
- Kehew, A. E. (1993). Glacial-Lake Outburst Erosion of the Grand Valley, Michigan, and Impacts on Glacial Lakes in the Lake Michigan Basin. *Quaternary Research* **39**, 36-44.
- Kehew, A. E., Beukema, S. P., Bird, B. C., and Kozlowski, A. L. (2003). Fast flow of the Lake Michigan Lobe: evidence from sediment-landform assemblages in southwestern Michigan, USA. In "Session on Reassessing the Role of Meltwater Processes During Quaternary Glaciations held at the 16th INQUA Congress." pp. 2335-2353, Reno, NV.
- Kehew, A. E., Beukema, S. P., Bird, B. C., and Kozlowski, A. L. (2005). Fast flow of the Lake Michigan Lobe: evidence from sediment-landform assemblages in southwestern Michigan, USA. *Quaternary Science Reviews* **24**, 2335-2353.
- Kehew, A. E., and Brewer, M. K. (1992). Groundwater quality variations in glacial drift and bedrock aquifers, Barry County, Michigan, U.S.A. *Environmental Geology Water Science* **20**, 105-115.
- Kehew, A. E., and Kozlowski, A. (2001). Glacial Geology of Southwestern Michigan. *Field Trip Guide #2, Michigan Basin Geological Society*, 32.
- Kehew, A. E., Nicks, L. P., and Straw, W. T. (1999). Palimpsest tunnel valleys: evidence for relative timing of advances in an interlobate area of the Laurentide ice sheet. *Annals of Glaciology* **28**, 47-52.
- Kehew, A. E., and Passero, R. N. (1990). PH and Redox Buffering Mechanisms in a Glacial Drift Aquifer Contaminated by Landfill Leachate. *Ground Water* **28**, 728-737.
- Kehew, A. E., Passero, R. N., Krishnamurthy, R. V., Lovett, C. K., Betts, M. A., and Dayharsh, B. A. (1998). Hydrogeochemical interaction between a wetland and an unconfined glacial drift aquifer, southwestern Michigan. *Ground Water* **36**, 849-856.
- Kehew, A. E., Straw, W. T., Steinmann, W. K., Barrese, P. G., Guiseppe, P., and Wei-Shyuan, P. (1996). Ground-water quality and flow in a shallow glaciofluvial aquifer impacted by agricultural contamination. *Ground Water* **34**, 491-500.
- Kehew, A. E., and Teller, J. T. (1994). History of late glacial runoff along the southwestern margin of the Laurentide ice sheet. *Quaternary Science Reviews* **13**, 859-877.
- Kelley, R. W. (1962). Michigan's Sand Dunes. 22 p.
- Keough, J. R., Thompson, T. A., Guntenspergen, G. R., and Wilcox, D. A. (1999). Hydrogeomorphic factors and ecosystem responses in coastal wetlands of the Great Lakes. *Wetlands* **19**, 821-834.
- Kiesel, D. S., and Mickelson, D. M. (2005). Influence of Lake Michigan Holocene lake levels on fluvial sediments of the lower Pigeon River, Wisconsin. *Journal of Great Lakes Research* **31**, 343-359.
- Kingsley, R. G. (1981). Hopewell Middle Woodland settlement systems and cultural

- dynamics in southern Michigan. *Mid-Continental Journal of Archaeology* **6**, 131-177.
- Kolak, J. J., Long, D. T., Matty, J. M., Larson, G. J., Sibley, D. F., and Councell, T. B. (1999). Ground-water, large-lake interactions in Saginaw Bay, Lake Huron: A geochemical and isotopic approach. *Geological Society of America Bulletin* **111**, 177-188.
- Kozlowski, A. L., Kehew, A. E., and Bird, B. C. (2005). Outburst flood origin of the central Kalamazoo River Valley, Michigan, USA. *Quaternary Science Reviews* **24**, 2354-2374.
- Krist, F., and Schaetzl, R. J. (2001). Paleowind (11,000 BP) directions derived from lake spits in Northern Michigan. *Geomorphology* **38**, 1-18.
- LaBlanc, K. J. (2001). "A GIS-based study of sedimentation rates and sediment fluxes of the Lake Michigan and Green Bay Lobes of the Southern Laurentide Ice Sheet." unpublished M.S. thesis, University of Wisconsin-Madison.
- Larsen, C. E. (1987). Geological history of Glacial Lake Algonquin and the upper Great Lakes. *United States Geological Survey Bulletin* **1801**, 1-36.
- Larson, G., Ehlers, J., and Gibbard, P. L. (2003). Large scale glaciotectonic deformation in the Great Lakes basin, USA-Canada. *Boreas* **32**, 370-385.
- Larson, G., and Schaetzl, R. (2001). Origin and evolution of the great lakes. *Journal of Great Lakes Research* **27**, 518-546.
- Larson, G. J. Glacial Geology of the Grand Valley Michigan. 155-174.
- Larson, G. J., Delcore, M. R., and Offer, S. (1987). Application of the Tritium Interface Method for Determining Recharge Rates To Unconfined Drift Aquifers: 1 Homogeneous Case. *Journal of Hydrology* **91**, 59-72.
- Larson, G. J., Lawson, D. E., Evenson, E. B., Alley, R. B., Knudsen, O., Lachniet, M. S., and Goetz, S. L. (2006). Glaciohydraulic supercooling in former ice sheets? *Geomorphology* **75**, 20-32.
- Larson, G. J., Lowell, T. V., and Ostrom, N. E. (1994). Evidence for the Two Creeks Interstade in the Lake Huron Basin. *Canadian Journal of Earth Sciences* **31**, 793-797.
- Larson, G. J., and Monaghan, W. G. (1988). Wisconsinan and Holocene Stratigraphy in southwestern Michigan.
- Larson, G. L., Hughes, J. D., and Denton, G. H. (1999). Age verification of the Lake Gribben forest bed and the Younger Dryas Advance of the Laurentide Ice Sheet. *Canadian Journal of Earth Science* **36**, 383-393.
- Leavitt, S. W., Panyushkina, I. P., Lange, T., Cheng, L., Schneider, A. F., and Hughes, J. (2007). Radiocarbon "Wiggles" in great lakes wood at about 10,000 to 12,000 BP. *Radiocarbon* **49**, 855-864.
- Leavitt, S. W., Panyushkina, I. P., Lange, T., Wiedenhoeft, A., Cheng, L., Hunter, R. D., Hughes, J., Pranschke, F., Schneider, A. F., Moran, J., and Stieglitz, R. (2006). Climate in the great lakes region between 14,000 and 4000 years ago from isotopic composition of conifer wood. *Radiocarbon* **48**, 205-217.
- Leney, G. W., and Leney, A. T. (1957). Armored Till Balls in the Pleistocene Outwash of southeastern Michigan. *Journal of Geology* **65**, 105-&.
- Lepczyk, X. C., and Arbogast, A. F. (2005). Geomorphic history of dunes at Petoskey State Park, Petoskey, Michigan. *Journal of Coastal Research* **21**, 231-241.

- Leverett, F., and Taylor, F. B. (1915). The Pleistocene of Indiana and Michigan and the history of the Great Lakes. United States Geological Survey.
- Lewis, C. F. M., Heil, C. W., Hubeny, J. B., King, J. W., Moore, T. C., and Rea, D. K. (2007). The Stanley unconformity in Lake Huron basin: evidence for a climate-driven closed lowstand about 7900 C-14 BP, with similar implications for the Chippewa lowstand in Lake Michigan basin. *Journal of Paleolimnology* **37**, 435-452.
- Lewis, C. F. M., Karrow, P. F., Blasco, S. M., McCarthy, F. M. G., King, J. W., Moore, T. C., and Rea, D. K. (2008). Evolution of lakes in the Huron basin: Deglaciation to present. *Aquatic Ecosystem Health & Management* **11**, 127-136.
- Licciardi, J. M., Clark, P. U., Jenson, J. W., and Macayeal, D. R. (1998). Deglaciation of a soft-bedded Laurentide Ice Sheet. *Quaternary Science Reviews* **17**, 427-448.
- Lineback, J. A., Bleuer, N. K., Mickelson, D. M., Farrand, W. R., and Goldthwait, R. P. (1983). Quaternary Geologic Map of the Chicago 4 x 6 Quadrangle, United States. United States Geological Survey, map scale 1:2,000,000.
- Lineback, J. A., Dell, C. I., and Gross, D. L. (1979). Glacial and postglacial sediments in Lakes Superior and Michigan. *Geological Society of America Bulletin, Part I* **90**, 781-791.
- Lineback, J. A., Gross, D. L., and Meyer, R. P. (1964). Glacial tills under Lake Michigan.
- Loope, H. M., Loope, Walter L., Goble, Ronald J., Fisher, Timothy G., Jol, Harry, Seong, J. C. (2010). Early Holocene dune activity linked with final destruction of glacial Lake Minong, eastern Upper Michigan, USA. *Quaternary Research* **in press**.
- Loope, W. L., and Arbogast, A. F. (2000). Dominance of an similar to 150-year cycle of sand-supply change in late Holocene dune-building along the eastern shore of Lake Michigan. *Quaternary Research* **54**, 414-422.
- Loope, W. L., Fisher, T. G., Jol, H. M., Goble, R. J., Anderton, J. B., and Blewett, W. L. (2004). A Holocene history of dune-mediated landscape change along the southeastern shore of Lake Superior. *Geomorphology* **61**, 303-322.
- Lovis, W. A. (1974). Mocasín Bluff Site and Woodland Culture of Southwestern-Michigan - Bettarel, RL and Smith, HG. *American Anthropologist* **76**, 463-464.
- Lovis, W. A. (1985). Seasonal Settlement Dynamics and the Role of the Fletcher Site in the Woodland Adaptations of the Saginaw Drainage-Basin. *Arctic Anthropology* **22**, 153-170.
- Lovis, W. A., Donahue, R. E., and Holman, M. B. (2005). Long-distance logistic mobility as an organizing principle among northern hunter-gatherers: A Great Lakes Middle Holocene settlement system. *American Antiquity* **70**, 669-693.
- Lovis, W. A., Egan-Bruhy, K. C., Smith, B. A., and Monaghan, G. W. (2001). Wetlands and emergent horticultural economies in the Upper Great Lakes: A new perspective from the Schultz site. *American Antiquity* **66**, 615-632.
- Lowell, T. V., Larson, G. J., Hughes, J. D., and Denton, G. H. (1999). Age verification of the Lake Gribben forest bed and the Younger Dryas Advance of the Laurentide Ice Sheet. *Canadian Journal of Earth Sciences* **36**, 383-393.
- Luehmann, M. D., Schaetzl, R. J., Miller, B. A., and Bigsby, M. E. (2013). Thin, pedoturbated, and locally sourced loess in the western Upper Peninsula of Michigan. *Aeolian Research* **8**, 85-100.

- Lutz, B., Wiles, G., Lowell, T., and Michaels, J. (2007). The 8.2-ka abrupt climate change event in Brown's Lake, northeast Ohio. *Quaternary Research* **67**, 292-296.
- Lynch, E. A., Calcote, R., and Hotchkiss, S. (2006). Late-Holocene vegetation and fire history from Ferry Lake, northwestern Wisconsin, USA. *Holocene* **16**, 495-504.
- Lytle, D. E. (2005). Palaeoecological evidence of state shifts between forest and barrens on a Michigan sand plain, USA. *Holocene* **15**, 821-836.
- Ma, L., Castro, M. C., and Hall, C. M. (2004). A late Pleistocene-Holocene noble gas paleotemperature record in southern Michigan. *Geophysical Research Letters* **31**.
- Macclintock, P., and Dreimanis, A. (1964). REORIENTATION OF TILL FABRIC OVERRIDING GLACIER IN ST LAWRENCE VALLEY. *American Journal of Science* **262**, 133-&.
- MacDonald, N. W., Rediske, R. R., Scull, B. T., and Wierzbicki, D. (2008). Landfill cover soil, soil solution, and vegetation responses to municipal landfill leachate applications. *Journal of Environmental Quality* **37**, 1974-1985.
- Macdonald, R. A., and Longstaffe, F. J. (2008). The late quaternary oxygen-isotope composition of Southern Lake Huron. *Aquatic Ecosystem Health & Management* **11**, 137-143.
- Machatschek. (1913). Surface Geology and Agricultural Conditions of the Southern Peninsula of Michigan. *Petermanns Mitteilungen* **59**, 97-98.
- Machatschek. (1913). Surface Geology of the Northern Peninsula of Michigan. *Petermanns Mitteilungen* **59**, 97-98.
- Maher, L. J., and Mickelson, D. M. (1996). Palynological and radiocarbon evidence for deglaciation events in the Green Bay Lobe, Wisconsin. *Quaternary Research* **46**, 251-259.
- Mainville, A., and Craymer, M. R. (2005). Present-day tilting of the Great Lakes region based on water level gauges. *Geological Society of America Bulletin* **117**, 1070-1080.
- Martin, H. M. (1950). Geology of Michigan. *Geological Society of America Bulletin* **61**, 1570-1570.
- Martin, H. M. (1957). "Outline of the Geologic History of Cheboygan County." Michigan Department of Conservation, Geological Survey Division.
- Martin, H. M. (1957). "Outline of the Geologic History of Hillsdale County." Michigan Department of Conservation, Geological Survey Division.
- Martin, H. M. (1957). "Outline of the Geologic History of Kalamazoo County." Michigan Department of Conservation, Geological Survey Division.
- Martin, H. M. (1957). "Outline of the Geologic History of the Grand Traverse Region." Michigan Department of Conservation, Geological Survey Division.
- Martin, H. M. (1958). "Outline of the Geologic History of Ingham County." Michigan Department of Conservation, Geological Survey Division.
- Martin, H. M. (1958). "Outline of the Geologic History of Ottawa County." Michigan Department of Conservation, Geological Survey Division.
- Martin, H. M. (1958). "Outline of the Geologic History of Shiawassee County." Michigan Department of Conservation, Geological Survey Division.
- Martin, P. E., and Mainfort, R. C. (1985). The Battle Point Site - A Late Historic

- Cemetery in Ottawa County, Michigan. *Arctic Anthropology* **22**, 115-129.
- McDonald, M. G. (1978). Three-dimensional finite-difference model of ground-water system underlying the Muskegon County wastewater disposal system, Michigan. *Journal of Research U.S. Geological Survey* **6**, 307-318.
- McIntosh, J. C., and Walter, L. M. (2006). Paleowaters in Silurian-Devonian carbonate aquifers: Geochemical evolution of groundwater in the Great Lakes region since the Late Pleistocene. *Geochimica Et Cosmochimica Acta* **70**, 2454-2479.
- Meliker, J. R., Slotnick, M. J., Avruskin, G. A., Haack, S. K., and Nriagu, J. O. (2009). Influence of groundwater recharge and well characteristics on dissolved arsenic concentrations in southeastern Michigan groundwater. *Environmental Geochemical Health* **31**, 147-157.
- Meriano, M., and Eyles, N. (2009). Quantitative assessment of the hydraulic role of subglaciofluvial interbeds in promoting deposition of deformation till (Northern Till, Ontario). *Quaternary Science Reviews* **28**, 608-620.
- Meyers, P. A. (2003). Applications of organic geochemistry to paleolimnological reconstructions: a summary of examples from the Laurentian Great Lakes. *Organic Geochemistry* **34**, 261-289.
- Meyrick, R. A., and Karrow, P. F. (2007). Three detailed, radiocarbon-dated, Holocene tufa and alluvial fan mollusc successions from southern Ontario: The first in northeastern North America. *Palaeogeography Palaeoclimatology Palaeoecology* **243**, 250-271.
- Miao, X. D., Hanson, P. R., Wang, H., and Young, A. R. (2010). Timing and origin for sand dunes in the Green River Lowland of Illinois, upper Mississippi River Valley, USA. *Quaternary Science Reviews* **29**, 763-773.
- Michigan State, U. (1964). "Field Trip Guide." Geology Department.
- Michigan State, U. (1964). "Field Trip Guide to Geology of Lake Huron Region." Department of Geology.
- Mickelson, D. M., and Evenson, E. B. (1975). Pre-Twocreekan age of the type Valders till, Wisconsin. *Geology*, 587-590.
- Mikesell, L. R., Schaetzl, R. J., and Velbel, M. A. (2004). Hornblende etching and quartz/feldspar ratios as weathering and soil development indicators in some Michigan soils. *Quaternary Research* **62**, 162-171.
- Miller, B. B., Karrow, P. F., and Kalas, L. L. (1979). LATE QUATERNARY MOLLUSKS FROM GLACIAL LAKE ALGONQUIN, NIPISSING, AND TRANSITIONAL SEDIMENTS FROM SOUTHWESTERN ONTARIO, CANADA. *Quaternary Research* **11**, 93-112.
- Miller, B. B., Schneider, A. F., Smith, A. J., and Palmer, D. F. (2000). A 6000 year water level history of Europe Lake, Wisconsin, USA. *Journal of Paleolimnology* **23**, 175-183.
- Miller, B. B., Tevesz, M. J. S., and Carney, J. S. (1998). Holocene environmental changes in the Whitefish Dunes Area, Door Peninsula, northern Lake Michigan Basin, USA. *Journal of Paleolimnology* **19**, 473-479.
- Miller, B. B., Tevesz, M. J. S., and Pranschke, F. A. (2000). An early Holocene oxygen isotope record from the Olson buried forest bed, southern Lake Michigan. *Journal of Paleolimnology* **24**, 271-276.
- Miller, B. B., Tevesz, M. J. S., and Smith, J. E. (1997). Post-Chippewa oxygen isotope

- record from Cowles Bog, southern Lake Michigan basin. *Journal of Paleolimnology* **18** P **299-305**.
- Miller, J. M. (1988). Letters. *NGR*, 4-5.
- Miller, N. G., and Benninghoff, W. S. Plant fossils from Cary-Port Huron Interstade deposit and their paleoecological interpretation. *Geological Society of America*, 225-247.
- Milstein, R. L. (1987). Mackinaw Island State Park, Michigan. *Geological Society of America Centennial Field Guide—North Central Section* **68**, 285-288.
- Milstein, R. L. (1987). Sleeping Bear Dunes National Lakeshore, Michigan. *Geological Society of America Centennial Field Guide—North Central Section*, %V 72, 303-306.
- Mokma, D. L., Schaetzl, R. J., Doolittle, J. A., and Johnson, E. P. (1990). Ground-penetrating radar study of ortstein continuity in some Michigan Haplaquods. *Soil Science Society of America Journal* **54**, 936-938.
- Mokma, D. L., and Sprecher, S. W. (1994). Water-Table Depths and Color Patterns in Soils Developed from Red Parent Materials in Michigan, USA. *Catena* **22**, 287-298.
- Monaghan, G. W., and Larson, G. J. (1985). A Computerized Groundwater Resource Information-System. *Ground Water* **23**, 233-239.
- Monaghan, G. W., Lovis, W. A., and Fay, L. (1986). The Lake Nipissing transgression in the Saginaw Bay region, Michigan. *Canadian Journal of Earth Sciences* **23**, 1851-1854.
- Monaghan, G. W., Lovis, W. A., and Fay, L. (1986). The Lake Nippising Transition in the Saginaw Bay Region, Michigan. *Canadian Journal of Earth Sciences* **23**, 1851-1854.
- Monaghan, W. G. (1990). Systematic variation in the clay-mineral composition of till sheets; Evidence for the Erie Interstade in the Lake Michigan basin, in Schneider, A. F., and Fraser, G. S. (eds.), Late Quaternary History of the Lake Michigan Basin, Geological Society of America, Special Paper 251, p. 43-50.
- Monaghan, W. G., and Larson, G. J. (1986). Late Wisconsinan drift stratigraphy of the Saginaw ice lobe in south-central Michigan. *Geological Society of America Bulletin* **97**, 324-328.
- Monaghan, W. G., Larson, G. J., and Gephart, G. D. (1986). Late Wisconsinan drift stratigraphy of the Lake Michigan Lobe in southwestern Michigan. *Geological Society of American Bulletin* **97**, 329-334.
- Monaghan, W. G., Lovis, W. A., and Egan-Bruhy, K. C. (2006). Earliest *Curcubita* from the Great Lakes, Northern USA. *Quaternary Research* **Article in press**, www.sciencedirect.com.
- Murray, K. S., Rogers, D. T., and Kaufman, M. M. (2006). Dissolved heavy metals in shallow ground water in a southeastern Michigan urban watershed. *Journal of the American Water Resources Association* **42**, 777-792.
- Murray, T. (1997). Assessing the paradigm shift: Deformable glacier beds. *Quaternary Science Reviews* **16**, 995-1016.
- Naeve, V. A. (1979). What influenced the major transition of Postglacial vegetational assemblages in southwestern Michigan? *Michigan Academy of Sciences, Arts & Letters*.

- Nelson, J. A., Licht, K., Yansa, C., and Filippelli, G. (2010). Climate-related cyclic deposition of carbonate and organic matter in Holocene lacustrine sediment, Lower Michigan, USA. *Journal of Paleolimnology* **44**, 1-13.
- Norman, S. A., Schaetzl, R. J., and Small, T. W. (1995). Effects of slope angle on mass movement by tree uprooting. *Geomorphology* **14**, 19-27.
- Odegaard, C., Rea, D. K., and Moore, T. C. (2003). Stratigraphy of the mid-Holocene black bands in Lakes Michigan and Huron: Evidence for possible basin-wide anoxia. *Journal of Paleolimnology* **29**, 221-234.
- Ohara, N. W. (1983). Regional Basement Geology of Lake-Michigan. *Geophysics* **48**, 452-452.
- Ohara, N. W., and Hinze, W. J. (1972). Basement Geology of Lake-Michigan Area From Aeromagnetic Studies. *Geological Society of America Bulletin* **83**, 1771-&.
- Oort, M. V., Arbogast, A., Hansen, E. C., and Hansen, B. (2001). Geomorphological history of massive parabolic dunes, Van Buren State Park, Van Buren County, Michigan. *Michigan Academician* **33**, 175-188.
- Panyushkina, I. P., Leavitt, S. W., Thompson, T. A., Schneider, A. F., and Lange, T. (2008). Environment and paleoecology of a 12 ka mid-North American Younger Dryas forest chronicled in tree rings. *Quaternary Research* **70**, 433-441.
- Patterson, C. J. (1997). Southern Laurentide ice lobes were created by ice streams: Des Moines lobe in Minnesota, USA. *Sedimentary Geology* **111**, 249-261.
- Peterson, J. M., and Dersch, E. A guide to sand dune and coastal ecosystem functional relationships.
- Petty, W. H., Delcourt, P. A., and Delcourt, H. R. (1996). Holocene lake-level fluctuations and beach-ridge development along the northern shore of Lake Michigan, USA. *Journal of Paleolimnology* **15**, 147-169.
- Petty, W. H., Delcourt, P. A., and Hazel, R. (1996). Holocene lake-level fluctuations and beach-ridge development along the northern shore of Lake Michigan, USA. *Journal of Paleolimnology* **15**, 147-169.
- Pregitzer, K. E. (1972). Soil Survey of Ottawa County, Michigan (U. S. D. o. A. S. C. Service, Ed.), pp. 139. United States Department of Agriculture Soil Conservation Service.
- Quigley, R. M., and Dreimani, A. (1972). WEATHERED INTERSTADIAL GREEN CLAY AT PORT TALBOT, ONTARIO. *Canadian Journal of Earth Sciences* **9**, 991-&.
- Ravenscroft, P., and McArthur, J. M. (2004). Mechanism of regional enrichment of groundwater by boron: the examples of Bangladesh and Michigan, USA. *Applied Geochemistry* **19**, 1413-1430.
- Rawling, J. E. (2000). A review of lamellae. *Geomorphology* **35**, 1-9.
- Rea, D. K., Moore, T. C., Lewis, C. F. M., Mayer, L. A., Dettman, D. L., Smith, A. J., and Dobson, D. M. (1994). STRATIGRAPHY AND PALEOLIMNOLOGIC RECORD OF LOWER HOLOCENE SEDIMENTS IN NORTHERN LAKE HURON AND GEORGIAN BAY. *Canadian Journal of Earth Sciences* **31**, 1586-1605.
- Reed, R. C. (1979). Michigan Precambrian - Geology and Minerals. *Mining Congress Journal* **65**, 46-51.
- Rieck, R. L., Klasner, J. S., Winters, H. A., and Marlette, P. A. (1991). Glaciotectonic effects on a Middle-Wisconsin boreal fenland peat in Michigan, USA. *Boreas* **20**, 155-167.

- Rieck, R. L., and Winters, H. A. (1976). The bedrock surface and its relationship to hydrography and buried organic and oxidized deposits. *Michigan Academician* **9**, 97-108.
- Rieck, R. L., and Winters, H. A. (1979). Lake, stream, and bedrock in southcentral Michigan. *Annals of the Association of American Geographers* **69**, 276-288.
- Rieck, R. L., and Winters, H. A. (1982). Characteristics of a Glacially Buried Cuesta in Southeast Michigan. *Annals of the Association of American Geographers* **72**, 482-494.
- Rieck, R. L., and Winters, H. A. (1982). Low-altitude organic deposits in Michigan: Evidence for pre-Woodfordian Great Lakes and paleosurfaces. *Geological Society of America Bulletin* **93**, 726-734.
- Rieck, R. L., and Winters, H. A. (1991). Paleotopography and present terrain in southwestern Michigan. *Michigan Academician* **23**, 241-256.
- Rieck, R. L., and Winters, H. A. (1993). Drift volume in the southern peninsula of Michigan—A prodigious Pleistocene endowment. *Physical Geography* **14**, 478-493.
- Rieck, R. L., Winters, H. A., Mokma, D. L., and Mortland, M. M. (1979). Differentiation of surficial glacial drift in southeastern Michigan from 7-A/10-A X-ray diffraction ratios of clays. *Geological Society of America Bulletin, Part I* **90**, 216-220.
- Rindfleisch, P. R., and Schaetzl, R. J. (2001). Soils and geomorphic evidence for a high lake stand in a Michigan drumlin field. *Physical Geography* **22**, 483-501.
- Roberts, J. (1973). South Manitou Island. *Field Trips of Northwestern Michigan College*.
- Roberts, M. R., and Gilliam, F. S. (1995). Disturbance effects on herbaceous layer vegetation and soil nutrients in *Populus* forests of northern lower Michigan. *Journal of Vegetation Science* **6**, 903-912.
- Robertson, J. M. (1975). Geology and Mineralogy of Some Copper Sulfide Deposits Near Mount Bohemia, Keweenaw County, Michigan. *Economic Geology* **70**, 1202-1224.
- Ronnert, L. (1992). Genesis of Dimicton in the Oak Creek Formation of South-East Wisconsin, USA. *Sedimentology* **39**, 177-192.
- Rovey, C. W., and Borucki, M. K. (1994). Bluff evolution and long term recession rates, southwestern Lake Michigan. *Environmental Geology* **23**, 256-263.
- Rovey, C. W., and Borucki, M. K. (1995). Subglacial to Proglacial Sediment Transition in a Shallow Ice-Contact Lake. *Boreas* **24**, 117-127.
- Saarnisto, M. (1974). The deglaciation history of the Lake Superior region and its climatic implications. *Quaternary Research* **4**, 316-339.
- Safarudin, and Moore, T. C., Jr. (1998). The history and architecture of lacustrine depositional systems in the northern Lake Michigan basin. *Journal of Paleolimnology* **22**, 475-496.
- Schaetzl, R. J. (1986). Complete soil profile inversion by tree uprooting. *Physical Geography* **7**, 181-189.
- Schaetzl, R. J. (1991). A lithosequence of soils in extremely gravelly, dolomitic parent materials, Bois Blanc Island, Lake Huron. *Geoderma* **48**, 305-320.
- Schaetzl, R. J. (1992). Texture, Mineralogy, and Lamellae Development in Sandy Soils in Michigan. *Soil Science Society of America Journal* **56**, 1538-1545.
- Schaetzl, R. J. (1996). Division S-5—Pedology. *Soil Science Society of America Journal*

- 60**, 1862-1870.
- Schaetzl, R. J. (1996). Spodosol-Alfisol intergrades: Bisequal soils in NE Michigan, USA. *Geoderma* **74**, 23-47.
- Schaetzl, R. J. (2001). Late Pleistocene ice-flow directions and the age of glacial landscapes in northern lower Michigan. *Physical Geography* **22**, 28-41.
- Schaetzl, R. J. (2001). Morphologic evidence of lamellae forming directly from thin, clayey bedding planes in a dune. *Geoderma* **99**, 51-63.
- Schaetzl, R. J. (2002). A Spodosol-Entisol transition in Northern Michigan. *Soil Science Society of America Journal* **66**, 1272-1284.
- Schaetzl, R. J. (2008). The distribution of silty soils in the Grayling Fingers region of Michigan: Evidence for loess deposition onto frozen ground. *Geomorphology* **102**, 287-296.
- Schaetzl, R. J., and Attig, J. W. (2013). The loess cover of northeastern Wisconsin. *Quaternary Research* **79**, 199-214.
- Schaetzl, R. J., Burns, S. F., Small, T. W., and Johnson, D. L. (1990). *Physical Geography* **11**, 277-291.
- Schaetzl, R. J., Drzyzga, S. A., Weisenborn, B. N., Kincare, K. A., Lepczyk, X. C., Shein, K., Dowd, C. M., and Linker, J. (2002). Measurement, correlation, and mapping of glacial Lake Algonquin shorelines in northern Michigan. *Annals of the Association of American Geographers* **92**, 399-415.
- Schaetzl, R. J., Drzyzga, S. A., Weisenborn, B. N., Kincare, K. A., Lepczyk, X. C., Shein, K., Dowd, C. M., and Linker, J. (2002). Measurement, correlation, and mapping of glacial Lake Algonquin shorelines in northern Michigan. *Annals of the Association of American Geographers* **92**, 399-415.
- Schaetzl, R. J., and Follmer, L. R. (1990). Longevity of tree throw microtopography: Implications for mass wasting. *Geomorphology* **3**, 113-123.
- Schaetzl, R. J., and Forman, S. L. (2008). OSL ages on glaciofluvial sediment in northern Lower Michigan constrain expansion of the Laurentide ice sheet. *Quaternary Research* **70**, 81-90.
- Schaetzl, R. J., Forman, S. L., and Attig, J. A. (2014). Optical ages on loess derived from outwash surfaces constrain the advance of the Laurentide Ice Sheet out of the Lake Superior Basin, USA. *Quaternary Research* **81**, 318-329.
- Schaetzl, R. J., and Isard, S. A. (1991). The distribution of spodosol soils in southern Michigan: A climatic interpretation. *Annals of the Association of American Geographers* **81**, 425-442.
- Schaetzl, R. J., and Isard, S. A. (1996). Regional-scale relationships between climate and strength of podzolization in the Great Lakes Region, North America. *Catena* **28**, 47-69.
- Schaetzl, R. J., Krist, F. J., Jr., Rindfleisch, R. R., Liedens, J., and Williams, T. E. (2000). Postglacial landscape evolution of northeastern Lower Michigan, interpreted from soils and sediments. *Annals of the Association of American Geographers* **90**, 443-446.
- Schaetzl, R. J., and Loope, W. L. (2008). Evidence for an eolian origin for the silt-enriched soil mantles on the glaciated uplands of eastern Upper Michigan, USA. *Geomorphology* **100**, 285-295.
- Schaetzl, R. J., and Mokma, D. L. (1988). A numerical index of podzol and podzolic soil

- development. *Physical Geography* **9**, 232-246.
- Schaetzl, R. J., and Welsenborn, B. N. (2004). The Grayling Fingers region of Michigan: soils, sedimentology, stratigraphy and geomorphic development. *Geomorphology* **61**, 251-274.
- Schaetzl, R. J., Yansa, C. H., and Luehmann, M. D. (2013). Paleobotanical and environmental implications of a buried forest bed in northern Lower Michigan, USA. *Canadian Journal of Earth Sciences* **50**, 483-493.
- Schneider, A. F. Radiocarbon confirmation of the Greatlakean Age of the type Two Rivers Till of Eastern Wisconsin.
- Schneider, A. F. (1970). A Significant Pleistocene Exposure in South-Central Indiana. *Geological Society of America Bulletin* **81**, 3079-&.
- Schneider, A. F., and Fraser, G. S. (1990). Late Quaternary History of the Lake Michigan Basin. *Geological Society of America Special Paper* **251**.
- Schneider, A. F., Leavitt, S. W., and Lange, T. (2009). Stratigraphy, age, and flora of the Southport forest bed, Southeastern Wisconsin. *Journal of Great Lakes Research* **35**, 538-547.
- Schomberg, J. D., Host, G., Johnson, L. B., and Richards, C. (2005). Evaluating the influence of landform, surficial geology, and land use on streams using hydrologic simulation modeling. *Aquatic Sciences* **67**, 528-540.
- Scull, P., and Schaetzl, R. J. (2011). Using PCA to characterize and differentiate loess deposits in Wisconsin and Upper Michigan, USA. *Geomorphology* **127**, 143-155.
- Seybold, C. A., Grossman, R. B., and Pierce, F. J. (2003). On-site assessment of use-dependent soil properties in Michigan. *Communications in Soil Science and Plant Analysis* **34**, 765-780.
- Sharma, S., Mora, G., Johnston, J. W., and Thompson, T. A. (2005). Stable isotope ratios in swale sequences of Lake Superior as indicators of climate and lake level fluctuations during the Late Holocene. *Quaternary Science Reviews* **24**, 1941-1951.
- Shedlock, R. J., Wilcox, D. A., Thompson, T. A., and Cohen, D. A. (1993). Interactions Between Ground-Water and Wetlands, Southern Shore of Lake-Michigan, USA. *Journal of Hydrology* **141**, 127-155.
- Shoemaker, E. M. (1992). Subglacial Floods and the Origin of Low-Relief Ice-Sheet Lobes. *Journal of Glaciology* **38**, 105-112.
- Sims, P. K., and Peterman, Z. E. (1976). Geology and Rb-Sr Ages of Reactivated Precambrian Gneisses and Granite in Marenisco-Watersmeet Area, Northern Michigan. *Journal of Research of the Us Geological Survey* **4**, 405-414.
- Sims, P. K., Peterman, Z. E., and Prinz, W. C. (1977). Geology and Rb-Sr Age of Precambrian - W Puritan Quartz Monzonite, Northern Michigan. *Journal of Research of the Us Geological Survey* **5**, 185-192.
- Sjogren, D. B., Fisher, T. G., Taylor, L. D., Jol, H. M., and Munro-Stasiuk, M. J. (2002). Incipient tunnel channels. *Quaternary International* **90**, 41-56.
- Slawson, C. B. (1933). The Jasper conglomerate, an index of drift dispersion. *Journal of Geology* **41**, 546-552.
- Slotnick, M. J., Meliker, J., and Nriagu, J. (2003). Natural sources of arsenic in Southeastern Michigan groundwater. In "12th International Conference on Heavy Metals in the Environment." pp. 1247-1250, Grenoble, France.

- Smith, B. A., Egan, K. C., Lovis, W. A., and Monaghan, G. W. (1994). Targetting the marsh: A reanalysis of subsistence patterns and local environments of the Schultz site. In "Origins of the People of the Longhouse." (A. Bekerman, and G. Warrick, Eds.), pp. 140-141. Ontario Archaeological Society Inc, N York.
- Smith, G. L. (1997). Late Quaternary climates and limnology of the Lake Winnebago basin, Wisconsin, based on ostracodes. *Journal of Paleolimnology* **18**, 249-260.
- Smith, H., and Wilding, L. P. (1972). Genesis of Argillic Horizons in OchraQualfs Derived From Fine Texture Till Deposits of Northwestern Ohio and Southeastern Michigan. *Soil Science Society of America Proceedings* **36**, 808-&.
- Smith, H. I. (1901). Summary of the Archeology of Saginaw Valley, Michigan - Part I. *American Anthropologist* **3**, 286-293.
- Smith, H. I. (1901). Summary of the Archeology of Saginaw Valley, Michigan - Part II. *American Anthropologist* **3**, 501-512.
- Smith, H. I. (1901). Summary of the Archeology of Saginaw Valley, Michigan - Part III. *American Anthropologist* **3**, 726-736.
- Socha, B. J., Colgan, P. M., and Mickelson, D. M. (1999). Ice-surface profiles and bed conditions of the Green Bay Lobe from 13,000 to 11,000 C-14-years BP. In "Meeting of the North-Central-Geological-Society-of-America/Midwest Glaciology." (D. M. Mickelson, and J. W. Attig, Eds.), pp. 151-158, Madison, Wi.
- Squire, G. R. (1972). "A Field Guide to the Geology of Southwestern Michigan."
- Stone, B. D., Kincare, K. A., O'Leary, D. W., Lundstrom, S. C., Taylor, E. M., and Brown, S. E. D. (2003). Glacial and postglacial geology of the Berrien County Region of Michigan: Field Trip Guidebook for 49th Midwest Friends of the Pleistocene Field Conference.
- Strong, W. L., and Hills, L. V. (2005). Late-glacial and Holocene palaeovegetation zonal reconstruction for central and north-central North America. *Journal of Biogeography* **32**, 1043-1062.
- Sugita, S., Parshall, T., and Calcote, R. (2006). Detecting differences in vegetation among paired sites using pollen records. *Holocene* **16**, 1123-1135.
- Suwanwaree, P., and Robertson, G. P. (2005). Methane oxidation in forest, successional, and no-till agricultural ecosystems: Effects of nitrogen and soil disturbance. *Soil Science Society of America Journal* **69**, 1722-1729.
- Swenson, M. J., Wu, C. H., Edil, T. B., and Mickelson, D. M. (2006). Bluff recession rates and wave impact along the Wisconsin coast of Lake Superior. *Journal of Great Lakes Research* **32**, 512-530.
- Syverson, K. M., and Colgan, P. M. (2011). The Quaternary of Wisconsin: An Updated Review of Stratigraphy, Glacial History and Landforms. *Quaternary Glaciations - Extent and Chronology: A Closer Look* **15**, 537-552.
- Taylor, L. D. (1990). Evidence for high glacial-lake levels in the northeastern Lake Michigan basin and their relation to the Glenwood and Calumet phases of glacial Lake Chicago. *Geological Society of America Special Paper*, 91-109.
- Taylor, L. D. (1990). Late Wisconsinan till stratigraphy, east shore of Lake Michigan, Muskegon to Northport Peninsula, Michigan.
- Teller, J. T. (1987). Proglacial lakes and the southern margin of the Laurentide Ice Sheet. *The Geological Society of America K-3*, 39-69.
- Ten Brink, N. W. (1981). In "East-Central NAGT Field Trip Guidebook." NAGT.

- Ten Brink, N. W. (1994). Kalamazoo: Field Trips Guidebook Geological Society of America. *unpublished guidebook*.
- Tevesz, M. J. S., Smith, J. E., Coakley, J. P., and Risk, M. J. (1997). Stable carbon and oxygen isotope records from Lake Erie sediment cores: Mollusc aragonite 4600 BP 200 BP. *Journal of Great Lakes Research* **23**, 307-316.
- Tevesz, M. J. S., Spongberg, A. L., and Fuller, J. A. (1998). Stable carbon and oxygen isotope record of central Lake Erie sediments. *Journal of Paleolimnology* **20**, 295-305.
- Thomason, J. F., and Iverson, N. R. (2006). Microfabric and microshear evolution in deformed till. *Quaternary Science Reviews* **25**, 1027-1038.
- Thompson, G. W. (1982). The use of quantitative carbonate mineral analyses in differentiating till units in Allegan County.
- Thompson, T. A. (1989). Anatomy of a Transgression Along the Southeastern Shore of Lake-Michigan *Journal of Coastal Research* **5**, 711-724.
- Thompson, T. A. (1990). Dune and beach complex and back-barrier sediments along the southeastern shore of Lake Michigan: Cowles Bog area of the Indiana Dunes National Lakeshore. In "Geological Society of America Special Paper." pp. 9-19.
- Thompson, T. A. (1992). Beach-Ridge Development and Lake Level Variation in Southern Lake-Michigan. *Sedimentary Geology* **80**, 305-318.
- Thompson, T. A., and Baedke, S. J. (1995). Beach-ridge development in Lake Michigan: Shoreline behavior in response to quasi-periodic lake-level events. *Marine Geology* **129**, 163-174.
- Thompson, T. A., and Baedke, S. J. (1997). Strand-plain evidence for late Holocene lake-level variations in Lake Michigan. *Geological Society of America Bulletin* **109**, 666-682.
- Timmons, E. A., Fisher, T. G., Hansen, E. C., Eisaman, E., Daly, T., and Kashgarian, M. (2007). Elucidating aeolian dune history from lacustrine sand records in the Lake Michigan Coastal Zone, USA. *Holocene* **17**, 789-801.
- Tulaczyk, S. (1999). Ice sliding over weak, fine-grained tills: Dependence of ice-till interactions on till granulometry. In "Meeting of the North-Central-Geological-Society-of-America/Midwest Glaciology." (D. M. Mickelson, and J. W. Attig, Eds.), pp. 159-177, Madison, Wi.
- Tulaczyk, S. M., Scherer, R. P., and Clark, C. D. (1999). A ploughing model for the origin of weak tills beneath ice streams: a qualitative treatment. In "15th International-Union-for-Quaternary-Association Congress." pp. 59-70, Durban, South Africa.
- Vacco, D. A., Alley, R. B., and Pollard, D. (2009). Modeling dependence of moraine deposition on climate history: the effect of seasonality. *Quaternary Science Reviews* **28**, 639-646.
- Vahrenkamp, V. C., Eschman, D. F., and Wilkinson, B. H. (1983). SUPRAGLACIAL DIAMICTONS AT CONTINENTAL ICE MARGINS - PLEISTOCENE ALLUVIAL-FAN FLOW TILL DEPOSITION IN SOUTHEASTERN MICHIGAN. *Aapg Bulletin-American Association of Petroleum Geologists* **67**, 563-563.
- Vahrenkamp, V. C., Eschman, D. F., and Wilkinson, B. H. (1983). Supraglacial Diamictos at Continental Ice Margins - Pleistocene Alluvial-Fan Flow Till Deposits in Southeastern Michigan. *Aapg Bulletin-American Association of*

- Petroleum Geologists* **67**, 563-563.
- Velbel, M. A., Matty, D. J., Wacker, J. F., and Linke, M. P. (2002). The Worden meteorite: A new ordinary chondrite fall from Michigan, USA. *Meteoritics & Planetary Science* **37**, B25-B29.
- Vries, H. D., and Dreimanis, A. (1960). FINITE RADIOCARBON DATES OF THE PORT TALBOT INTERSTADIAL DEPOSITS IN SOUTHERN ONTARIO. *Science* **131**, 1738-1739.
- Waltrip, D. A. (1973). Sourcebook and Field Guide to the Geology of the West-Central Lower Peninsula of Michigan.
- Warner, B. G., Karrow, P. F., Morgan, A. V., and Morgan, A. (1987). Plant and insect fossils from Nipissing sediment along the Goulas River, southeastern Lake Superior. *Canadian Journal of Earth Sciences* **24**, 1526-1536.
- Wattrus, N. J., and Rausch, D. E. (2001). A preliminary survey of relict shoreface-attached sand ridges in Western Lake Superior. *Marine Geology* **179**, 163-177.
- Weege, R. J., and Pollock, J. P. (1972). Geology of 2 New Mines in Native Copper District of Michigan. *Economic Geology* **67**, 622-&.
- West, C. C., Lyon, W. G., Ross, D. L., and Pennington, L. K. (1994). Investigation of Vertical-Distribution and Morphology of Indigenous Organic-Matter at Sleeping Bear Site, Michigan. *Environmental Geology* **24**, 176-187.
- Wickham, J. T., Gross, D. L., Lineback, J. A., and Thomas, R. L. (1978). Late Quaternary sediments of Lake Michigan. *Environmental Geology Notes*.
- Wiebe, W. A. (1926). Surface Geology of Menominee County, Michigan. *Papers of the Michigan Academy of Science, Arts and Letters* **7** \$P **167-179**.
- Wildermuth, R., and Kraft, L. (1926).
- Winguth, C., Mickelson, D. M., Colgan, P. M., and Laabs, B. J. C. (2004). Modeling the deglaciation of the Green Bay Lobe of the southern Laurentide Ice Sheet. *Boreas* **33**, 34-47.
- Winkler, E. M. (1960). Post-Pleistocene ostracodes of Lake Nipissing age. *Journal of Paleontology* **34**, 923-&.
- Winters, H. A., and Rieck, R. L. (1980). Significance of landforms in southeastern Michigan. *Annals of the Association of American Geographers* **70**, 413-423.
- Winters, H. A., and Rieck, R. L. (1991). Late glacial terrain transformation in Michigan. *Michigan Academician* **23**, 137-148.
- Winters, H. A., Rieck, R. L., and Knapp, R. O. (1986). Significance and Ages of Mid-Wisconsinan organic deposits in southern Michigan. *Physical Geography* **7**, 292-305.
- Wittkop, C. A., Teranes, J. L., Dean, W. E., and Guilderson, T. P. (2009). A lacustrine carbonate record of Holocene seasonality and climate. *Geology* **37**, 695-698.
- Wold, R. J., Paull, R. A., Wolosin, C. A., and Friedel, R. J. (1981). Geology of Central Lake-Michigan. *Aapg Bulletin-American Association of Petroleum Geologists* **65**, 1621-1632.
- Wong, S. A. (2002). "Stratigraphic analysis of diamicton units in southern Allegan County, Michigan." Western Michigan University, Kalamazoo.
- Wood, J. R., Forman, S. L., Everton, D., Pierson, J., and Gomez, J. (2010). Lacustrine sediments in Porter Cave, Central Indiana, USA and possible relation to

- Laurentide ice sheet marginal positions in the middle and late Wisconsinan. *Palaeogeography Palaeoclimatology Palaeoecology* **298**, 421-431.
- Yu, S. Y., Colman, S. M., Lowell, T. V., Milne, G. A., Fisher, T. G., Breckenridge, A., Boyd, M., and Teller, J. T. (2010). Freshwater Outburst from Lake Superior as a Trigger for the Cold Event 9300 Years Ago. *Science* **328**, 1262-1266.
- Zumberge, J. H. (1960). Correlation of Wisconsin drifts in Illinois, Indiana, Michigan and Ohio. *Bulletin of the Geological Society of America* **71**, 1177-1188.
- Zumberge, J. H., and Potzer, J. E. (1956). Late Wisconsin chronology of the Lake Michigan Basin Correlated with Pollen Studies. *Bulletin of the Geological Society of America* **67**, 271-288.
- Zuzek, P. J., Nairn, R. B., and Thieme, S. J. (2003). Spatial and Temporal Considerations for Calculating Shoreline Change Rates in the Great Lakes Basin. *Journal of Coastal Research* **38**, 125-146.