

DR. DAVID M. MICKELSON

Senior Research Scientist and Emeritus Professor, Departments of Geoscience and Geological Engineering at University of Wisconsin--Madison and owner Geo-Professional Consultants, LLC WI PG #220.

PERSONAL DATA

Born: August 22, 1944

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EDUCATION -- Clark University - A.B., 1966, Geography; University of Maine - M.S., 1968, Geology; Ohio State University - Ph.D., 1971, Geology

EXPERIENCE

Clark University, 1965-66, Teaching Assistant
University of Maine, 1967, Instructor, summer school; 1966-68, Teaching Assistant; M.S. thesis study, Chronological investigation of a kettle-hole peat bog, Cherryfield, Maine
Ohio State University, 1968-69, Teaching Assistant; 1969-70, Institute of Polar Studies, Graduate Research Associate; 1970-71, University Dissertation Year Fellow
University of Wisconsin, 1971-1975, Assistant Professor
University of Wisconsin, 1976-1980, Associate Professor
University of Wisconsin, Professor (1981-2005), Geology and Geophysics and
Chairman, Department of Geology and Geophysics, 1984-1987
Chairman, Water Resources Management Program, 1990-1992
Chairman, Geological Engineering Program, 1999-2002
Senior Research Scientist and Emeritus Professor 2005-
Owner, Geo-Professional Consultants LLC 2005-

COURSES TAUGHT

Regular courses: Geology of the National Parks, Environmental Geology, Geomorphology, Glacial Geology, air photo interpretation, Coastal Geomorphology, and advanced seminars.
Short courses: Landslides and slope stability, U.W. Extension; (co-taught); Properties of glacial deposits in Wisconsin, Department of Natural Resources, USDA Soil Conservation Service, private industry.

CONSULTING

Registered Professional Geologist in WI-#220. Consulting in the areas of determination of ordinary high water mark, reconstruction of original ordinary high water mark, shore erosion, slope stability, properties of glacial deposits and suitability for waste disposal or other land use, distribution of aggregate materials. Geologic mapping (have mapped or supervised mapping of glacial deposits in more than 10 counties in WI). Have provided consulting services for aggregate producers, environmental consulting firms, several counties, the State of Wisconsin, the U.S. Geological Survey, and the U.S. Department of Justice.

PROFESSIONAL AFFILIATION

American Quaternary Association, member (Management Council, 1984-1988)
Geological Society of America, fellow (Geomorphology Division Panel Member, 1984- 1986)
(Quaternary Geology and Geomorphology Division, Chairman, 1991-92)
International Glaciological Society, member
Sigma Xi, member

International Quaternary Association (INQUA), Commission on Genesis and Lithology of Quaternary Deposits (Full Member and Secretary, 1978-1984) Head of Work Group on Subglacial Processes and Sediments (1987-1985)

President, INQUA Commission on Glaciation (1995-1999)

Associate Editor, Geological Society of America Bulletin (1989-1992) (1992-1994)

Editorial Board of Boreas (2000- present)

Examining Board of Professional Geologists (Wisconsin) (1996-2000, 2000-2005)

WI Coastal Management Program Hazards Advisory Committee (2005-present)

Friends of the Lakeshore Preserve Board (Madison, WI) (2009-2015)

Ice Age Trail Alliance, Board of Directors (2010-2015)

IATA Conservation Committee member, Ice Age trail Alliance (2010-present)

IATA Education Committee member, Ice Age Trail Alliance (2010-present)

Fellow, Wisconsin Academy of Sciences, Arts and Letters (2018-present)

Wisconsin Geological Mapping Advisory Committee member (2016-present), Chair 2018-2019.

Driftless Trail Steering and Planning Team member, Driftless Area Land Conservancy (2017-present)

Wisconsin's Green Fire member (2017-present)

RECIPIENT OF: 2011 Distinguished Career Award, Geological Society of America, Quaternary Geology and Geomorphology Division

Mickelson, Maher, and Simpson, 2011, *Geology of the Ice Age National Scenic Trail* book was a finalist for the Midwest Independent Publishers Association 2011 Book Award in the Nature category. It also won the (National) Geoscience Information Society's Best Guidebook Award in 2012.

RECIPIENT OF: 2020 Educator of the Year Award, Lake Superior Lobe Chapter of the Ice Age Trail Alliance

RECIPIENT OF: 2021 Wisconsin Conservation Educator of the Year, Wisconsin Conservation Congress

PUBLICATIONS (Selected publications only)

Mickelson, D.M., Edil, T.B., and Guy, D.E., 2004, Erosion of coastal bluffs in the Great Lakes, in Hampton, M.A. and Griggs, G.B., (eds.) *Formation, Evolution, and Stability of Coastal Cliffs: Status and Trends*: U.S.G.S. Professional Paper 1693, p. 107-123.

Brown, E.A., Wu, Chin, Mickelson, D.M., and Edil, D.M., 2005, Factors controlling rates of bluff recession at two sites on Lake Michigan: *Journal of Great Lakes Research*, v. 31, p. 306-321.

Syverson, K.M. and Mickelson, D.M., 2008, Origin and significance of lateral meltwater channels formed along a temperate glacier margin, Glacier Bay, Alaska: *Boreas*, v.38, p. 132-145.

Ackert, R.P., Becker, R.A., Singer, B.S., Kurz, M.D., Caffee, M.W., and Mickelson, D.M., 2008, Patagonian Glacier response during the Late Glacial-Holocene transition; *Science*, v. 321, p. 392-395.

Refsnider K.A., Laabs, B.J.C, Plummer, M.A., Mickelson, D.M., Singer, B.S., and Caffee, M.W., 2008, Late glacial maximum climate inferences from cosmogenic dating and glacier modeling of the western Uinta ice field, Uinta Mountains, Utah: *Quaternary Research*, v. 69, p. 130-144.

Laabs, B.J., Refsnider, K.A., Munroe, J.S., Mickelson, D.M., Applegate, P.J., Singer, B.S., Marc W. Caffee, M.W., 2009, Latest Pleistocene glacial chronology of the Uinta Mountains: support for moisture-driven asynchrony of the last deglaciation: *Quaternary Science Reviews*, v. 28, p. 1171-1187.

Zhou Shangzhe, Wang Jie, Xu Liubing, Wang Xiaoli, Patrick M. Colgan, P.M., Mickelson, D.M. 2010, Glacial advances in southeastern Tibet during late Quaternary and their implications for climatic changes: *Quaternary International*, v. 218, p. 58-66.

Attig, J.W., Bricknell, M., Carson, E.C., Clayton, Lee, Johnson, M.D., Mickelson, D.M., and Syverson, K.M., 2011, *Glaciation of Wisconsin: Wisconsin Geological and Natural History Survey Educational Series 36 (4th edition)*, 4 p.

- Mickelson, D.M., Maher, L.J., and Simpson, S, L., 2011, *Geology of the Ice Age National Scenic Trail*: Madison, University of Wisconsin Press, 395 p.
- Laabs, B.J.C., Marchetti, D.W., Munroe, J.S., Refsnider, K.A., Gosse, J.C., Lips, E.W., Becker, R.A., Mickelson, D.M., and Singer, B.S., 2011, Chronology of latest Pleistocene mountain glaciation in the western Wasatch Mountains, Utah, U.S.A.: *Quaternary Research*, v. 76, p. 272-284.
- Carlson, A.E., Principato, S.M., Chapel, D.M., and Mickelson, D.M., 2011, Quaternary Geology of Sheboygan County, Wisconsin: Wisconsin Geological and Natural History Survey, Bulletin 106, 32 p. plus map and cross sections.
- Syverson, K.M., Clayton, L., Attig, J.W., and Mickelson, D.M.,(eds.), 2011, *Lexicon of Pleistocene Stratigraphic Units of Wisconsin*: Wisconsin Geological and Natural History Survey Technical Report 1.
- Mickelson, D.M., 2012, A Shipwreck in 1903: The Quarterly (Swedish Finn Historical Society), v. 20, no. 2, p. 39 and 53.
- Becker, R.A., Streveler, G.P., and Mickelson, D.M., 2012, A 1:100,000-Scale Map of Surficial Deposits in Glacier Bay National Park and Preserve, Southeast Alaska, National Park Service, Natural Resource Technical Report NPS/GLBA/NRTR—2012/638.
(<https://irma.nps.gov/App/Reference/Profile/2188778>)
- Mickelson, David M., 2014, Going to America: The Quarterly (Swedish Finn Historical Society), v. 21, no. 4, p. 100-101.
- Socha, B. J., Carignano, C., Rabassa, J. and Mickelson, D.M., 2014, Gondwana glacial paleolandscape: diamictite record of Carboniferous valley glaciation, and pre-glacial remnants of an ancient weathering front in northwestern Argentina: In Rabassa, J. and Ollier, C. (eds.), *Gondwana Landscapes in southern South America*: Springer Earth System Sciences 2014, p. 331-363.
- Mickelson, David M. and Stone, Jeff, 2014, Revisiting 1970s and 1990s bluff profiles along the Lake Michigan shoreline in southeastern Wisconsin using USACE Lidar data: *Geological Society of America Abstracts with Programs*. v. 46, no. 6, p. 650.
- Carson, E.C., Brown, S.R., Mickelson, D.M., and Schneider, A.F., 2014, Quaternary Geology of Door County, Wisconsin: Wisconsin Geological and Natural History Survey Bulletin 109, 44 p.
- Mickelson, D.M., Attig, John, Clark J. A., Hamilton, Erin, Mauel, Steve, and Schoephoester, Pete, 2015, Mapping the extent and chronology of the Late Wisconsin Ice Sheet in Wisconsin: Geological Society of America, *Abstracts with Programs*. v. 47, no. 5, p. 79.
- Jones, D.K. and Mickelson, D. M., 2016, *From Raccoon Plain to Pakachoag Hill—A History of South Worcester, Massachusetts, highlighting the growth and dispersal of an English Enclave*: Madison, Wisconsin, Glade Street Press, 312 pp.
- Mickelson, D.M. and Socha, Betty, 2017, Quaternary Geology of Calumet and Manitowoc Counties, Wisconsin: Wisconsin Geological and Natural History Survey Bulletin 108, 60 p.
- Mickelson, D. M., Hochschild, J., Wolters, C., Stone, J., 2017, Bluff profile changes over 40 years on Wisconsin's Lake Michigan shoreline: Geological Society of America, *Abstracts with Programs*, vol. 49, no. 6, p.
- Mickelson, D.M., 2018, An overview of landforms and postulated subglacial conditions of the Laurentide Ice Sheet in the western Great Lakes Area:
<https://gsa.confex.com/gsa/2018NC/webprogram/Paper312171.html>
- Mickelson, D.M., 2018, Has another period of bluff instability begun on Wisconsin's Lake Michigan shoreline? <https://gsa.confex.com/gsa/2018NC/webprogram/Paper312172.html>
- Mickelson, David M., Stone, Jeff, Hochschild, Jason, 2020, Continuing high lake levels are leading to severe erosion of Lake Superior's clay bluffs in Wisconsin: Geological Society of America Abstracts with Programs, ISSN 0016-7592 doi: 10.1130/abs/2020NC-348004
- Zoet, L.K., Rawling, J.E., Woodward, J.B., Barrette, Nolan, and Mickelson, D.M., 2021, Factors that contribute to the elongation of drumlins beneath the Green Bay Lobe, Laurentide Ice Sheet: *Earth Surface Processes and Landforms*, 1-11. Available from: <https://doi.org/10.1002/esp.5192>