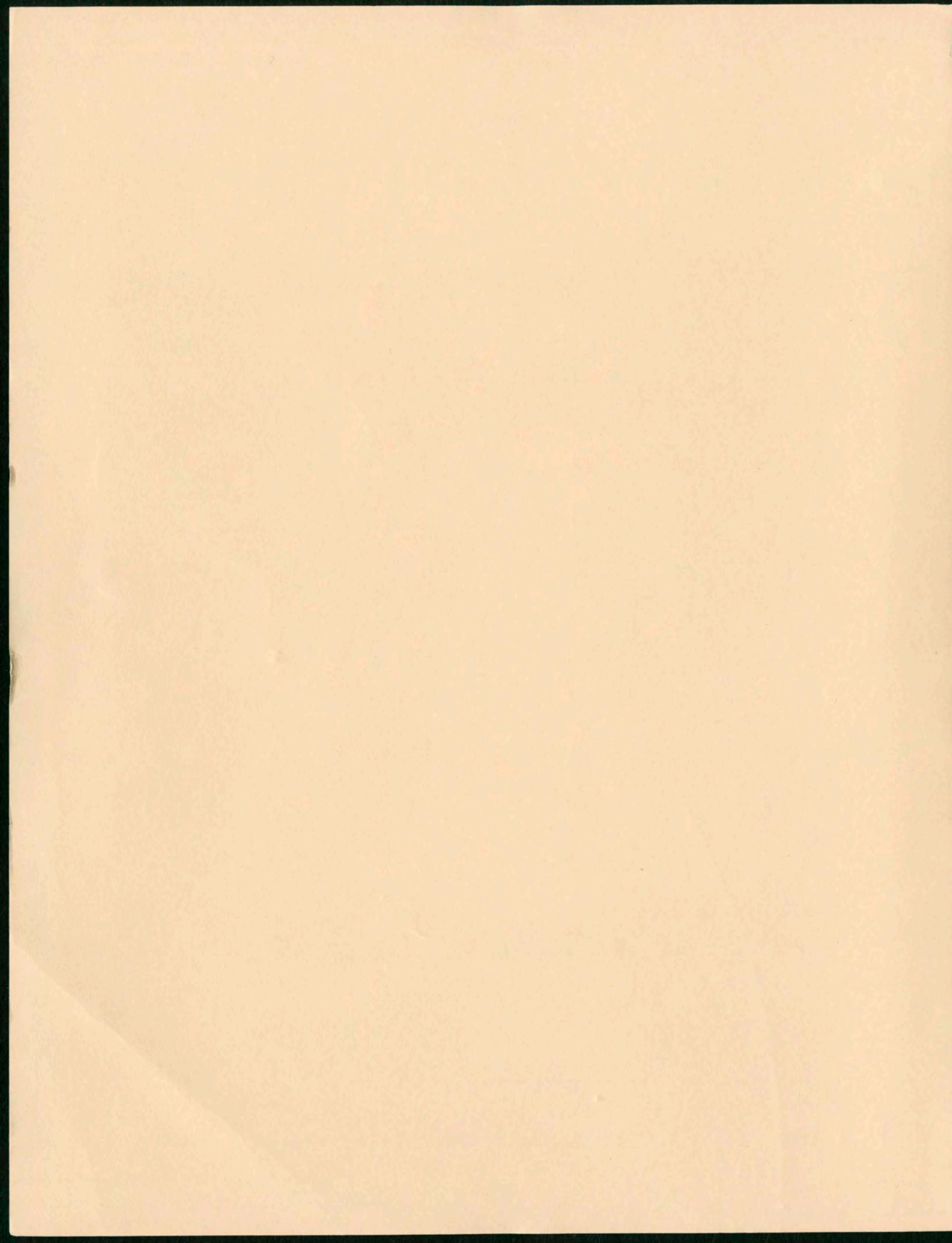


BULLETIN 89 1982

BIBLIOGRAPHY AND INDEX
OF WISCONSIN GEOLOGY
1698-1977

by Christine Reinhard

WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY
1815 UNIVERSITY AVE. MADISON WI 53705-4096



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1982

PUBLISHED BY AND AVAILABLE FROM
WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY
1815 UNIVERSITY AVE. MADISON, WI 53705-4096

This work
is dedicated to
Prof. Brian K. McKnight
University of Wisconsin-Oshkosh Geology Department
with whom it all began.

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Geological and Natural History Survey.

*Cover: The Trail thru the Pines. A file photo (No. 1640) from Survey
archives of a forest north of Chippewa Falls. Circa 1916.*

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FOREWORD

The Bibliography and Index of Wisconsin Geology 1698-1977 draws together, for the first time in an organized format, references to the published knowledge on the geology of Wisconsin. This knowledge is essential to government and the private sector for understanding Wisconsin's geologic foundation. It includes the origin, character, and distribution of Wisconsin's rock, mineral, soil, and water resources and the natural processes of weathering, erosion, sediment transportation, deposition, and mountain building which formed them and which affect our lives by their continued operation.

Geologic information is basic to solving many of today's resource and environmental problems and to the management decision-making process. For example, geologic information is critical to problem-solving and decision-making for mineral exploration, ground water supply, pollution control, waste disposal, material storage, construction siting, utility routing, and hazards. It is required by government, industry, and the public for resource and environmental management, mineral and water supply, and educational purposes.

The Bibliography is the culmination of 12 years of commitment to an idea conceived by Professor Brian McKnight (Department of Geology, University of Wisconsin-Oshkosh) and brought to completion by the author, Christine Reinhard. The project was begun on a shoe-string budget in 1970 when Reinhard worked as an undergraduate student hourly employee. In 1971 McKnight and Reinhard came to State Geologist George F. Hanson with a proposal to complete the Bibliography and requested funding support. The size of the task was awesome for one person to undertake, but the need for a bibliography required bold initiative. In spite of very limited budget, the Survey hired Reinhard and was able to fund her work through 1974. Although project salary funds were eliminated at the end of that year, and Reinhard accepted a position in the Office of the State Cartographer, the Survey continued to provide computer, cartographic, and review support services. It is a tribute to interagency cooperation and the dedication of Ms. Reinhard that the project was not allowed to die. The State Cartographer, Arthur Ziegler, recognized the potential value of the Bibliography and agreed to allow Reinhard supplemental time to work on the project. This generous contribution by the State Cartographer's Office, and the great number of hours contributed to the project by Ms. Reinhard over the seven-year period from 1975 through 1982, are gratefully acknowledged by the Survey.

*M.E. Ostrom
Director and State Geologist*

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INTRODUCTION

The Bibliography and Index of Wisconsin Geology 1698-1977 encompasses all fields of geologic research. The geographical scope goes beyond current state boundaries, partly because of the time period covered, but also because entries emphasizing adjacent states are included if parts of their texts are relevant to Wisconsin. The time period spans French missionaries exploring Wisconsin by canoe in the late 17th century to remote sensing by satellite in 1977.

No previous bibliography on Wisconsin geology existed; thus, compilation began with the standard reference works: the Bibliography of North American Geology (later the Bibliography and Index of Geology), Abstracts of North American Geology, Geological Abstracts, Geophysical Abstracts, and the Annotated Bibliography of Economic Geology. The unpublished soils bibliography of Mr. Robert Cheetham, U.S. Department of Agriculture-Soil Conservation Service, provided additional references. In many cases it was not possible to index directly from the original article. However, the lists of references in the articles which were personally reviewed provided a great number of obscure and previously overlooked citations. For example, "Topaz from Texas" by George F. Kunz (1894) discusses diamonds found in glacial deposits in Wisconsin.

Only those theses which are found in Dissertation Abstracts (International) are included. Manuscripts, open-file reports, and other generally unpublished documents were not considered. Nor were guidebooks which had a limited distribution within the scope of this bibliography. Only separately published maps are listed.

The bibliography lists citations alphabetically by author, then chronologically from oldest to most recent. Multiple-author entries follow the single-author entries of the primary (first) author. An entry authored by four or more persons is listed as "primary author (and others)." Letters following dates distinguish between citations having identical authors and dates. Cross references direct users familiar with the second or third author of a work to the entry under the first author's name.

The index uses a hierarchical system consisting of major subject or geographical headings with second- and third-level subheadings. The subject headings are based on those in the Bibliography of North American Geology, tailored to Wisconsin's unique geology. Users should refer to the map for the appropriate subdivision (p. xi) or river basic (p. xii).

Each citation usually has multiple subject headings to help the user gather all appropriate references. However, it still may be necessary to search more than one subject heading to be sure all possibilities are exhausted. Various forms of cross references guide the user to alternative subject headings. Generally, specific topics are grouped under broader categories. A user looking for information on petrified wood will find nothing listed there but is referred by a *see* reference to **GEOCHRONOLOGY**, TWO CREEKS FOREST BED and to **GLACIAL GEOLOGY**, TWO CREEKS FOREST BED. In this case the term petrified wood itself is not used in indexing. A *see* reference to a third-level indexing term works similarly: MASTODONS *see PALEONTOLOGY*, QUATERNARY, Mammalia. When the user finds a *see under* cross reference, s/he should look for that specific topic under the major subject heading: KAMES *see under GLACIAL GEOLOGY*. A *see also* reference indicates that additional information can be found elsewhere, for example, **BAR-RON COUNTY** *see also HYDROGEOLOGY*, CHIPPEWA, ST. CROIX RIVER BASIN; **NORTHWESTERN WISCONSIN**.

The structure of the Bibliography is the result of the Wisconsin Geological and Natural History Survey's decision to automate the project in 1978. Automation required the conversion of all citations and the indexing from a totally manual system into a computer-acceptable format. It continued through four consecutive programmers which created program documentation problems. Considerable effort went into verifying accuracy and checking consistency, but errors will undoubtedly be found. The Publications Editor of the Wisconsin Geological and Natural History Survey welcomes all corrections, additions, and comments.

ABBREVIATIONS

Format Abbreviations

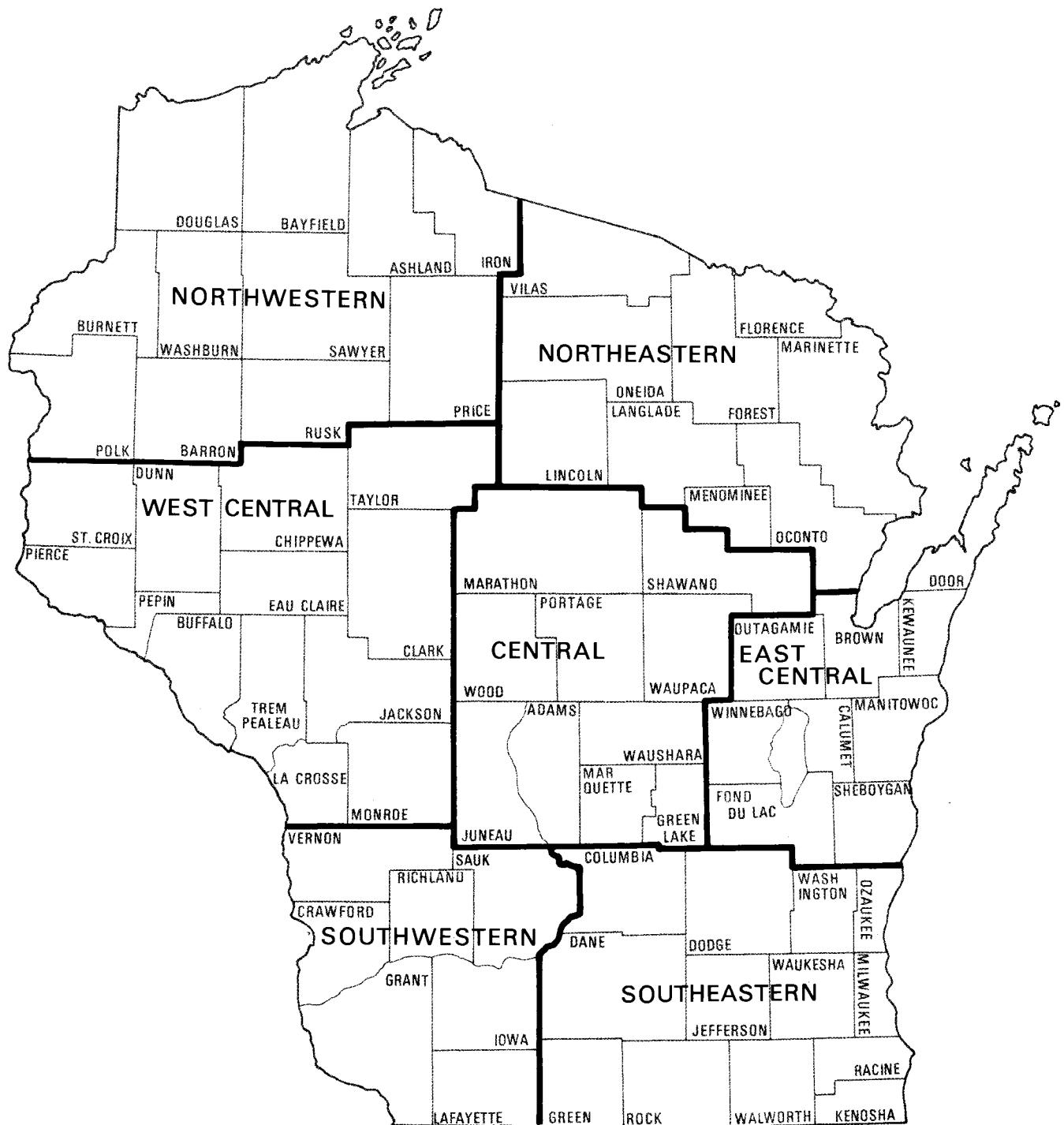
abs.	abstract	inv.	investigation	pt.	part
app.	approximately	misc.	miscellaneous	pub.	publication
anon.	anonymous	mon.	monograph	rpt.	report
art.	article	mtg.	meeting	sess.	session
bull.	bulletin	nat.	natural	sp.	special
circ.	circular	natl.	national	tech.	technical
conf.	conference	no.	number	trans.	transactions
doc.	document	n.s.	new series	univ.	university
ed.	editor	p.	page, pages	v.	volume
illus.	illustrations	proc.	proceedings	Wis.	Wisconsin
inf.	information	prof.	professional		

Serial Titles and Corporate Authors

Abs. North Am. Geol.	Am. Nat.
Abstracts of North American Geology	American Naturalist
Acad. Sci Paris	Am. Philosophical Soc.
Academie des Sciences, Paris	American Philosophical Society
Ag. Eng.	Am. Quaternary Assoc.
Agricultural Engineering	American Quaternary Association
Albany Inst.	Am. Sci.
Albany Institute	American Scientist
Am. Antiquity	Am. Soc. Agron.
American Antiquity	American Society of Agronomy
Am. Assoc. Adv. Sci.	Am. Soc. Civ. Eng.
American Association for the Advancement of Science	American Society of Civil Engineers
Am. Assoc. Pet. Geol.	Am. Water Works Assoc.
American Association of Petroleum Geologists	American Water Works Association
Am. Bur. Geography	Assoc. Am. Geographers
American Bureau of Geography	Association of American Geographers
Am. Ceramic Soc.	Assoc. Am. Geol.
American Ceramic Society	Association of American Geologists
Am. City	Assoc. Eng. Societies
American City	Association of Engineering Societies
Am. Fish. Soc.	Assoc. Pacific Coast Geog.
American Fisheries Society	Association of Pacific Coast Geographers
Am. Forests	Boston Soc. Nat. History
American Forests	Boston Society of Natural History
Am. Geog. Soc.	Botan. Gazette
American Geographical Society	Botanical Gazette
Am. Geog. Soc. of New York	British Assoc.
American Geographical Society of New York	British Association for the Advancement of Science
Am. Geologist	Buffalo Soc. Nat. Sci.
American Geologist	Buffalo Society of Natural Sciences
Am. Geophys. Union	Butler Univ. Bot. Studies
American Geophysical Union	Butler University Botanical Studies
Am. Inst. Mining Eng.	Can. Min. Metall. Bull.
American Institute of Mining Engineers	Canadian Mining and Metallurgical Bulletin
Am. Inst. Mining and Met. Eng.	Canada Geol. Survey
American Institute of Mining and Metallurgical Engineering	Geological Survey of Canada
Am. Inst. Mining, Metallurgical, Petroleum Eng., Inc.	Canadian Inst. Mining Metallurgy
American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.	Canadian Institute of Mining and Metallurgy
Am. Jour. Min. Eng.	Canadian Jour. Earth Sci.
American Journal of Mining, Engineering, Geology	Canadian Journal of the Earth Sciences
Mineralogy, Metallurgy	Canadian Nat.
Am. Jour. Sci.	Canadian Naturalist
American Journal of Science	Chicago Acad. Sci.
Am. Meteorol. Soc.	Chicago Academy of Sciences
American Meteorological Society	Cincinnati Soc. Nat. History
Am. Microscopical Soc.	Cincinnati Society of Natural History
American Microscopical Society	Civil Eng.
Am. Midland Naturalist	Civil Engineering
American Midland Naturalist	Colorado-Wyoming Acad. Sci. Jour.
Am. Mineralogist	Colorado-Wyoming Academy of Science Journal
American Mineralogist	Compass
Am. Mus. Nat. History	The Compass of Sigma Gamma Epsilon
American Museum of Natural History	Davenport Acad. Nat. Sci.
Acad. Sci. St. Louis	Davenport Academy of Natural Sciences
St. Louis Academy of Science	

Denison Univ. Bull. (Sci. Lab. Jour.)	Internat. Verein. Limnol.
Denison University Bulletin, Journal of the Scientific Laboratories	Internationale Vereinigung fur Theoretische und An- gewandte Limnologie
Dissert. Abs. (Internat.)	Iowa Acad. Sci.
Dissertation Abstracts (International)	Iowa Academy of Science
Earth Planet Sci. Letters	Iowa Geol. Survey
Earth and Planetary Science Letters	Iowa Geological Survey
Earth Sci. Digest	Iowa Univ. Studies Nat. History
Earth Science Digest	Iowa University Studies in Natural History
Ecol. Monographs	Iowa Univ. Studies Eng.
Ecological Monographs	Iowa University Studies in Engineering
Econ. Geology	Jour. Geochem. Explor.
Economic Geology	Journal of Geochemical Exploration
Elec. World	Jour. Geography
Electrical World	Journal of Geography
Eng. Mag.	Jour. Geol.
Engineering Magazine	Journal of Geology
Eng. Min. Jour.	Jour. Geophys. Research
Engineering and Mining Journal	Journal of Geophysical Research
Eng. News-Record	Jour. Glaciology
Engineering News-Record	Journal of Glaciology
Env. Sci. and Technology	Jour. Mammalogy
Environmental Science and Technology	Journal of Mammalogy
Fed. Inter-Agency Sediment Conf.	Jour. Paleontology
Federal Inter-Agency Sediment Conference	Journal of Paleontology
G.S.A.	Jour. Petrology
Geological Society of America	Journal of Petrology
Geographic Soc. Philadelphia	Jour. Sed. Petrology
Geographic Society of Philadelphia	Journal of Sedimentary Petrology
Geographical Abs.	Jour. Thermal Analysis
Geographical Abstracts	Journal of Thermal Analysis
Geol. Assoc. Canada	Jour. Urban Plan. Dev. Div.
Geological Association of Canada	Journal of Urban Planning and Development Division
Geol. Mag.	American Society of Civil Engineers
Geological Magazine	
Geol. Min.	Jour. Western Soc. Engineers
Geology of Minnesota	Journal of the Western Society of Engineers
Geol. Soc. China	Jour. Wildlife Management
Geological Society of China	Journal of Wildlife Management
Geol. Soc. Denmark	Kansas Geol. Soc.
Geological Society of Denmark	Kansas Geological Society
Geol. Soc. London, Quarterly Jour.	Kansas Geol. Survey
Quarterly Journal of the Geological Society of London	Kansas Geological Survey
Geol. Survey Pennsylvania	Lake Superior Min. Inst.
Geological Survey of Pennsylvania	Lake Superior Mining Institute
Geophysical Abs.	Lapidary Jour.
Geophysical Abstracts	Lapidary Journal
III. Acad. Sci.	Mich. Acad. Sci.
Illinois State Academy of Science	Michigan Academy of Science
III. Geol. Survey	Mich. Acad. Sci., Arts and Letters
Illinois Geological Survey	Michigan Academy of Sciences, Arts and Letters
III. State Acad. Sci.	Mich. Basin Geol. Soc.
Illinois State Academy of Science	Michigan Basin Geological Society
III. State Geol. Survey	Mich. Geol. and Biol. Survey
Illinois State Geological Survey	Michigan Geological and Biological Survey
III. Soc. Eng. and Surveyors	Mining Cong. Jour.
Illinois Society of Engineers and Surveyors	Mining Congress Journal
Ind. Acad. Sci.	Mining Eng.
Indiana Academy of Science	Mining Engineering
Internat. Assoc. Great Lakes Research	Mining Mag.
International Association for Great Lakes Research	Mining Magazine
Internat. Assoc. Quaternary Research	Minn. Acad. Nat. Sci.
International Association for Quaternary Research	Minnesota Academy of Natural Sciences
Internat. Assoc. Sci. Hydrol.	Minn. Geol. Survey
International Association of Scientific Hydrology	Minnesota Geological Survey
Internat. Assoc. Theoretical and Applied Limnology	Minn. Univ. Quart. Bull.
International Association of Theoretical and Applied Limnology	Minnesota University Quarterly Bulletin
Internat. Jour. Air and Water Pollution	Minnesota State Historical Soc.
International Journal of Air and Water Pollution	Minnesota State Historical Society
Internat. Ser. Mon. Earth Sci.	Missouri Weather Rev.
International Series of Monographs on Earth Science	Missouri Weather Review
Internat. Union Geod. & Geophys.	Mo. Acad. Sci.
International Union of Geodesy and Geophysics	Missouri Academy of Science
	Modern Power and Eng.
	Modern Power and Engineering

Nat. Acad. Sci.	Tri-State Geol. Field Conf.
National Academy of Sciences	Tri-State Geological Field Conference
Nat. History	U.S. Atomic Energy Comm.
Natural History	United States Atomic Energy Commission
Nat. Park Service	U.S. Bur. Fish
National Park Service	United States Bureau of Fisheries
Nat. Speleo. Soc.	U.S. Bur. Mines
National Speleological Society	United States Bureau of Mines
Nebr. Acad. Sci.	U.S. Cong.
Nebraska Academy of Science	United States Congress
New York Acad. Sci.	U.S.D.A.
New York Academy of Sciences	United States Department of Agriculture
New York Geol. Survey	Ag. Research Service
New York Geological Survey	Agriculture Research Service
New York St. Geol.	Bur. Soils
New York State Geologist	Bureau of Soils
Ohio Geol. Survey	U.S. Env. Protection Agency
Ohio Geological Survey	United States Environmental Protection Agency
Ohio Jour. Sci.	U.S.G.S.
Ohio Journal of Science	United States Geological Survey
Oil and Gas Jour.	U.S. Natl. Museum
Oil and Gas Journal	United States National Museum
Oklahoma Acad. Sci.	Univ. Mich., Great Lakes Res. Division
Oklahoma Academy of Science	University of Michigan, Great Lakes Research Division
Pan-Am. Geologist	Univ. Tenn. Space Inst.
Pan-American Geologist	University of Tennessee Space Institute
Phil. Mag.	Univ. Wis.
Philosophical Magazine	University of Wisconsin
Philadelphia Acad. Nat. Sci.	College Ag. Life Sci.
Philadelphia Academy of Natural Sciences	College of Agriculture and Life Sciences
Philos. Soc. Washington	Dept. Geology
Philosophical Society of Washington	Department of Geology
Pop. Sci. Monthly	Agr. Experimental Station
Popular Science Monthly	Agricultural Experiment Station
Prof. Geog.	Eng. Experiment Station
Professional Geographer	Engineering Experiment Station
Rochester Acad. Sci.	Univ. Wis. Press
Rochester Academy of Science	University of Wisconsin Press
Royal Soc. Canada	Wash. Acad. Sci.
Royal Society of Canada	Washington Academy of Sciences
SEWRPC	Washington Philos. Soc.
Southeastern Wisconsin Regional Planning Commission	Washington Philosophical Society
Scientific Am.	Water Works Eng.
Scientific American	Water Works Engineering
Seismol. Soc. Am.	Wis. Acad. Sci., Arts, and Letters
Seismological Society of America	Wisconsin Academy of Sciences, Arts, and Letters
Smithsonian Inst.	Wis. Comm. Fish. Rpt.
Smithsonian Institution	Wisconsin Commission on Fisheries Report
Soc. Eng. and Surveyors	Wis. Com. on Water Pollution
Society of Engineers and Surveyors	Wisconsin Committee on Water Pollution
Soc. Explor. Geophysicists	Wis. Cons. Dept.
Society of Exploration Geophysicists	Wisconsin Conservation Department
Soc. Geol. France	Wis. Dept. Agr., Div. Land Economic Inventory
Societe Geologique de France	Wisconsin Department of Agriculture, Division of Land Economic Inventory
Soil Cons. Soc. Am., Wis. Chap.	Wis. Dept. Natural Resources
Soil Conservation Society of America, Wisconsin Chapter	Wisconsin Department of Natural Resources
Soil Sci.	Wis. Geol. Survey
Soil Science	Wisconsin Geological Survey
Soil Sci. Soc. Am.	Wis. Geol. and Nat. History Survey
Soil Science Society of America	Wisconsin Geological and Natural History Survey
Tennessee Acad. Sci.	Wis. Mag. History
Tennessee Academy of Science	Wisconsin Magazine of History
Torrey Bot. Club	Wis. Nat. History Soc.
Torrey Botanical Club	Wisconsin Natural History Society
Wis. State Hist. Soc.	State Historical Society of Wisconsin
Wis. State Agr. Soc.	Wisconsin State Agricultural Society



Geographical Regions used in Index



Major River Drainage Basins of Wisconsin

LANDFORMS OF WISCONSIN

Geological and Natural History Survey

George F. Hanson, Director and State Geologist

UNIVERSITY EXTENSION, UNIVERSITY OF WISCONSIN

1971

0 30 60
SCALE OF MILES



Relief by David A. Woodward

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of
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- see also Heyl, Allen Van, Jr.
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Andrews, George William. 1955. Carozzi, Albert V.; Davis, Richard A., Jr. 1964. Davis, Richard A., Jr. 1966a. Davis, Richard A., Jr. 1966b. Davis, Richard A., Jr. 1968. Davis, Richard A., Jr. 1969. Davis, Richard A., Jr. 1970. Davis, Richard A., Jr. 1975. Drindak, Joseph T. 1935. Flint, Arthur Emerson. 1956. Heller, R.L. 1956. Heyl, Allen Van, Jr.; Lyons, Erwin J.; Agnew, Allen Francis. 1951 (1952). Keyes, Charles Rollin. 1934b. Kraft, John C. 1956. Needham, Claude E. 1931. Palmquist, Robert Clarence. 1969a. Powers, Elliot Holcomb. 1935a. Powers, Elliot Holcomb. 1935b. Powers, Elliot Holcomb. 1935c. Prokopovich, Nikola. 1953. Raasch, Gilbert Oscar. 1952a. Sardeson, Frederick William. 1934. Trewartha, Glenn T. 1932.

PRE-CINCINNATIAN CYCLIC SEDIMENTS

Ostrom, Meredith E. 1964.

ST. PETER FORMATION see also CHAMPLAINIAN SERIES

Amaral, Eugene J. 1974. Amaral, Eugene J.; Pryor, Wayne Arthur. 1971. Amaral, Eugene J.; Pryor, Wayne Arthur. 1977. Berkey, Charles Peter. 1906. Bevan, Arthur P. 1926. Dake, Charles L. 1921. Dapples, Edward C. 1955. Dott, Robert H., Jr.; Roshardt, Mary A. 1972. Elder, Stanly G. 1936. Flint, Arthur Emerson. 1956. Guldenzopf, E. Charles. 1967. Hart, Richard Royce. 1964. Hershey, Oscar H. 1894. Howell, Jesse V.; Thwaites, Frederik Turville; Jones, Daniel Johnathan. 1935. Irving, Roland Duer. 1883. James, Joseph Francis. 1894. Lamar, J.E. 1935. Odom, I. Edgar; Woodard, H.H. 1974. Palmquist, Robert Clarence. 1969a. Pryor, Wayne Arthur; Amaral, Eugene J. 1971. Pryor, Wayne Arthur; Amaral, Eugene J. 1973. Sardeson, Frederick William. 1896c. Sardeson, Frederick William. 1926b. Sardeson, Frederick William. 1926c. Sardeson, Frederick William. 1933. Templeton, Justus Stevens, Jr. 1948. Thiel, George Alfred. 1935. Thwaites, Frederik Turville. 1962. Trowbridge, Arthur Carleton. 1917b. Tyler, Stanley Allen. 1936. Votaw, Robert Barnett. 1972. Wadsworth, Marshman E. 1883c. Wadsworth, Marshman E. 1884. Woodard, H.H. 1972. Young, A.A. 1882b.

SHAKOPEE FORMATION see also PRAIRIE DU CHIEN GROUP

Andrews, George William. 1955. Davis, Richard A., Jr. 1966b. Flint, Arthur Emerson. 1956. Heller, R.L. 1956. Keyes, Charles Rollin. 1934b. Needham, Claude E. 1931. Sardeson, Frederick William. 1926c. Sardeson, Frederick William. 1934.

SILURIAN BOUNDARY

Ulrich, Edward Oscar. 1914b.

SINNIPEE GROUP see also individual formations

Agnew, Allen Francis. 1950. Agnew, Allen Francis. 1956. Agnew, Allen Francis; Heyl, Allen Van, Jr. 1946. Asquith, George Benjamin. 1967. Badizamani, Khosrow. 1972. Ball, John Rice. 1935. Bays, Carl A. 1938. Bays, Carl A.; Raasch, Gilbert Oscar. 1935. Bevan, Arthur P. 1926. Cramer, Frank. 1891. DeMott, Lawrence L. 1964. Elder, Stanly G. 1936. Guldenzopf, E. Charles. 1967. Heyl, Allen Van, Jr.; Hosterman, John W.; Brock, M.R. 1964. Kay, George Marshall. 1928. Kay, George Marshall. 1929b. Kay, George Marshall. 1930. Kay, George Marshall. 1931. Kay, George Marshall. 1935b. Keyes, Charles Rollin. 1937. Rassam, Ghassan Noel. 1968. Sardeson, Frederick William. 1896b. Sardeson, Frederick William. 1897a. Sardeson, Frederick William. 1927. Stauffer, Clinton Raymond. 1925b.

TRENTON FORMATION

Blake, William Phipps. 1894d. DuBois, Ernest Paul. 1945. Hall, James. 1843b. Hall, James. 1859. Sardeson, Frederick William. 1901a. Walcott, Charles Doolittle. 1883b.

UPPER ORDOVICIAN

Cohee, George Vincent. 1948b.

VOLCANIC MATERIALS, ALTERED

Allen, Victor T. 1932.

OUTAGAMIE COUNTY see also EAST CENTRAL WISCONSIN; HYDROGEOLOGY, FOX-WOLF, MENOMINEE-OCONTO-PESHTIGO RIVER BASINS

GENERAL

Cramer, Frank. 1891. LeRoux, Edmund F. 1957.

GROUNDWATER

LeRoux, Edmund F. 1957. Stewart, Mark T. 1977. SOILS

Edil, Tuncer B. 1974. Edil, Tuncer B. 1975. Whitson, Andrew Robeson (and others). 1921a.

SURFACE-WATER RESOURCES

Nelson, Linden M.; Fassbender, Ronald L. 1972.

OUTWASH see under GLACIAL GEOLOGY

OZAUKEE COUNTY see also HYDROGEOLOGY, LAKE MICHIGAN BASIN; SOUTHEASTERN WISCONSIN

SOILS

Parker, Dale Edward; Kurer, Donald C.; Steingraeber, Joseph A. 1970. Whitson, Andrew Robeson (and others). 1926b.

SURFACE-WATER RESOURCES

Poff, Ronald J.; Gernay, Ronald; Threinen, C.W. 1964.

PALEOBOTANY see PALEONTOLOGY

PALEOCLIMATOLOGY

CAMBRIAN ENVIRONMENT

Byers, C.W. 1977. Byers, C.W.; Huber, M.E. 1976. Dott, Robert H., Jr. 1974. Kumar, Naresh; Sanders, J.E. 1976. Novak, Irwin D.; Smosna, Richard; Dott, Robert H., Jr. 1974. Seeland, David A. 1969.

DEPOSITIONAL ENVIRONMENTS

Doe, T.W. 1976. Pryor, Wayne Arthur; Amaral, Eugene J. 1973.

DURICRUSTS

Dury, George H. 1971.

FLOODS, HOLOCENE

Knox, James Clarence. 1975.

FRANCONIA FORMATION DEPOSITION

Dapples, Edward C. 1970.

ICE-WEDGE CASTS

Black, Robert Foster. 1957. Black, Robert Foster. 1965. Black, Robert Foster. 1976a.

PALEO-WIND DIRECTION

Raasch, Gilbert Oscar. 1958.

PERIGLACIAL FEATURES

Black, Robert Foster. 1969a. Black, Robert Foster. 1969d. Smith, Harold Theodore Uhr. 1949b.

PLEISTOCENE CONDITIONS

Black, Robert Foster. 1970b. Bryson, Reid A.; Wendland, Wayne M. 1966. Deevey, Edward Smith, Jr. 1949. Frye, John Chapman; Willman, Harold B. 1973.

POLLEN ANALYSIS

Davis, Anthony M. 1974. Maher, Louis J., Jr. 1975. Webb, Thompson, III. 1970b.

POSTGLACIAL CONDITIONS

Alden, William Clinton. 1910. Black, Robert Foster. 1970b. Bryson, Reid A.; Wendland, Wayne M. 1966. Cain, Stanley Adair. 1943. Potzger, John Ernest. 1946. Truman, Harry V. 1937. Webb, Thompson, III. 1970a. Webb, Thompson, III; Bryson, Reid A. 1972. West, Richard Gilbert. 1961. Wilson, Leonard Richardson; Webster, Ruth M. 1942a.

VEGETATION

Cain, Stanley Adair. 1943. Fuller, George D. 1935. Wilson, Leonard Richard. 1937. Wilson, Leonard Richard. 1938b. Wilson, Leonard Richard. 1938c. Zimmerman, James H. 1970.

VENTIFACTS

Tank, Ronald W. 1970.

PALEONTOLOGY see also PALEOCLIMATOLOGY, VEGETATION

CROSS-REFERENCES

algae see Plantae

arthropoda see Chelicerata, Crustacea

beavers see Mammalia

bison see Mammalia

clams see Bivalvia

corals see Coelenterata

crinoidea see Echinodermata

cryptozoa see Plantae

diatoms see Plantae

fish see Pisces

foraminifera see Protozoa

man see Mammalia

mastodons see Mammalia

merostomata see Chelicerata

mollusca see Bivalvia, Cephalopoda, Gastropoda

oldhamia see Plantae

ostracoda see Crustacea

pelecypoda see Bivalvia

pteropoda see Gastropoda

radiolaria see Protozoa

snails see Gastropoda

snakes see Reptilia

sponges see Porifera

starfish see Echinodermata

GENERAL

Bell, William Charles. 1950. Hall, James. 1862c. Marcou, Jules. 1853. McChesney, J.H. 1867. Shumard, Benjamin Franklin; Owen, David Dale. 1851. Van Hise, Charles Richard; Bayley, W.S. 1900.

Brachiopoda

Bell, William Charles. 1950.

Cephalopoda

Foerste, August Frederick. 1930.

Plantae

Ward, Lester F. 1889.

CAMBRIAN

General

Berg, Robert Raymond; Nelson, Clemens Arvid; Bell, William Charles. 1956. Daniels, Edward. 1858. Desor, Eduard. 1851e. Hall, James. 1863. Lochman-Balk, Christina; Wilson, James Lee. 1958. Moore, Raymond C. 1955. Owen, David Dale. 1848b. Raasch, Gilbert Oscar. 1935b. Raasch, Gilbert Oscar. 1936. Raasch, Gilbert Oscar; Unfer, Louis, Jr. 1964 (1966). Sardeson, Frederick William. 1932. Shumard, Benjamin Franklin. 1863. Swain, F.M.; Austin, G. 1969. Walcott, Charles Doolittle. 1890. Whitfield, Robert Parr. 1882. Wilson, James Lee; Fredrickson, Edward Arthur, Jr. 1950.

Annelida

Howell, Benjamin Franklin. 1958. Winchell, Alexander. 1864.

Brachiopoda

Owen, David Dale. 1851b. Porter, J.W. 1876. Stauffer, Clinton Raymond. 1940. Walcott, Charles Doolittle. 1912. Winchell, Alexander. 1864. Winchell, Newton Horace. 1885b.

Chelicera

Graham, William A.P. 1931. Hall, James. 1862b. Raasch, Gilbert Oscar. 1934. Raasch, Gilbert Oscar. 1939.

Conodonts

Miller, James Frederick. 1970.

Fucoids

Porter, J.W. 1876.

Gastropoda

Porter, J.W. 1876. Stauffer, Clinton Raymond. 1940. Winchell, Alexander. 1864.

Graptolithina

Ruedemann, Rudolf. 1933.

Plantae

Porter, J.W. 1876. Twenhofel, William Henry. 1945. Ward, Lester F. 1889.

Protozoa

Ruedemann, Rudolf; Shrock, Robert R. 1939.

Pseudofossils

Bayer, Thomas N.; Knoll, Kenneth M. 1971.

Tracefossils

Byers, C.W. 1977. Todd, James Edward. 1882.

Trilobita

Bell, William Charles; Fenik, Oliver W.; Kurtz, Vincent E. 1952. Berg, Robert Raymond. 1953a. Berg, Robert Raymond. 1953b. Bradley, Frank Howe. 1861. Fredrickson, Edward Arthur, Jr. 1941. Lochman, Christina; Duncan, Donald C. 1944. Miller, James Frederick. 1970. Montague, James O. 1954. Nelson, Clemens Arvid. 1951. Nelson, Clemens Arvid. 1953. Owen, David Dale. 1851b. Palmer, Allison Ralph. 1951. Porter, J.W. 1876. Raasch, Gilbert Oscar. 1952b. Resser, Charles Elmer. 1935. Resser, Charles Elmer. 1937. Stauffer, Clinton Raymond. 1940. Twenhofel, William Henry. 1945. Ulrich, Edward Oscar. 1914a. Ulrich, Edward Oscar; Resser, Charles Elmer. 1930. Ulrich, Edward Oscar; Resser, Charles Elmer. 1933. Walcott, Charles Doolittle. 1916. Walcott, Charles Doolittle. 1924. Walcott, Charles Doolittle. 1925. Wilson, James Lee; Fredrickson, Edward Arthur, Jr. 1950. Winchell, Alexander. 1864. Winchell, Newton Horace. 1885b.

DEVONIAN

General

Alden, William Clinton. 1906. Cleland, Herdman Fitzgerald. 1909. Cleland, Herdman Fitzgerald. 1911. Monroe, Charles E.; Teller, Edgar E. 1899. Pohl, Erwin R. 1929b. Pohl, Erwin R. 1931. Sardeson, Frederick William. 1901b. Whitfield, Robert Parr. 1882.

Bivalvia

Cloud, Preston Ercelle, Jr. 1941. Pohl, Erwin R. 1929a. Pohl, Erwin R. 1929c.

Brachiopoda

Cloud, Preston Ercelle, Jr. 1942. Griesemer, Allan David. 1965. North, Frederick J. 1913.

Bryozoa

Bassler, Roy Smith. 1911.

Cephalopoda

Cleland, Herdman Fitzgerald. 1907.

Chelicera

Whitfield, Robert Parr. 1896.

Paleontology (con't.)

- Coelenterata
Stumm, Erwin. 1967.
- Conodonts
Schumacher, D. 1971.
- Echinodermata
Weller, Stuart. 1898.
- Graptolithina
Decker, Charles Elijah. 1930.
- Pisces
Eastman, Charles Rochester. 1898. Lapham, Increase Allen. 1860a.
- Plantae
Johnson, H.A.; Thomas, B.W. 1884. Penhallow, David Pearce. 1908.
- HOLOCENE
Crustacea
Burrell, J.A. 1977.
- Fossil pollen
Webb, Thompson, III. 1974.
- ORDOVICIAN
General
Bain, Harry Foster. 1906. Chamberlin, Thomas Chrowder (and others). 1877-1883. Chamberlin, Thomas Chrowder. 1877a. Chamberlin, Thomas Chrowder. 1877b. Davis, Richard A., Jr. 1975. Gavlin, S.; Byers, C.W. 1976. Hall, Christopher Webber; Sardeson, Frederick William. 1895. Hall, James. 1851a. James, Joseph Francis. 1894. Kay, George Marshall. 1930. Kolata, Dennis R.; Blake, D.B. 1977. Ockerman, John W. 1926. Powell, Louis Harvey. 1935. Raasch, Gilbert Oscar. 1935b. Sardeson, Frederick William. 1896a. Whitfield, Robert Parr. 1882.
- Annelida
James, Joseph Francis. 1894.
- Bivalvia
James, Joseph Francis. 1894. Sardeson, Frederick William. 1902. Ulrich, Edward Oscar. 1892.
- Brachiopoda
Bretsky, Peter W. 1970. Cooper, Gustav Arthur. 1956. Fenton, Carroll Lane; Fenton, Mildred A. 1924. Hall, Christopher Webber; Sardeson, Frederick William. 1895. James, Joseph Francis. 1894. Kay, George Marshall. 1929a. Kay, George Marshall. 1930. Ockerman, John W. 1926. Raymond, Percy Edward. 1921. Sardeson, Frederick William. 1896a. Whitfield, Robert Parr. 1880b. Winchell, Newton Horace. 1895a.
- Bryozoa
Bork, Kennard B.; Perry, T.G. 1967. Bork, Kennard B.; Perry, T.G. 1968a. Bork, Kennard B.; Perry, T.G. 1968b. Bretsky, Peter W. 1970. Ockerman, John W. 1926. Perry, T.G. 1962.
- Cephalopoda
Foerster, August Frederick. 1928. Foerste, August Frederick. 1932. Hall, Christopher Webber; Sardeson, Frederick William. 1895. James, Joseph Francis. 1886. James, Joseph Francis. 1894. McKelvey, Vincent Ellis. 1939. Sardeson, Frederick William. 1896a.
- Coelenterata
Ockerman, John W. 1926. Sardeson, Frederick William. 1897c. Walcott, Charles Doolittle. 1879b.
- Conodonts
Furnish, William Madison. 1938. Guldenzopf, E. Charles. 1967. Hart, Richard Royce. 1964. Miller, James Frederick. 1970. Miller, James Frederick. 1971. Stauffer, Clinton Raymond. 1935. Votaw, Robert Barnett. 1972.
- Crustacea
Bretsky, Peter W. 1970. Kay, George Marshall. 1934. Kay, George Marshall. 1938. Kay, George Marshall. 1940.
- Echinodermata
Bagg, Rufus Mather. 1927. Bassler, Roy Smith; Mooday, Margaret W. 1943. Jones, Jeanette A. 1935. Kolata, Dennis R. 1975. Ockerman, John W. 1926. Raymond, Percy Edward. 1921. Westphal, Klaus W. 1974.
- Gastropoda
Ball, John Rice. 1936. Bretsky, Peter W. 1970. Hall, Christopher Webber; Sardeson, Frederick William. 1895. James, Joseph Francis. 1894. Ockerman, John W. 1926. Raymond, Percy Edward. 1921. Sardeson, Frederick William. 1896a.
- Graptolithina
Decker, Charles Elijah. 1952. Ockerman, John W. 1926. Twenhofel, William Henry. 1945. Walker, Margaret. 1953. Whitfield, Robert Parr. 1894.
- Plantae
Carozzi, Albert V.; Davis, Richard A., Jr. 1964. Whitfield, Robert Parr. 1894.
- Porifera
Howell, Benjamin Franklin; Landes, Robert W. 1936. Ockerman, John W. 1926.
- Trilobita
Blake, William Phipps. 1894d. Bretsky, Peter W.
1970. DeMott, Lawrence L. 1964. Fredrickson, Edward Arthur. 1941. Hall, Christopher Webber; Sardeson, Frederick William. 1895. Miller, James Frederick. 1970. Raymond, Percy Edward. 1921. Sardeson, Frederick William. 1896a. Tripp, R.P. 1974. Walcott, Charles Doolittle. 1879a. Walcott, Charles Doolittle. 1879b. Walcott, Charles Doolittle. 1924. Walcott, Charles Doolittle. 1925.
- PALEOZOIC
General
Bierbauer, Bruno A. 1891. Chamberlin, Thomas Chrowder. 1880a. Daniels, Edward. 1858a. Hall, James. 1861. Hall, James. 1862c. Teller, Edgar E. 1911. Whitfield, Robert Parr. 1878. Whitfield, Robert Parr. 1880a. Whitfield, Robert Parr. 1882. Whitfield, Robert Parr. 1883. Whitfield, Robert Parr. 1895.
- Bivalvia
Hall, James. 1861. McChesney, J.H. 1859. Whitfield, Robert Parr. 1882.
- Brachiopoda
Daniels, Edward. 1858a. Douglas, Dale. 1969a. Hall, James. 1861. Hall, James; Clarke, John M. 1897. McChesney, J.H. 1859. Whitfield, Robert Parr. 1878. Whitfield, Robert Parr. 1882.
- Bryozoa
Sardeson, Frederick William. 1937. Ulrich, Edward Oscar. 1911a. Whitfield, Robert Parr. 1882.
- Cephalopoda
Hall, James. 1861. Whitfield, Robert Parr. 1878. Whitfield, Robert Parr. 1882.
- Coelenterata
Douglas, Dale. 1969b. Hall, James. 1861. Whitfield, Robert Parr. 1878.
- Conodonts
Clark, David L. 1971. Clark, David L. 1972.
- Crustacea
Bassler, Roy Smith; Kellett, Betty. 1934.
- Echinodermata
Douglas, Dale. 1969c. Hall, James. 1861. McChesney, J.H. 1859. Whitfield, Robert Parr. 1882.
- Fucoids
Whitfield, Robert Parr. 1882.
- Gastropoda
Hall, James. 1861. McChesney, J.H. 1859. Whitfield, Robert Parr. 1878. Whitfield, Robert Parr. 1882.
- Graptolithina
Decker, Charles Elijah; Fredrickson, Edward Arthur, Jr. 1939. Hall, James. 1861.
- Pisces
Newberry, John Strong. 1889. Teller, Edgar E. 1906.
- Plantae
Whitfield, Robert Parr. 1882.
- Porifera
Hall, James. 1861. Whitfield, Robert Parr. 1882.
- Protozoa
Whitfield, Robert Parr. 1882.
- Trilobita
Daniels, Edward. 1858a. Hall, James. 1861. Whitfield, Robert Parr. 1878. Whitfield, Robert Parr. 1882.
- PRECAMBRIAN
General
Cayeux, L. 1911. Swain, F.M.; Austin, G. 1969.
- Plantae
Twenhofel, William Henry. 1919.
- QUATERNARY
General
Kay, George Marshall; Apfel, Earl T. 1930. Sandberg, Walt. 1972. West, R.M.; Dallman, John E. 1978.
- Amphibia
Rasmussen, Donald L. 1971.
- Bivalvia
Baker, Frank Collins. 1900. Wagner, George. 1905.
- Crustacea
Frey, David Grover. 1960.
- Gastropoda
Baker, Frank Collins. 1900.
- Insecta
Morgan, Anne; Morgan, Alan. 1973.
- Mammilia (except human)
Cooper, Chalmers L. 1937. Dallman, John E. 1968. Dallman, John E. 1969. Hay, Oliver Perry. 1925. Kuhn, Herbert W. 1954a. Palmer, Harris A. 1954. Parmalee, Paul W. 1959. Rasmussen, Donald L. 1971. Wyman, Jeffries. 1862.
- Mammalia, human
Black, Robert Foster; Wittry, Warren L. 1959. Cooper, Chalmers L. 1937. Peske, G. Richard; Tappen, N.C. 1970. Wittry, Warren L. 1964.
- Mollusca, general
Baker, Frank Collins. 1913. Baker, Frank Collins. 1935. Keyes, Charles Rollin. 1889. Roy, Edward Carl, Jr. 1963. Roy, Edward Carl, Jr. 1964. Roy, Edward Carl, Jr. 1965.
- Pisces
Chamberlin, Thomas Chrowder. 1877c.
- Plantae
Twenhofel, William Henry. 1938. Winchell, Newton Horace. 1895b. Winchell, Newton Horace; Schuchert, Charles. 1895b.
- Porifera
Twenhofel, William Henry. 1945. Winchell, Newton Horace. 1895b. Winchell, Newton Horace; Schuchert, Charles. 1895b.
- Protozoa
Hall, James. 1867. Hall, James. 1871.
- Pisces
Hussakof, Louis. 1916.
- Plantae
Andrews, George William. 1966. Andrews, George William. 1968. Cain, Stanley Adair. 1943. Cheney, Leilen S. 1930. Cheney, Leilen S. 1931. Conger, Paul S. 1939. Culberson, William Louis. 1955. Cushing, Edward J. 1965. Davis, Ronald B.; Brewster, Lynn A.; Sutherland, Joyce. 1969. Deevey, Edward Smith, Jr. 1949. Edwards, Arthur Mead. 1881a. Edwards, Arthur Mead. 1881b. Fuller, George D. 1935. Hansen, Henry P. 1937. Hansen, Henry P. 1939. Hartley, Thomas G. 1966. Maher, Louis J., Jr. 1970. Miller, Norton G.; Benninghoff, William S. 1969. Morey, Philip R.; Morey, Elsie Darrah. 1969. Potzger, John Ernest. 1942. Potzger, John Ernest. 1943. Potzger, John Ernest; Keeler, Carl O. 1943. Potzger, John Ernest; Richards, Ruth Rebekah. 1942. Schweger, Charles Earl. 1969. Truman, Harry V. 1937. Voss, John. 1934. Webb, Thompson, III. 1970b. Webb, Thompson, III; Bryson, Reid A. 1972. West, Richard Gilbert. 1961. Wilson, Leonard Richard. 1932. Wilson, Leonard Richard. 1938a. Wilson, Leonard Richard. 1938c. Wilson, Leonard Richard; Cross, Aurel T. 1943. Wilson, Leonard Richard; Galloway, Eleanor F. 1937. Wilson, Leonard Richard; Webster, Ruth M. 1942a. Wilson, Leonard Richard; Webster, Ruth M. 1942b. Zumberge, James Herbert; Potzger, John Ernest. 1956.
- Porifera
Wilson, Leonard Richard; Galloway, Eleanor F. 1937.
- Reptilia
Rasmussen, Donald L. 1971.
- SILURIAN
General
Alden, William Clinton. 1906. Arey, Albert L. 1895. Bain, Harry Foster. 1906. Barrande, Joachim. 1853. Chamberlin, Thomas Chrowder (and others). 1877-1883. Chamberlin, Thomas Chrowder. 1877a. Conrad, Timothy Abbott. 1843. Daniels, Edward. 1858c. Day, Fisk Holbrook. 1878. Hall, James. 1860. Hall, James. 1867. Hall, James. 1871. Miller, Samuel Almond. 1881. Nicholson, Henry Alleyne. 1875. Savage, Thomas Edmund. 1916. Shrock, Robert R. 1939b. Whitfield, Robert Parr. 1882. Winchell, Newton Horace; Ulrich, Edward Oscar. 1897. Ziegler, A.M.; Zawacki, R.L. 1969.
- Bivalvia
Day, Fisk Holbrook. 1878. Hall, James. 1867. Hall, James. 1871. Ulrich, Edward Oscar. 1897a.
- Brachiopoda
Cloud, Preston Ercelle, Jr. 1942. Day, Fisk Holbrook. 1878. Hall, James. 1867. Hall, James. 1871. Ulrich, Edward Oscar; Cooper, Gustav Arthur. 1936. Winchell, Newton Horace; Schuchert, Charles. 1895a.
- Bryozoa
Hall, James. 1867. Hall, James. 1871. Ulrich, Edward Oscar. 1895.
- Cephalopoda
Clarke, John M. 1897a. Day, Fisk Holbrook. 1878. Hall, James. 1867. Hall, James. 1871.
- Coelenterata
Buell, Ira M. 1882. Cummings, Edgar R.; Shrock, Robert R. 1928. Day, Fisk Holbrook. 1878. Hall, James. 1867. Hall, James. 1871. Winchell, Newton Horace. 1895b. Winchell, Newton Horace; Schuchert, Charles. 1895b.
- Crustacea
Gutschick, Raymond Charles. 1941. Hall, James. 1867. Ulrich, Edward Oscar. 1897a. Ulrich, Edward Oscar. 1897b.
- Echinodermata
Bassler, Roy Smith; Moodey, Margaret W. 1943. Day, Fisk Holbrook. 1878. Foerster, August Frederick. 1920. Hall, James. 1867. Hall, James. 1871. Paul, C.R.C. 1967. Weller, Stuart. 1897. Weller, Stuart. 1900. Weller, Stuart. 1902.
- Gastropoda
Day, Fisk Holbrook. 1878. Hall, James. 1867. Hall, James. 1871. Peel, J.S. 1975. Teller, Edgar E. 1910. Ulrich, Edward Oscar; Scofield, W.H. 1897.
- Graptolithina
Prout, Hiram A. 1851. Winchell, Newton Horace. 1895b. Winchell, Newton Horace; Schuchert, Charles. 1895b.
- Pisces
Chamberlin, Thomas Chrowder. 1877c.
- Plantae
Twenhofel, William Henry. 1938. Winchell, Newton Horace. 1895b. Winchell, Newton Horace; Schuchert, Charles. 1895b.
- Porifera
Twenhofel, William Henry. 1945. Winchell, Newton Horace. 1895b. Winchell, Newton Horace; Schuchert, Charles. 1895b.
- Protozoa
Hall, James. 1867. Hall, James. 1871.

- Trace fossils
Desor, Edouard. 1854.
- Trilobita
Clarke, John M. 1897b. Conrad, Timothy Abbott. 1843. Day, Fisk Holbrook. 1878. Emilioty, Joseph G. 1963. Hall, James. 1867. Hall, James. 1871. Mason, Carol Y. 1934. Montague, James O. 1954. Raymond, Percy Edward. 1916. Weller, Stuart. 1907.
- PALEOZOIC see under STRATIGRAPHY; see also individual systems
- PALYNOLGY see PALEONTOLOGY; PALEOCLIMATOLOGY, POLLEN ANALYSIS
- PARKS
- APOSTLE ISLANDS NATIONAL LAKESHORE
United States Congress, House. 1969.
- DEVIL'S LAKE
Black, Robert Foster. 1964c. Black, Robert Foster. 1968a.
- GREEN BAY AND GRAVEL ISLAND NATIONAL WILDLIFE REFUGE
Dutton, Carl E. 1968.
- KETTLE MORaine STATE FOREST, NORTHERN
Black, Robert Foster. 1969c.
- ICE AGE NATIONAL SCIENTIFIC RESERVE
Black, Robert Foster. 1974a. National Park Service; Wisconsin Department, Natural Resources. 1968.
- INTERSTATE
Cooper, Chalmier L. 1937. Kuhm, Herbert W. 1954b.
- PUBLIC OPEN SPACE
Wisconsin Department Administration, State Planning Office. 1974d.
- PEAT see under ECONOMIC GEOLOGY; SOILS
- PECATONICA-SUGAR RIVER BASIN see under HYDROGEOLOGY
- PENOKEE-GOEBIC IRON RANGE see NORTHWESTERN WISCONSIN, PENOKEE RANGE; PRECAMBRIAN SYSTEM, GOEBIC IRON RANGE
- PEPIN COUNTY see also HYDROGEOLOGY, CHIPPEWA RIVER BASIN; WEST CENTRAL WISCONSIN SOILS
Thomas, Delbert D. 1964. Wurman, E. 1960a.
- PERIGLACIAL FEATURES see under GLACIAL GEOLOGY; PALEOClimATOLOGY
- PETRIFIED WOOD see GEOCHRONOLOGY, TWO CREEKS FOREST BED; GLACIAL GEOLOGY, TWO CREEKS FOREST BED
- PERMEABILITY see under HYDROGEOLOGY, GROUND WATER
- PETROLOGY
- GENERAL
Irving, Roland Duer. 1883d. Julien, Alexis Anastay. 1880. Lawson, Publius Virgilius. 1906. Weidman, Samuel. 1908.
- AMBERG GRANITE
Cain, James Allan. 1964c. Cain, James Allan; Beckman, Walter A., Jr. 1984. Rebello, Dennis P. 1965.
- AMPHIBOLITE
Cummings, M.L. 1975. Cummings, M.L.; Myers, Paul E. 1978.
- ANALYSES, GENERAL
Clarke, Frank Wigglesworth; Hillebrand, W.F. 1897. Freeman, K.J.; Vogel, T.A.; LaBerge, Gene L. 1974. Wichmann, Arthur. 1880.
- ARCHEAN GNEISS
DuBois, James F.; Van Schmus, W.R. 1978.
- BARABOO QUARTZITE
Becker, Hans. 1931b. Emmons, Richard Conrad. 1940. Haimson, B.C. 1978. Riley, N. Allen. 1947. Stirewalt, G.L.; Sullivan, Catherine E. 1975. Weidman, Samuel. 1895.
- BATHOLITH UNITS
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