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#### MINNESOTA GEOLOGICAL SURVEY

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The Minnesota Geological Survey (MGS) is a unit of the Newton Horace Winchell School of Earth Sciences in the University of Minnesota. The Survey is the University outreach center for the science and technology of earth resources in Minnesota. The Survey conducts basic and applied earth science research, conveys that information to the public through publications and service activities, and promotes earth science education.

### Minnesota Geological Survey Contact Information

MGS website ..... [www.mngs.umn.edu](http://www.mngs.umn.edu)

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Water-Well Help Line..... 612) 626-4468

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### SOURCES OF INFORMATION ON MINNESOTA GEOLOGY

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In addition to Minnesota Geological Survey (MGS) publications, information on Minnesota geology is available from a broad range of sources. All MGS reports and maps have been scanned and are available for free download through the MGS home page ([www.mngs.umn.edu](http://www.mngs.umn.edu)), as well as from the University of Minnesota Library Digital Conservancy Unit. Of increasing importance are MGS databases, such as the aeromagnetic and gravity databases. This catalog lists relatively recent publications that can still be purchased as hard copies. Literature from other publishers may be identified through internet searches or references services, and for older literature, previously prepared Bibliographies of Minnesota Geology remain accessible – including MGS Bulletins 34, 46, and 47, and Information Circular 21. These bibliographies can be found as PDF documents by searching at <http://conservancy.umn.edu/handle/11299/708>. For MGS publications not listed in this catalog, as an alternative to a digital download, most publications may be found in libraries, or on the used book market. Most publications released since 1993 also contain some geographic information system (GIS) files as supplementary information on the download web site. MGS publications may also be searched for through a map interface on the MGS web site.

The County Well Index (CWI) is a database that contains information for over 500,000 water-wells drilled in Minnesota. The data are derived from water-well contractors' logs of geologic materials encountered during drilling. Confirmed locations and interpreted geologic well records are available for about half of the wells. Available data also include casing, screen and pump information. CWI is Web accessible at [CWI ONLINE](#), [now the Minnesota Well Index (MWI)]. The database can be searched and files printed. Files cannot be downloaded. Due to the Homeland Security Act of 2002, wells supplying public water systems will not be displayed in CWI Online. If you need access to this information, please contact the MN Department of Health 651-201-4688. This restriction also applies to a data CD or downloadable file. If a CD is required, please contact MGS.

## MAPS AND REPORTS OF THE MINNESOTA GEOLOGICAL SURVEY AVAILABLE AS HARD COPY

Most MGS maps published since 1994 have supplementary GIS data and are marked with an \* in the list below. All publications since 1872 have now been scanned and are available in PDF format through the MGS website.

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### AEROMAGNETIC MAP SERIES

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Recently reprocessed statewide aeromagnetic data may be downloaded from the MGS website; the following maps remain available for historic reference.

- A-1 Cook and Lake Counties.** 1983. **\$3.50.**
- A-2 St. Louis County.** 1983. **\$3.50.**
- A-3 Carlton and Pine Counties.** 1983. **\$3.50.**
- A-4 East-central region** [area between 93° to 94°37'30" and 45°37'30" to 47°37'30"]. 1983. **\$3.50.**
- A-5 Central region** [area between 94°37'30" to 96°30' and 47°37'30" to and 94°37'30" to 95°22'30" and 45°37'30"]. 1985. **\$3.50.**
- A-6 West-central region** [area from 95°22'30" to western state line between 45°37'30" and 47°; and from 94° to western state line between 45° and 45°37'30"]. 1987. **\$6.50.**
- A-7 Northwestern region** [area from 96°30' to western state line between 47° and 47°37'30" and from 95°37'30" to western state line between 47°37'30" and the International Boundary]. 1989. **\$6.50.**
- A-8 Southwestern region** [area from 94°22'30" to western state line between the southern state line and 44°22'30"; and from 94°37'30" to western state line between 44°22'30" and 45°]. 1989. **\$6.50.**
- A-9 Southeastern region.** 1991. **\$6.50.**

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### BULLETINS (ISSN 0076-9169)

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- 46 Bibliography of Minnesota geology, 1951-1980.** G.B. Morey, N.H. Balaban, and L. Swanson. 1981. 143 p. **\$5.50.**
- 47 Bibliography of Minnesota geology, 1981-1985.** L. Swanson, N.H. Balaban, and G.B. Morey. 1987. 107 p. **\$5.50.**
- 48 Frederick William Sardeson, Geologist 1866-1958.** M.P. Weiss. 2000. 203 p. **\$16.50.**

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### COUNTY ATLAS SERIES

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For County Atlases numbered C-13 and higher, GIS files may be downloaded; the MGS also offers a CD/DVD that contains products of the MGS County Atlas project in GIS and PDF formats. Each CD/DVD is **\$3.00** when purchased with an Atlas or associated RI, or **\$5.50** if purchased separately.

On the CD/DVD, atlas data are part of an ArcGIS mxd project file. The mxd is compatible with the latest versions of ArcGIS but is not backward compatible. With GIS software, the data are searchable and can be manipulated or integrated with other georeferenced data (such as road and water networks, census data, images, and parcel boundaries). If ArcGIS is not available the CD/DVD data can be viewed with ArcReader, a program available directly from the ESRI web site. It is free.

The CD/DVD also contains PDF files of the atlas plates that match the colors and styles of the printed version. Maps can be printed from the PDF files if you have access to a large format plotter. Also included are text versions of the map explanation, jpeg images, and database (dbf) files and some html files, that can be viewed or used independently of any GIS system.



The DNR parts of the County Atlas Series beginning with C-8 are available at [http://www.dnr.state.mn.us/waters/groundwater\\_section/mapping/status.html](http://www.dnr.state.mn.us/waters/groundwater_section/mapping/status.html).

- \*C-2 Geologic atlas of Winona County, Minnesota.** N.H. Balaban and B.M. Olsen, eds. 1984. (*out of print, available online. Plates available upon request for \$10.00 each. Please allow 1 business day for printing.*)
- \*C-3 Geologic atlas of Olmsted County, Minnesota.** N.H. Balaban, ed. 1988. 9 pls. Scale 1:100,000. 9 pls. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, depth to bedrock; pl. 5, bedrock hydrogeology; pl. 6, pollution sensitivity; pl. 7, sinkhole probability; pl. 9, geologic resources (Plate 8 available for \$10.00 upon request. Please allow 1 business day for printing).* **\$12.00** for pls. 1-8.
- \*C-4 Geologic atlas of Hennepin County, Minnesota.** N.H. Balaban, ed. 1989. 9 pls. Scale 1:100,000 and smaller. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, depth to bedrock; pl. 5, Quaternary hydrogeology; pl. 6, bedrock hydrogeology; pl. 7, pollution sensitivity; pl. 8, well construction; pl. 9, geologic resources.* **\$12.50.**
- \*C-5 Geologic atlas of Washington County, Minnesota.** L. Swanson and G.N. Meyer, eds. 1990. 7 pls. Scale 1:100,000 and smaller. *Pl. 1, data-base; pl. 2, bedrock geology, pl. 3, surficial geology; pl. 4, bedrock topography and depth to bedrock; pl. 5, hydrogeology; pl. 6, sensitivity of ground-water systems to pollution; pl. 7, geology and well construction.* **\$12.50.**
- \*C-6 Geologic atlas of Dakota County, Minnesota.** N.H. Balaban and H.C. Hobbs, eds. 1990. 9 pls. Scale 1:100,000 and smaller. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, depth to bedrock and bedrock topography; pl. 5, Quaternary hydrogeology; pl. 6, bedrock hydrogeology; pl. 7, sensitivity of the Prairie du Chien-Jordan aquifer to pollution; pl. 8, geology and well construction; pl. 9, geologic resources.* **\$12.50.**
- \*C-7 Geologic atlas of Ramsey County, Minnesota.** G.N. Meyer and L. Swanson, eds. 1992. 10 pls. Scale 1:48,000 and smaller. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, bedrock topography and Quaternary stratigraphy; pl. 5, depth to bedrock and Confining units of the St. Peter Sandstone; pl. 6, surficial hydrogeology; pl. 7, bedrock hydrogeology; pl. 8, sensitivity of the water-table system to pollution; pl. 9, sensitivity of the Prairie du Chien-Jordan aquifer to pollution; pl. 10, bedrock and bedrock topography.* **\$13.00.**
- C-8 Geologic atlas of Fillmore County, Minnesota. Three parts \$26.00.**
- \*Part A** J.H. Mossler, project manager. 1995. 5 pls. Scale 1:100,000. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, depth to bedrock and bedrock topography; pl. 5, geologic resources.* **\$12.50.**
- \*Part B** J. Falteisek, Minnesota Dept. of Natural Resources, Division of Waters, project supervisor. 1996. 4 pls. Scale 1:100,000. *Pl. 6, bedrock hydrogeology; pl. 7, sensitivity of the St. Peter-Prairie du Chien-Jordan aquifer to pollution; pl. 8, sinkholes and sinkhole probability; pl. 9, springsheds.* **\$12.50.**
- Part C** Text supplement. R.S. Lively and N.H. Balaban, eds. 1995. 41 p. **\$2.50.**
- C-9 Geologic atlas of Rice County, Minnesota. Both parts \$24.50.**
- \*Part A** H.C. Hobbs, project manager. 1995. 6 pls. Scale 1:100,000. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy; pl. 5, depth to bedrock and bedrock topography; pl. 6, geologic resources.* **\$14.50.**
- \*Part B** J. Falteisek, Minnesota Dept. of Natural Resources, Division of Waters, project supervisor. 1997. 3 pls., 1 pl supplement. Scale 1:100,000. *Pl. 7, water-table hydrogeology; pl. 8, bedrock hydrogeology; pl. 9 and pl. 9 supplement, sensitivity of ground-water systems to pollution.* **\$11.50.**
- C-10 Geologic atlas of Stearns County, Minnesota. Three parts \$33.50.** (*For more information on granites, see also Report of Investigations 56.*)
- \*Part A** G.N. Meyer, project manager. 1995. 7 pls. Scales 1:100,000 and 1:200,000. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy; pl. 5, depth to bedrock and thickness of Cretaceous strata; pl. 6, bedrock topography; pl. 7, geologic resources.* **\$20.50.**
- \*Part B** J. Falteisek, Minnesota Dept. of Natural Resources, Division of Waters, project manager. 1998. 3 pls. and insert. Scale 1:100,000. *Pl. 8, hydrogeology of the Quaternary water-table system; pl. 9, hydrogeology of Quaternary*

*confined aquifers and bedrock aquifers; pl. 10, sensitivity of ground-water systems to pollution; insert, summary of ground-water chemistry. \$12.50.*

**Part C** Text supplement. G.N. Meyer and L. Swanson, eds. 1996. 63 p. **\$3.00.**

**C-11 Geologic atlas of Mower County, Minnesota.** (See also *Report of Investigations 50.*)

**\*Part A** J.H. Mossler, project manager. 1998. 6 pls. Scale 1:100,000. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, depth to the Pre-Cretaceous bedrock surface and topography of the Pre-Cretaceous bedrock surface; pl. 5, subsurface stratigraphy; pl. 6, sand and gravel resources and bedrock resources. \$16.50.*

**\*Part B** J. Falteisek, Minnesota Dept. of Natural Resources, Division of Waters project manager. 2002. 4 pls. and insert. Scale 1:100,000. *Pl. 7, bedrock hydrogeology; pl. 8, ground-water flow in bedrock aquifers; pl. 9 sensitivity to pollution of the uppermost bedrock aquifers; pl. 10, karst hydrogeomorphic units; technical appendix, potentiometric surfaces of the uppermost bedrock aquifers. \$14.50.*

**C-12 Geologic atlas of Goodhue County, Minnesota.**

**\*Part A** D.R. Setterholm, project manager. 1998. 6 pls. Scale 1:100,000. *Pl. 1, data-base; pl. 2, bedrock geology; pl. 3, surficial geology and thickness of Quaternary sediments; pl. 4, Quaternary stratigraphy; pl. 5, bedrock topography; pl. 6, geologic resources. \$17.50 (with CD \$20.50).*

**\*Part B** J. Falteisek, Minnesota Dept. of Natural Resources, Division of Waters, project manager. 2003. 4 pls. Scale 1:100,000. *Pl. 7, bedrock and water-table hydrogeology; pl. 8, hydrogeologic cross sections; pl. 9, sensitivity of pollution of the uppermost bedrock aquifers; pl. 10, sinkholes, sinkhole probability, and springs and seeps. \$14.50.*

**C-13 Geologic atlas of Pine County, Minnesota.** (See also *Report of Investigations 60.*)

**\*Part A** T.J. Boerboom, project manager. 2001. 7 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geologic map and sections; pl. 3, supplemental data on bedrock geology and geophysics; pl. 4, surficial geology; pl. 5, Quaternary stratigraphy; pl. 6, sinkhole distribution, depth to bedrock and bedrock topography; pl. 7, mineral endowment. \$19.50, \$22.50 with CD.*

**\*Part B** J.A. Berg, project manager, Minnesota Dept. of Natural Resources, Division of Waters. 2003. 3 pls. Scale 1:100,000. *Pl. 8, hydrogeology of the unconsolidated and bedrock aquifers; pl. 9, hydrogeologic cross sections; pl. 10, sensitivity of pollution of the uppermost bedrock aquifers. \$14.50.*

**C-14 Geologic atlas of Wabasha County, Minnesota.** (See also *Report of Investigations 59.*)

**\*Part A** A.C. Runkel, project manager. 2001. 7 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, bedrock topography and depth to bedrock; pl. 5, karst features; pl. 6, geologic endowment of construction-aggregate materials; pl. 7, illustrated geology. \$18.50 (with CD \$21.50).*

**\*Part B** T.A. Petersen, project manager. 2005. 3 pls. Scale 1:100,000. *Pl. 8, hydrogeology of the unconsolidated and bedrock aquifers; pl. 9, hydrogeologic cross sections; pl. 10, sensitivity to pollution of the uppermost aquifers. \$10.00.*

**C-15 Geologic atlas of Pope County, Minnesota.**

**\*Part A** K.L. Harris, project manager. 2003. 5 pls. Scales 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology, bedrock topography, and depth to bedrock; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy; pl. 5, mineral endowment. \$9.50 (with CD \$12.50).*

**\*Part B** J.A. Berg, project manager. 2006. 4 pls. Scales 1:100,000, 1:150,000 and 1:300,000. *Pl. 6, hydrogeology of the surficial aquifers; pl. 7, hydrogeology of the buried aquifers; pl. 8, hydrogeologic cross sections; pl. 9, sensitivity to pollution of the buried aquifers. \$12.00.*

**C-16 Geologic atlas of Crow Wing County, Minnesota.**

**\*Part A** D.R. Setterholm, project manager. 2004. 6 pls. Scales 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock, and Quaternary subsurface geology; pl. 6, mineral endowment. \$12.50 (\$18.50 with both CD's).*



- \*Part B** T.A. Petersen, project manager. 2008. 4 pls. Scale 1:100,000. *Pl. 7, hydrogeology of the buried and surficial aquifers; pl. 8, hydrogeologic cross sections; pl. 9, pollution sensitivity of the buried and surficial aquifers; pl. 10, interaction of lakes and ground water.* **\$12.00.**
- \*C-17 Geologic atlas of Scott County, Minnesota.**
- \*Part A** D.R. Setterholm, project manager. 2007. 6 pls. Scale 1:100,000 and 1:200,000. *Pl. 1, data-base; pl. 2, bedrock geology, pl. 3, surficial geology; pl. 4, Quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock and bedrock geology models; pl. 6, suburban recharge and surface infiltration.* **\$9.50.**
- C-18 Geologic atlas of Todd County, Minnesota.**
- \*Part A** D.R. Setterholm, project manager. 2007. 6 pls. Scales 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock, and sand distribution model; pl. 6, mineral endowment.* **\$16.50 (\$19.50 with DVD).**
- \*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2011. 4 pls. Scale 1:100,000. *Pl. 7, distribution of the surficial and buried sand aquifers; pl. 8, hydrogeologic cross sections; pl. 9, hydrogeology of the surficial and buried sand aquifers; pl. 10, pollution sensitivity of the buried sand aquifers.* **\$12.00.**
- C-19 Geologic atlas of Carlton County, Minnesota.**
- \*Part A** Terrence J. Boerboom, project manager. 2009. 6 pls. Scales 1:100,000 and 1:200,000. *Pl. 1 data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock, and sand distribution model; pl. 6, mineral endowment.* **\$16.00 (with CD \$19.00).**
- \*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2011. 4 pls. Scale 1:100,000. *Pl. 7, hydrogeology of the surficial aquifer; pl. 8, hydrogeologic cross sections; pl. 9, hydrogeology of the buried aquifers; pl. 10, sensitivity of groundwater systems to pollution.* **\$12.00.**
- C-20 Geologic atlas of McLeod County, Minnesota.**
- \*Part A** Barbara A. Lusardi, project manager. 2009. 6 pls. Scales 1:100,000 *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, supplemental bedrock geology; pl. 4, surficial geology; pl. 5, quaternary stratigraphy and sand distribution model; pl. 6, bedrock topography, depth to bedrock, and mineral endowment.* **\$9.50.**
- \*Part B** Minnesota Dept. of Natural Resources, Ecological and Water Resources Division. 2013, 3 pls. Scale 1:100,000. *Pl. 7, hydrogeology; pl. 8, hydrogeologic cross sections; pl. 9, pollution sensitivity of the near-surface materials, buried sand and gravel aquifers, and the bedrock surface.* **\$12.00.**
- C-21 Geologic atlas of Carver County, Minnesota.**
- \*Part A** E.J. Bauer, project manager. 2009. 5 pls. Scales 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy and sand distribution model; pl. 5, bedrock topography, depth to bedrock, and mineral endowment.* **\$13.60 (\$16.60 with DVD).**
- \*Part B** Minnesota Dept. of Natural Resources, Ecological and Water Resources Division. 2014. 4 pls. Scale 1:100,000. *Pl. 6, Quaternary hydrogeology; pl. 7, hydrogeologic cross sections; pl. 8, bedrock hydrogeology; pl. 9, pollution sensitivity.* **\$12.00.**
- C-22 Geologic atlas of Chisago County, Minnesota.**
- \*Part A** D.R. Setterholm, project manager. 2010. 6 pls. Scales 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy and sand distribution model; pl. 5, bedrock topography, depth to bedrock, and mineral endowment, pl. 6, bedrock topography and depth to bedrock.* **\$19.00 (\$22.00 with DVD).**
- \*Part B** Minnesota Dept. of Natural Resources, Ecological and Water Resources Division. 2014. 4 pls. Scale 1:100,000. *Pl. 7, surficial aquifer hydrogeology; pl. 8, Quaternary and bedrock aquifer hydrogeology; pl. 9, hydrogeologic cross sections; pl. 10, pollution sensitivity.* **\$12.00.**

**C-23 Geologic atlas of Benton County, Minnesota.**

- \*Part A** D.R. Setterholm, project manager. 2010. 5 pls. Scales 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary stratigraphy and sand distribution model; pl. 5, bedrock topography, depth to bedrock, and mineral endowment. \$17.00 (\$20.00 with DVD).*
- \*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2012. 4 pls. Scale 1:100,000. *Pl. 6, hydrogeology of the surficial sand aquifer; pl. 7, hydrogeologic cross sections; pl. 8, hydrogeology of the buried aquifers and the Rice Area aquifer system; pl. 9, sensitivity of the groundwater systems to pollution. \$12.00.*

**C-24 Geologic atlas of Sibley County, Minnesota.**

- \*Part A** D.R. Setterholm, project manager. 2012. 6 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2 bedrock geology; pl.3 surficial geology; pl. 4, quaternary stratigraphy; pl. 5, sand distribution model, and pl. 6, bedrock topography and depth to bedrock. \$15.00.*

**C-25 Geologic atlas of Nicollet County, Minnesota.**

- \*Part A** D.R. Setterholm, project manager. 2012. 6 pls. Scale 1:100,000. *Pl.1, data-base map; pl.2, bedrock geology; pl. 3 surficial geology; pl. 4, quaternary stratigraphy; pl. 5, sand distribution model, and pl. 6, bedrock topography and depth to bedrock. \$15.00.*
- \*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2016. Report and 2 pls. Scale 1:100,000. *Pl. 7, chemical hydrogeology; pl. 8, hydrogeologic cross sections \$12.00.*

**C-26 Geologic atlas of Blue Earth County, Minnesota.**

- \*Part A** D.R. Setterholm, project manager. 2012. 6 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, quaternary stratigraphy; pl. 5, sand distribution model, and pl. 6, bedrock topography and depth to bedrock. \$15.00.*
- \*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2016. 3 pls. Scale 1:100,000 to 1:500,000. *pl. 7, bedrock groundwater flow directions; pls. 8 and 9, hydrogeologic cross sections. \$12.00.*

**C-27 Geologic atlas of Anoka County, Minnesota.**

- \*Part A** D.R. Setterholm, project manager. 2013. 6 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, quaternary stratigraphy; pl. 5, sand distribution model; pl. 6, bedrock topography and depth to bedrock. \$15.00.*
- \*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2016. 3 pls., *pl. 7, water chemistry; pls. 8 and 9, hydrogeologic cross sections. \$12.00.*

**C-28 Geologic atlas of Renville County, Minnesota.**

- \*Part A** D.R. Setterholm, project manager. 2013. 5 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock, and sand distribution model. \$15.00.*
- \*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2017. 1 report, 1 book of 27 map figures, 3 pls, *pl. 6, chemical hydrogeology; pls. 7 and 8, hydrogeologic cross sections. \$12.00.*

**C-29 Geologic Atlas of Clay County, Minnesota.**

- \*Part A** E.J. Bauer, project manager. 2014. 5 pls. Scale 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl.2, bedrock geology; pl. 3, surficial geology; pl. 4, quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock, and sand distribution model. \$15.00.*

**C-30 Geologic atlas of Wright County, Minnesota.**

- \*Part A** R. G. Tipping, project manager. 2013. 6 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, quaternary stratigraphy; pl. 5, sand distribution model; pl. 6, bedrock topography and depth to bedrock. \$15.00*

**C-31 Geologic atlas of Morrison County, Minnesota.**





**\*Part A** B. A. Lusardi, project manager. 2014. 5 pls. Scales 1:100,000 and 1:200,000. *Pl. 1 data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock, and stand distribution model. \$15.00.*

**C-32 Geologic atlas of Sherburne County, Minnesota.**

**\*Part A** B.A. Lusardi, project manager. 2013. 5 pls. Scale 1:100,000 and 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, quaternary stratigraphy; pl. 5, bedrock topography, depth to bedrock, and sand distribution. \$15.00*

**\*Part B** Minnesota Dept. of Natural Resources, Division of Waters. 2017. 1 report, 3 pls, *pl. 6, water chemistry; pls. 7 and 8, hydrogeologic cross sections. \$12.00.*

**C-33 Geologic atlas of Houston County, Minnesota.**

**\*Part A** Setterholm, Dale, R., project manager. 2014. 4 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, bedrock topography, depth to bedrock. \$15.00*

**C-34 Geologic atlas of Winona County, Minnesota.**

**\*Part A** Setterholm, Dale, R., project manager. 2014. 4 pls. Scale 1:100,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, bedrock topography, depth to bedrock. \$15.00*

**C-35 Geologic atlas of Meeker County, Minnesota.**

**\*Part A** Meyer, Gary N., project manager. 2015. 5 pls. Scale 1:100,000 to 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5. Bedrock Topography, Depth to Bedrock, Sand Distribution Model. \$15.00*

**C-36 Geologic Atlas of Redwood County, Minnesota**

**\*Part A** Setterholm, Dale, R., project manager. 2016. 5 pls. Scale 1:100,000 to 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5. Bedrock Topography, Depth to Bedrock, Sand Distribution Model. \$15.00*

**C-37 Geologic Atlas of Brown County, Minnesota**

**\*Part A** Boerboom, Terrence, J., project manager. 2016. 5 pls. Scale 1:100,000 to 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5. Bedrock Topography, Depth to Bedrock, Sand Distribution Model. \$15.00*

**C-38 Geologic Atlas of Kanabec County, Minnesota**

**\*Part A** Boerboom, Terrence, J., project manager. 2016. 5 pls. Scale 1:100,000 to 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5. Bedrock Topography, Depth to Bedrock, Sand Distribution Model. \$15.00*

**C-39 Geologic Atlas of Washington County, Minnesota**

**\*Part A** Bauer, Emily, J., project manager. 2016. 5 pls. Scale 1:100,000 to 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5., Sand Distribution Model; Pl. 6, Bedrock Topography and Depth to Bedrock. \$15.00*

**C-40 Geologic Atlas of Wadena County, Minnesota**

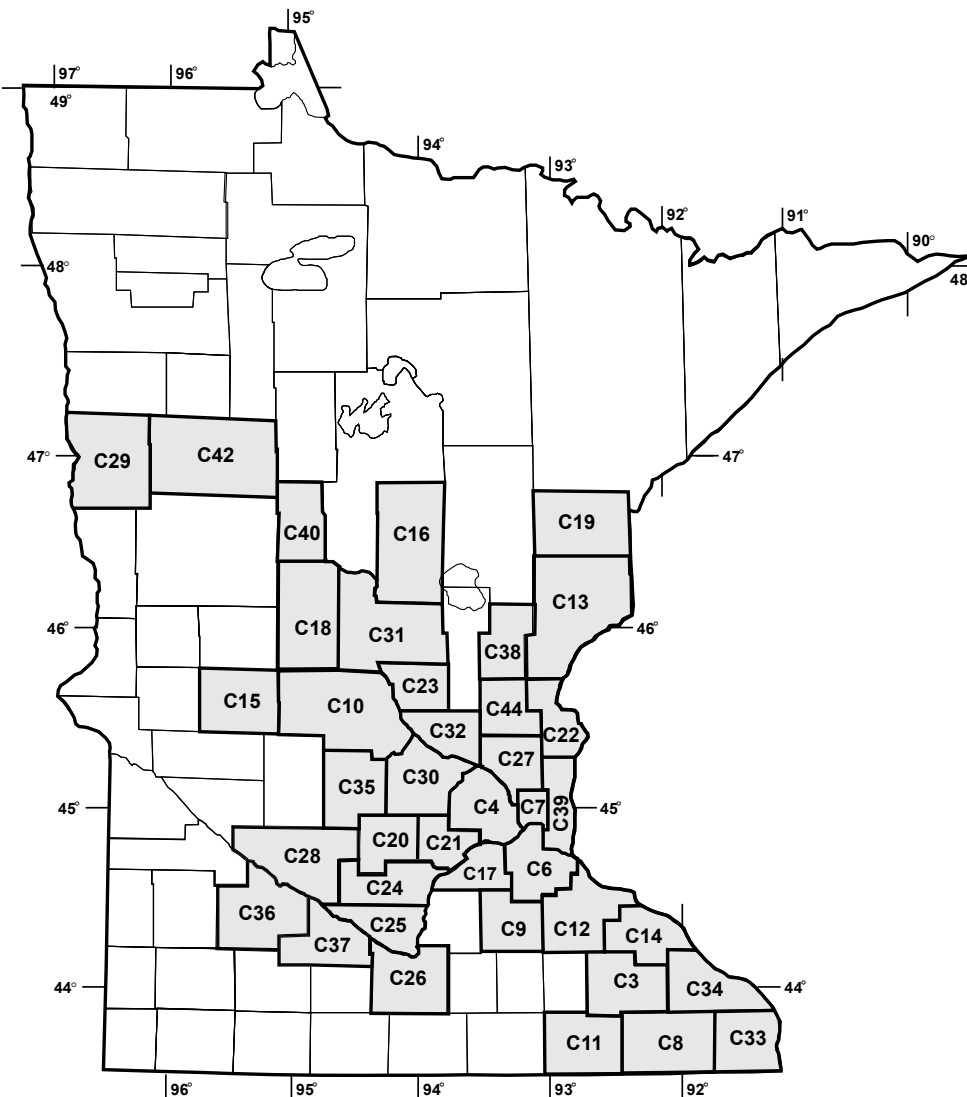
**\*Part A** Lusardi, Barbara, A., project manager. 2016. 5 pls. Scale 1:100,000 to 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5. Bedrock Topography, Depth to Bedrock, Sand Distribution Model. \$15.00*

**C-42 Geologic Atlas of Becker County, Minnesota**

**\*Part A** Bauer, Emily, J., project manager. 2016. 6 pls. Scale 1:100,000 to 1:200,000. *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5., Supplemental Quaternary Stratigraphy and Sand Distribution Model; Pl. 6, Bedrock Topography and Depth to Bedrock. \$15.00*

**C-44 Geologic Atlas of Isanti County, Minnesota**

**\*Part A** Bloomgren, B.A., project manager. 2017. 6 pls. Scale 1:100,000 *Pl. 1, data-base map; pl. 2, bedrock geology; pl. 3, surficial geology; pl. 4, Quaternary Stratigraphy; Pl. 5., Sand Distribution Model; Pl. 6, Bedrock Topography and Depth to Bedrock. \$15.00*

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**EDUCATIONAL SERIES (ISSN 0544-3083)**

- ES 2** Guide to mineral collecting in Minnesota. G.R. Rapp, Jr. and D.T. Wallace. Second revised edition 1979. 42 p. \$1.50.
- ES 6** The search for oil and gas in Minnesota. G.B. Morey. 1984. 30 p. \$1.50.
- ES 8** Using ground-water data for water planning. B.M. Olsen, E.H. Mohring and B.A. Bloomgren. 1987. 24 p. \$5.50.
- ES 9** The geology of Whitewater State Park [Winona County]. A.C. Runkel. 1996. 22 p. \$5.50.
- \*ES 10** Geology of the Root River State Trail area, southeastern Minnesota. J.H. Mossler. 1999. 56 p., 1 map in pocket. \$8.00.

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**GUIDEBOOK SERIES (ISSN 0192-6268)**


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- \*GS 21**      **Field trip guidebook for selected geology in Minnesota and Wisconsin.** 2005. L.A. Robinson, ed. *Prepared for the 2005 Geological Society of America, North Central Section Meeting, Minneapolis, Minnesota, May 18-20, 2005.* 278 p. **\$33.50.**
- \*GS 22**      **Landforms, stratigraphy, and lithologic characteristics of glacial deposits in central Minnesota.** 2004. A.R. Knaeble, coordinator. *Prepared for the 50th Midwest Friends of the Pleistocene Field Conference, June 4-6, 2004.* 44 p. **\$19.00.**

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**GEOLOGIC MAP OF MINNESOTA, [1966-1982]; (SCALE 1:250,000)**


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- St. Paul sheet, bedrock geology.** R.E. Sloan and G.S. Austin. 1966. **\$2.00.** *Flat only.*
- New Ulm sheet, bedrock geology.** G.S. Austin, J.A. Grant, R.J. Ikola, and P.K. Sims. 1970. **\$2.00.** *Flat or folded.*
- Hibbing sheet, bedrock geology.** P.K. Sims, G.B. Morey, R.W. Ojakangas, and S. Viswanathan. 1970. **\$2.00.** *Flat or folded.*
- International Falls sheet, bedrock geology.** D.L. Southwick and R.W. Ojakangas. 1979. **\$5.00.** *Flat or folded. (See also USGS map I-1965-B, which includes part of Ontario.)*
- Roseau sheet, bedrock geology.** R.W. Ojakangas, J.H. Mossler, and G.B. Morey. 1979. **\$5.00.** *Flat or folded. (See also USGS map I-2358-A, which includes parts of Ontario and Manitoba.)*
- East-Central Minnesota, bedrock geology [includes Duluth and Stillwater sheets, plus the parts of Brainerd and St. Cloud sheets east of 95°].** G.B. Morey, B.M. Olsen, and D.L. Southwick. 1981. **\$6.50.** *Flat or folded.*
- Two Harbors sheet, bedrock geology.** J.C. Green. 1982. **\$5.50.** *Flat or folded. (See also M-119.)*



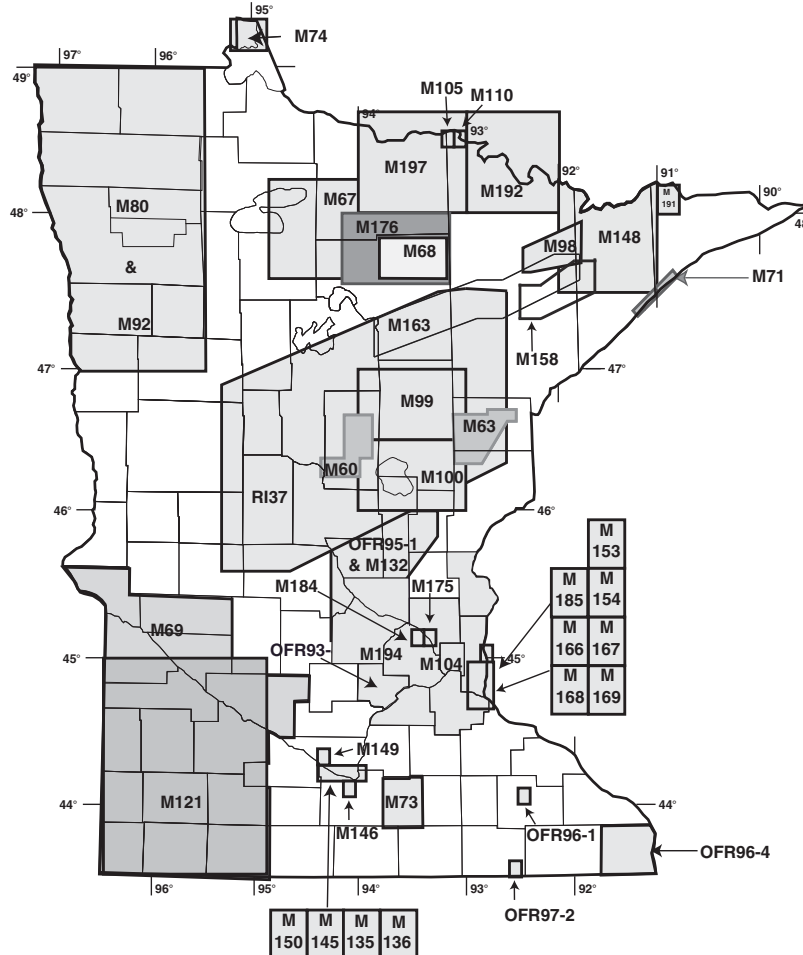

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**INFORMATION CIRCULARS (ISSN 0544-3105)**


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- IC-21**      **Publications of the Minnesota Geological Survey and its predecessor, the Geological and Natural History Survey of Minnesota.** L. Swanson. 1985. 48 p. **\$1.50.**
- IC-22**      **Analytical results of the Public Geologic Sample Program, 1983-1985 biennium.** G.B. Morey and others. 1985. 56 p., 2 figs., 9 tbls. **\$2.50.**
- IC-23**      **Scientific core drilling in central Minnesota: Summary of lithologic and geochemical results.** D.L. Southwick, G.N. Meyer, and S.J. Mills. 1986. 186 p., 2 figs., 1 tbl. **\$4.50.**

- IC-24** Scientific core drilling in north-central Minnesota: Summary of 1986 lithologic and geochemical results. S.J. Mills, D.L. Southwick, and G.N. Meyer. 1987. 48 p., 2 figs. **\$4.50.**
- IC-25** Analytical results of the Public Geologic Sample Program, 1985-1987 biennium. G.B. Morey and L.L. McDonald. 1987. 59 p., 1 fig., 12 tbls. **\$7.50.**
- IC-26** Scientific core drilling in parts of Koochiching, Itasca, and Beltrami Counties, north-central Minnesota, 1987-1989: Summary of lithological, geochemical, and geophysical results. T.J. Boerboom and others. 1989. 159 p., 3 figs., 1 tbl. **\$5.50.**
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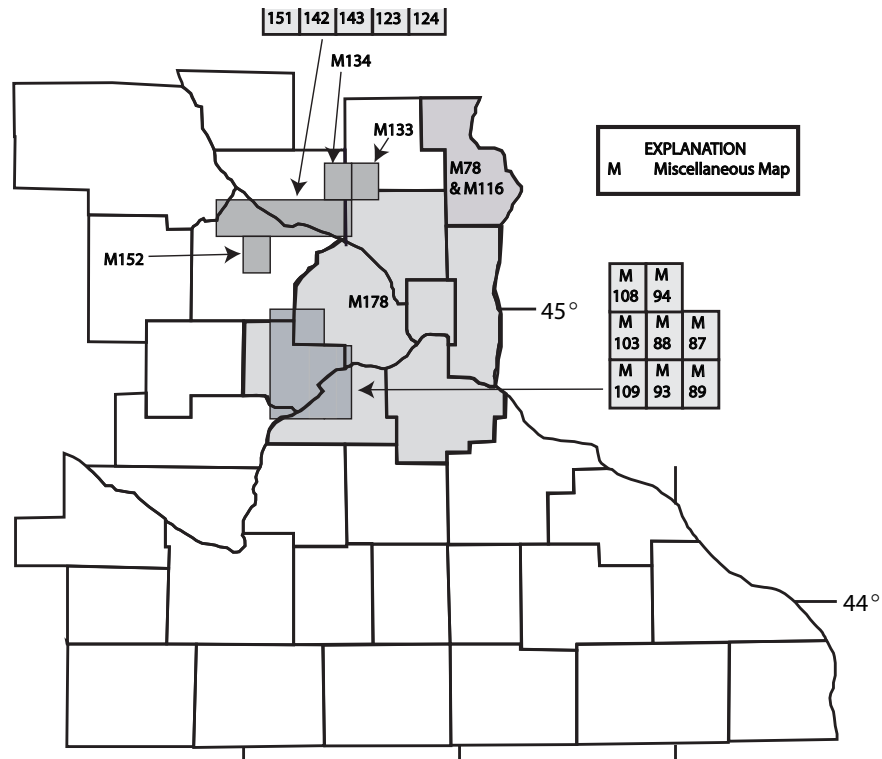
## Index to Bedrock Mapping

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- IC-34** **Precambrian geology of the southern Canadian Shield and the eastern Baltic Shield.** R.W. Ojakangas, ed. *U.S.A.-U.S.S.R.-Canada Joint Seminar, August 21-23, 1990, Duluth, Minnesota.* 174 p. **\$12.50.**
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- IC-42** **Scientific test drilling and mapping in east-central Minnesota, 1994-1995: Summary of lithologic results.** (*Companion to Open File Report 95-1 & MGS Miscellaneous Map M-132.*) M.A. Jirsa and V.W. Chandler. 1997. 105 p. **\$11.50.**
- \*IC-43** **Background levels of mercury and arsenic in Paleoproterozoic rocks of the Mesabi Iron Range, northern Minnesota.** G.B. Morey and R.S. Lively. 1999. 14 p. **\$2.50.**
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- \*IC-46** **Aggregate resources inventory of the seven-county metropolitan area, Minnesota.** D.L. Southwick, M. Jouseau, G.N. Meyer, J.H. Mossler, and T.E. Wahl. 2000. 91 p. **\$25.50.** (*See also MGS Miscellaneous Map 102.*)

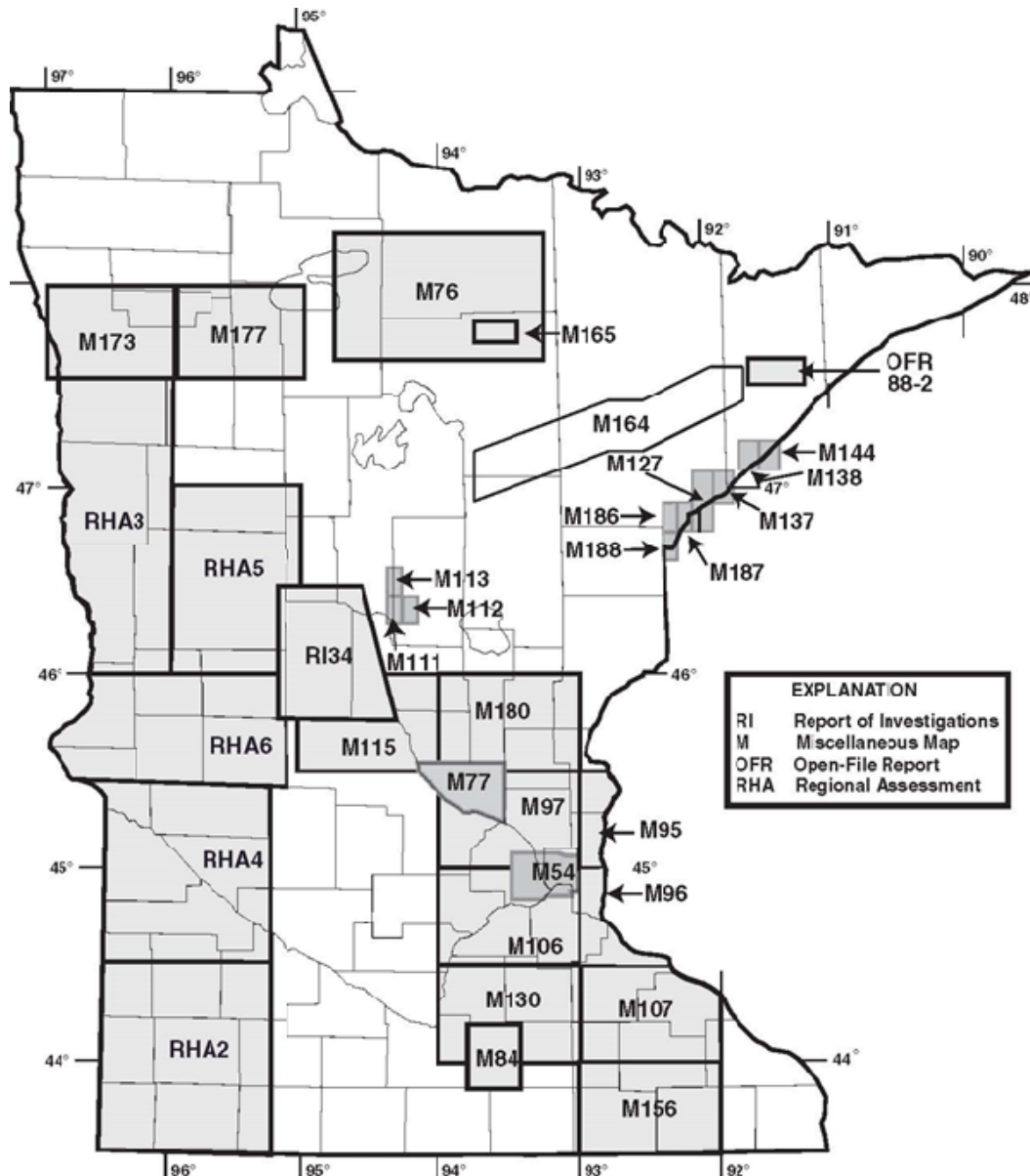




## Index to Quaternary Geologic Mapping in the Twin Cities Metro



## Index to selected Quaternary Geologic Maps



### MISCELLANEOUS MAP SERIES

(See MAP INDEXES, PAGES 12, 14, 15, 16)

- M-09** Simple Bouguer gravity map of Minnesota, Two Harbors sheet. R.J. Ikola. 1970. Scale 1:250,000. **\$1.50**. *Folded only.*
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- M-45** Lineament map, Two Harbors sheet, Minnesota. G.B. Morey. 1981. Scale 1:250,000. **\$3.50.** *Folded only.*
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- M-68** Bedrock geologic map of northeastern Itasca County, Minnesota. M.A. Jirsa. 1990. Scale 1:48,000. **\$8.50.** *Folded only.*
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- M-72** Geologic map of the Doyle Lake and Finland quadrangles, Lake County, Minnesota. J.D. Miller, Jr., J.C. Green, T.J. Boerboom, and V.W. Chandler. 1993. Scale 1:24,000. **\$8.50.** *Folded only.*
- M-73** Bedrock geology of Waseca County, Minnesota. B.A. Bloomgren. 1993. 3 pls. Scale 1:62,500 and smaller. **\$7.00.** *Folded only. (See M-84 for a surficial geologic map of Waseca County.)*
- M-74** Reconnaissance geologic map of the Northwest Angle, Lake of the Woods County, Minnesota. C.E. Zamzow and G.B. Morey. 1991. Scale 1:48,000. **\$4.50.** *Folded only.*
- M-75** Bedrock geologic map of the Cook to Side Lake area, St. Louis and Itasca Counties, Minnesota. M.A. Jirsa, T.J. Boerboom, V.W. Chandler, and P.L. McSwiggen. 1991. Scale 1:48,000. **\$10.50.** *Folded only.*
- M-76** Surficial geologic map of parts of Koochiching, Itasca, and Beltrami Counties, north-central Minnesota. G.N. Meyer. 1993. Scale 1:250,000. **\$7.50.** *Folded only.*
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- M-80** Bedrock geologic map of northwestern Minnesota. M.A. Jirsa, A.C. Runkel, and V.W. Chandler. 1994. Scale 1:250,000. **\$7.50.** *Folded only. A map of the area of Minnesota north of lat. 47° N. and west of lon. 95.5° W.*
- M-81** Bedrock geologic map of the Silver Island Lake, Wilson Lake, and western Toohey Lake quadrangles, Lake and Cook Counties, Minnesota. T.J. Boerboom and J.D. Miller, Jr. 1994. Scale 1:24,000. **\$7.50** *Folded only.*
- M-82** Bedrock geologic map of the Cabin Lake and Cramer quadrangles, Lake and Cook Counties, Minnesota. J.D. Miller, Jr., T.J. Boerboom, and E.A. Jerde. 1994. Scale 1:24,000. **\$7.50.** *Folded only.*
- \*M-83** Aerial gamma radiation in Minnesota and adjacent areas of North Dakota and South Dakota. R.S. Lively and G.B. Morey. 1996. 1 plate with 4 maps. Scale 1:3,168,000. Paper plot-**\$10.50.**
- \*M-84** Surficial geology of Waseca County, Minnesota. B.A. Lusardi. 1997. Scale 1:62,500. *(See also M-73 for bedrock geologic maps of Waseca County.)* **\$7.50.** *Folded only.*
- \*M-85** Bedrock geologic map of the Virginia Horn, Mesabi Iron Range, St. Louis County, Minnesota. M.A. Jirsa, T.J. Boerboom, and G.B. Morey. 1998. Scale 1:48,000. *(Companion to RI-53.)* Paper plot-**\$10.50.**



- \***M-86** **Bedrock geologic map of the Midway area, St. Louis County, Minnesota.** M.A. Jirsa. 1998. Scale 1:12,000. (*Companion to RI-53.*) Paper plot-**\$10.50.**
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- \***M-92** **Bedrock geologic map of northwestern Minnesota.** M.A. Jirsa, V.W. Chandler, A.C. Runkel. 1999. Scale 1:200,000. Paper-plot **\$12.50.**
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- \***M-99** **Bedrock geology of the Aitkin 30 x 60 minute quadrangle, east-central Minnesota.** T.J. Boerboom, M.J. Severson, and D.L Southwick. 1999. 2 pls. Scale 1:100,000. Paper plots. Pl. 1, bedrock geologic map. **\$12.50** Pl. 2, data base map. **\$10.50.**
- \***M-100** **Bedrock geology of the Mille Lacs 30 x 60 minute quadrangle, east-central Minnesota.** T.J. Boerboom, M.J. Severson, and D.L. Southwick. 1999. 2 pls. Scale 1:100,000. *Pl. 1, bedrock geologic map-\$12.50; pl. 2, data base map-\$10.50.* Complete set paper plots-**\$23.00.**
- \***M-101** **Bedrock geologic map of the central Duluth Complex and western part of the Beaver Bay Complex, Lake and St. Louis Counties, Minnesota.** J.D. Miller, Jr., and V.W. Chandler. 1999. Scale 1:100,000. Paper plot-**\$12.50.**
- \***M-102** **Primary sources of construction aggregate in the Twin Cities seven-county Metropolitan Area, Minnesota.** G.N. Meyer and J.H. Mossler, compilers. 1999. 2 pls. on 4 sheets. Scale 1:100,000. *Pl. 1, map of primary aggregate sources [2 sheets]; pl. 2, data-base map [2 sheets]; each sheet, \$12.50.* Complete set paper plots-**\$50.00.** (*See also MGS Information Circular 46.*) Also refer to the DNR aggregate web site: [www.dnr.state.mn.us/lands\\_minerals/metroaggregate.html](http://www.dnr.state.mn.us/lands_minerals/metroaggregate.html).
- \***M-103** **Surficial geologic map of the Waconia quadrangle, Carver County, Minnesota.** B.A. Lusardi. 2000. Scale 1:24,000. Paper plot-**\$8.00.**
- \***M-104** **Bedrock geology and structure of the seven-county Twin Cities Metropolitan Area, Minnesota.** J.H. Mossler and R.G. Tipping. 2000. Scale 1:125,000. Paper plot-**\$12.50.**

- \*M-105 Bedrock geology of the Island View quadrangle, Koochiching County, north-central Minnesota.** C.B. Hemstad, R.W. Ojakangas, and D.L. Southwick. 2000. 2 pls. Scale 1:24,000. *Pl. 1, bedrock geology; pl. 2, bedrock outcrop; each sheet, \$8.00*. Complete set paper plots-**\$16.00**.
- \*M-106 Surficial geology of the St. Paul 30 x 60 minute quadrangle, Minnesota.** G.N. Meyer and B.A. Lusardi, compilers. 2000. Scale 1:100,000. Paper plot-**\$12.50**.
- \*M-107 Surficial geology of the Rochester 30 x 60 minute quadrangle, Minnesota.** Compiled by H.C. Hobbs. 2000. Scale 1:100,000. Paper plot-**\$12.50**.
- \*M-108 Surficial geologic map of the Watertown quadrangle, Carver, Hennepin, and Wright Counties, Minnesota.** B.A. Lusardi. 2001. Scale 1:24,000. Paper plot-**\$10.00**.
- \*M-109 Surficial geologic map of the Belle Plaine North quadrangle, Carver, Scott, and Sibley Counties, Minnesota.** B.A. Lusardi. 2001. Scale 1:24,000. Paper plot-**\$10.00**.
- \*M-110 Bedrock geology of the Cranberry Bay quadrangle, Koochiching and St. Louis Counties, north-central Minnesota.** C.B. Hemstad, R.W. Ojakangas, D.L. Southwick, and M. Nemitz. 2001. 2 pls. Scale 1:24,000. *Pl. 1, bedrock geology; pl. 2, bedrock outcrop; each sheet, \$10.00*. Complete set paper plots - **\$20.00**.
- \*M-111 Surficial geology of the Baxter quadrangle, Cass, Morrison, and Crow Wing Counties, Minnesota.** A.R. Knaeble. 2001. Scale 1:24,000. Paper plot-**\$10.00**.
- \*M-112 Surficial geology of the Brainerd quadrangle, Crow Wing County, Minnesota.** H.C. Hobbs. 2001. Scale 1:24,000. Paper plot-**\$10.00**.
- \*M-113 Surficial geology of the Gull Lake quadrangle, Cass and Crow Wing Counties, Minnesota.** H.C. Hobbs. 2001. Scale 1:24,000. Paper plot-**\$10.00**.
- \*M-114 Bedrock geologic map of the Eagles Nest quadrangle, St. Louis County, Minnesota.** M.A. Jirsa, T.J. Boerboom, and D.M. Peterson, compilers. 2001. Scale 1:24,000. Paper plot-**\$10.00**. Data CD also available-**\$5.50**.
- \*M-115 Surficial geology of the St. Cloud 30 x 60 minute quadrangle, central Minnesota.** G.N. Meyer, A.R. Knaeble, and J.B. Ellingson. 2001. Scale 1:100,000. Paper plot-**\$15.50**.
- \*M-116 Aggregate resource potential of Chisago County, Minnesota.** G.N. Meyer, and B.A. Lusardi, compilers. 2001. 2 pls. Scale 1:100,000. *Pl. 1, surficial geology; pl. 2, aggregate endowment; each sheet, \$10.00*. Complete set paper plots-**\$20.00**. Data CD also available-**\$5.50**.
- \*M-117 Superimposed magnetic on gravity anomaly map of the Central Duluth Complex and western part of the Beaver Bay Complex, Lake and St. Louis Counties, Minnesota.** V.W. Chandler. 2001. Scale 1:100,000. Paper plot-**\$10.00**.
- \*M-118 One hundred years of mining: alterations to the physical and cultural geography of the western half of the Mesabi Iron Range, northern Minnesota.** R.S. Lively, G.B. Morey, and E.J. Bauer. 2002. 4 pls. Scale 1:100,000. *Pl. 1, land-surface topography; pl. 2, drainage and cultural features; pl. 3, topographic disturbance; pl. 4 bedrock geology; each sheet, \$12.50*. Complete set paper plots-**\$50.00**.
- \*M-119 Geologic map of the Duluth Complex and related rocks, northeastern Minnesota.** J.D. Miller, Jr., J.C. Green, M.J. Severson, V.W. Chandler, and D.M. Peterson. 2001. Scale 1:200,000 and 1:500,000. *2 sheets; each sheet, \$17.50*. Complete set paper plots-**\$35.00**. (*See also Report of Investigations 58.*)
- \*M-120 Superimposed magnetic on gravity anomaly map of the Duluth Complex and related rocks, northeastern Minnesota.** V.W. Chandler. 2001. Scale 1:200,000. Paper plot-**\$17.00**.
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- \***M-139 Bedrock geology of the Two Harbors quadrangle, Lake County, Minnesota.** T.J. Boerboom, J.C. Green, and J.D. Miller, Jr. 2003. Scale 1:24,000. Paper plot-**\$10.00.** (See also M-138 for surficial geologic map.)
- \***M-140 Bedrock geology of the Castle Danger quadrangle, Lake County, Minnesota.** T.J. Boerboom, J.C. Green, and J.D. Miller, Jr. 2003. Scale 1:24,000. Paper plot-**\$10.00.** (See also M-144 for surficial geologic map.)
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- 96-3 Geology of the Bassett valley area [Minneapolis].** G.N. Meyer. 1996. Scale 1 inch = about 385 feet. 2 pls. Scanned paper-plots. *Pl. 1, surface sediment prior to development; pl. 2, depth to sand and gravel; each plate, \$10.00; text, 6 p. (photocopy), \$1.50. Complete set (2 plates and text)-\$21.50.*
- 96-4 Bedrock geology of Houston County, Minnesota.** A.C. Runkel. 1996. 3 pls. Scale 1:100,000. *Pl. 1, bedrock geology; pl. 2, bedrock topography; pl. 3, orientation of fractures in carbonate rocks; scanned paper-plots-\$9.50; text, 13 p. (photocopy), \$2.50. Complete set (3 plates and text)-\$31.00.*

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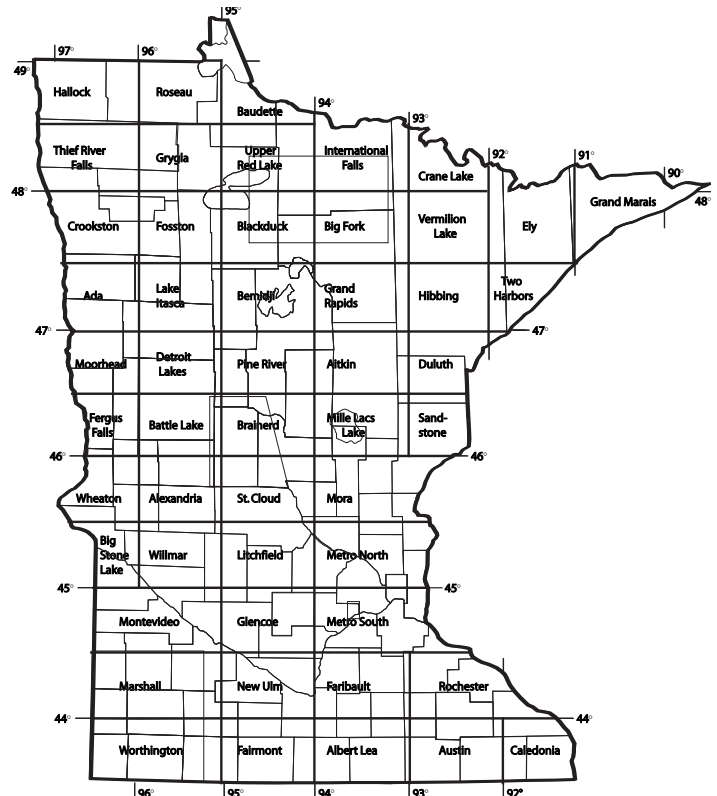
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<b>I-1529</b>	<b>Generalized bedrock geologic map of west-central Vermilion district, northern Minnesota.</b> P.K. Sims. 1985. Scale 1:48,000. <b>\$3.75.</b> <i>Flat only.</i>
<b>I-1965-B</b>	<b>Bedrock geologic map of the International Falls 1° x 2° quadrangle, Minnesota, United States, and Ontario, Canada.</b> Compiled by W.C. Day, D.L. Southwick, K.J. Schulz, and T.L. Klein. 1990. Scale 1:250,000. <b>\$4.50.</b> <i>Folded only.</i>
<b>I-2358-A</b>	<b>Bedrock geologic map of the Roseau 1° x 2° quadrangle, Minnesota, United State, Ontario and Manitoba, Canada.</b> W.C. Day, T.L. Klein, and K.J. Schulz. 1994. Scale 1:250,000. <b>\$9.00.</b> <i>Folded only.</i>
<b>MF-1835-G</b>	<b>Lithologic cross sections of Phanerozoic rocks in the northern Midcontinent, U.S.A.</b> Compiled by D.N. Mugel and W.P. Pratt. 1991. 7 p. 7 pls. Scale 1:1,000,000. <b>\$22.25.</b> <i>Folded only.</i>
<b>MF-1835-H</b>	<b>Maps showing areal extent of selected Paleozoic shales in the northern Midcontinent, U.S.A.</b> Compiled by W.P. Pratt. 1992. 7 pls. Scale 1:100,000. <b>\$26.00.</b> <i>Folded only.</i>

### TOPOGRAPHIC MAPS

*Most U.S. Geological Survey topographic maps of Minnesota are available from the Minnesota Geological Survey. The distinctive characteristic of a topographic map is that the shape of the Earth's surface is shown by contour lines. A topographic map includes symbols that represent such features as streets, buildings, streams, and woods.*

<b>Scale</b>	<b>1 Inch Equals:</b>	<b>Size of Map</b>	<b>Price</b>
1:24,000	2000 feet	27in x 22in	<b>\$8.50</b>
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1:250,000	4 miles	22in x 29in	<b>\$9.50</b>
1:500,000	8 miles	55in x 48in	<b>\$9.50</b>

All topographic maps are available for free download as image files at [ngmdb.usgs.gov/maps/TopoView](http://ngmdb.usgs.gov/maps/TopoView)

Search for topographic maps or aerial photos (not free): [www.terraserver.com](http://www.terraserver.com)

The Mn DNR also has a website for finding Minnesota topographic maps: [www.dnr.state.mn.us/maps/tomo.html](http://www.dnr.state.mn.us/maps/tomo.html)

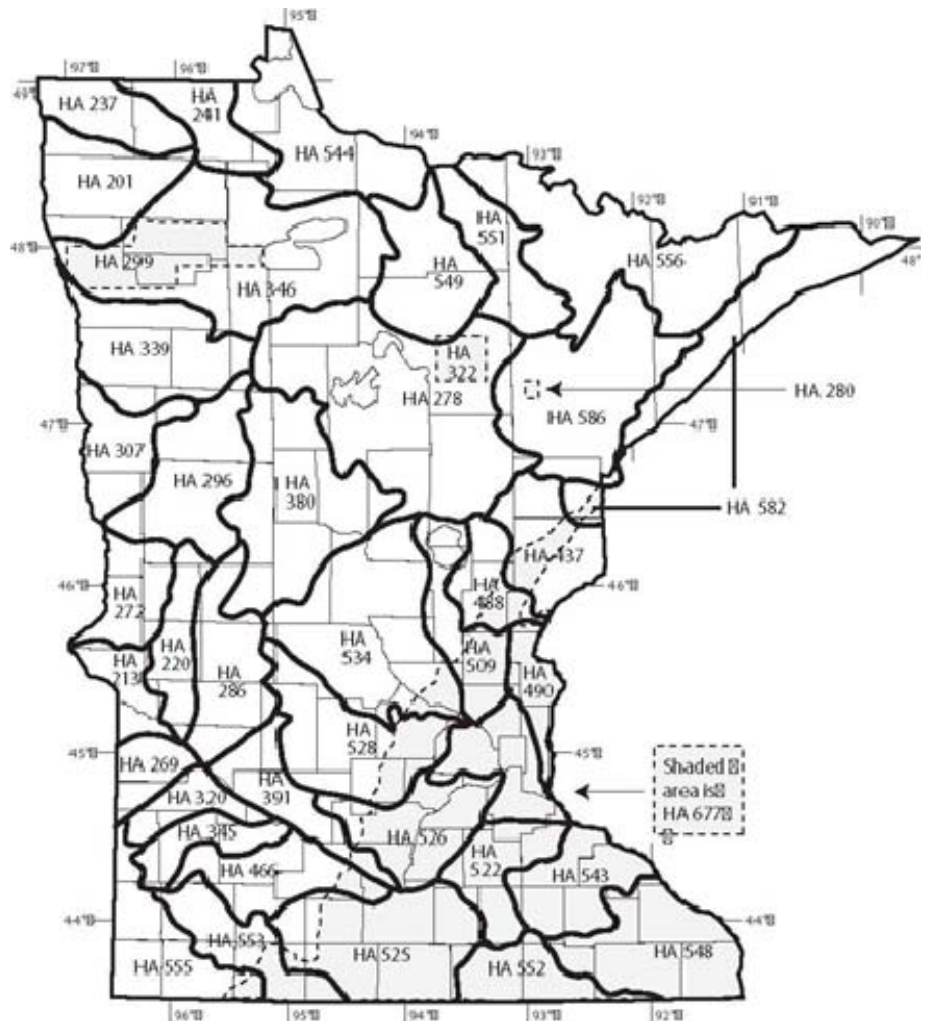
### USGS HYDROLOGIC ATLASES— Each atlas is \$7.50

<b>HA-201</b>	<b>Middle River</b>
<b>HA-213</b>	<b>Big Stone Lake</b>
<b>HA-220</b>	<b>Pomme de Terre River</b>
<b>HA-237</b>	<b>Two Rivers</b>
<b>HA-241</b>	<b>Roseau River</b>
<b>HA-269</b>	<b>Lac Qui Parle River</b>
<b>HA-272</b>	<b>Mustinka-Bois de Sioux</b>





- HA-278 Mississippi headwaters
- HA-280 Hibbing area
- HA-286 Chippewa River
- HA-296 Otter Tail River
- HA-299 Red Lake River reconnaissance
- HA-307 Buffalo River
- HA-320 Yellow Medicine River
- HA-322 Grand Rapids area
- HA-339 Wild Rice River
- HA-345 Redwood River
- HA-346 Red Lake River
- HA-380 Crow Wing River
- HA-391 Minnesota River-Hawk Creek
- HA-437 Kettle River
- HA-466 Cottonwood River
- HA-488 Snake River
- HA-490 Lower St. Croix River
- HA-509 Rum River
- HA-522 Cannon River
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- HA-526 Lower Minnesota River
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- HA-534 Mississippi and Sauk Rivers
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- HA-544 Lake of the Woods
- HA-548 Root River
- HA-549 Big Fork River
- HA-551 Little Fork River
- HA-552 Cedar River
- HA-553 Des Moines River
- HA-555 Rock River
- HA-556 Rainy Lake
- HA-582 Lake Superior
- HA-586 St. Louis River
- HA-677 Hydrogeologic framework and properties of regional aquifers in the Hollandale embayment, southeastern Minnesota



## NATIONAL GEOGRAPHIC

**Boundary Waters Canoe Area Wilderness Map Pack**, National Geographic, **\$23.90**.

**TOPO! Minnesota**. National Geographic. *USGS 7.5' topographic maps of Minnesota on CD-ROM. Seamless mapping with optional shaded relief. Supports many GPS receivers.* CD. **\$99.95**.

**TOPO! Weekend Explorer 3D**. Twin Cities area and boundary waters, Apostle Islands. National Geographic. *USGS 7.5' topographic maps of selected areas of Minnesota on CD-ROM. Seamless mapping with optional shaded relief. Supports many GPS receivers.* CD. **\$29.95**.

**US Road Atlas: Adventure Edition**. National Geographic. Paperback. **\$20.00**.

**Voyageurs National Park Recreation Map**. National Geographic. Scale 1:50,000. **\$11.95**.

## OTHER MAPS AND ATLASES

**Geologic Map, Mesabi Iron Range, Minnesota**. Second Edition. Compiled by D.G. Meineke and others. *Prepared for the 1993 meeting of the Institute on Lake Superior Geology.* 1999. Scale 1:62,500. **\$6.50**. Flat only.

**Minnesota Atlas and Gazetteer**. DeLorme Mapping. *Topographic maps (GPS grids) of the entire state (scale 1:190,000) and information on bike routes, campgrounds, fishing, hiking, hunting, parks, wildlife, and more.* 2001. 96p. **\$19.95**.

**Wisconsin Atlas and Gazetteer**. DeLorme Mapping. *Topographic maps (GPS grids) of the entire state (scale 1:150,000) and information on bike routes, campgrounds, fishing, hiking, hunting, parks, wildlife, and more.* 2000. 104p. **\$19.95**.

## BOOKS

**An Introduction to Caves of Minnesota, Iowa, and Wisconsin**. E. C. Alexander, Jr., ed. 1980. 1980 Speleological Society Convention Guidebook. 5 pls. Paperback. **\$5.50**.

**Geology on Display: Geology and Scenery of Minnesota's North Shore State Parks**. J.C. Green. 1996. Minnesota Department of Natural Resources. 69 p. Spiral-bound paper. **\$19.95**.

**A Guide to Minnesota's Scientific & Natural Areas**. Second Edition. 1999. Minnesota Department of Natural Resources. 194 p. Spiral-bound paper. **\$14.95**.

**The Lake Superior Agate**. Fourth Edition. S.F. Wolter. 2008. 111 p. Paperback. **\$24.95**.

**The Lake Superior Agate: One Man's Journey**. S.F. Wolter. 2001. 175 p. Paperback. **\$24.95**.

**Minnesota Fossils and Fossiliferous Rocks**. R.E. Sloan. 2005. 218 p. Spiral-bound paper. **\$30.00**.

**Minnesota's Geology**. R.W. Ojakangas, and C.L. Matsch. *An extensive overview of the Geology of Minnesota; includes numerous color plates.* 1982. 255 p. Paperback. **\$29.95**.

**Minnesota Highway Map**. MN Department of Transportation. **\$0.93**. **Free if picked up**.

**Minnesota History Along the Highways**. S.P. Rubinstein. *Presents the locations and texts of 60 geologic markers, and nearly 300 historic markers in Minnesota.* 2003. 322 p. Paperback. **\$13.95**.

**Roadside Geology of Minnesota**. R.W. Ojakangas. 2009. Mountain Press. 353 p. Paperback. **\$26.00**.

**Rock Pickers Guide to Lake Superior's North Shore**. M.S. Stensaas. 2000. 43 p. Paperback. **\$9.95**.

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