NEW PRODUCTION FROM U.S. GEOLOGICAL SURVEY

These newly published 7½" topographic quadrangle maps (1:24,000) are listed by their location on the superceded 15' topographic map of the area. They are available from the Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706 (608) 263-7389. Topographic quadrangles are $2.00 each, plus postage and handling.

1 RICE LAKE 15' TOPO
   NE¼ none
   NW¼ none
   SW¼ Rice Lake North '81
   SE¼ none

PHOTOREVISED 7½' QUADS
   A Lake Winter 1971-80, '82 PR

Order 7½' quads by name, NOT by the index number or letter used here for locational purposes.

AN ACRE IS

- 43,560 square feet
- 165 feet x 264 feet
- 198 feet x 220 feet
- 5,280 feet x 8.25 feet
- 2,640 feet x 16.50 feet
- 1,320 feet x 33 feet
- 660 feet x 66 feet

- 330 feet x 132 feet
- 160 square rods
- 208 feet 8.5 inches square or 208.71033 feet square
- any rectangular tract, the product of the length and width of which totals 43,560 square feet
UPDATES

LANDSAT PRICES
Remember that Landsat reproduction prices increased October 1st at the EROS Data Center. Refer to the January 1982 Bulletin supplement for the new prices.

GEODETIC CONTROL
The Office has been receiving unadjusted National Geodetic Survey horizontal control data in manuscript form for several areas in the state. The data vary in accuracy levels and often include elevations (in meters). The January Bulletin will include a detailed article on what's available.

PUBLICATIONS OF INTEREST

WG&NHS LIST OF PUBS
The Wis. Geological and Natural History Survey recently issued a new List of Publications (not taverns like you thought). The 46-page booklet includes a separate order form for convenience. Publication prices no longer include sales tax. Mailing charges are now based on the total amount of purchase and the buyer's location. There's also an additional service charge of 50¢ for four or less maps mailed in a tube. Get your new list of pubs from the M.A.P.S. Office, Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706 (608/263-7389).

DIRECTORY OF CURRENT CARTOGRAPHIC RESEARCH
This all new second edition lists nearly 150 current or recently completed research projects in cartography. The American Cartographic Association of the Am. Congress on Surveying and Mapping compiled statistical summaries (profiles) of research survey results, an index of active researchers by category, a list of research sponsoring/funding organizations and the names and addresses of each project's contact person. The directory is $15 for non-ACSM members. Contact: ACSM Publications Sales, 210 Little Falls Street, Falls Church, VA 22046 (703/241-2446).

MAPS FOR AMERICA
In this second edition (1982), a number of changes have been made in the text. Illustrations were also updated. Morris M. Thompson describes the National Mapping Program of the U.S. Geological Survey in relation to the history of USGS and the cartographic products of other organizations. The 265-page, hardbound book sells for $15 from the Distribution Division, USGS, 604 South Pickett Street, Alexandria, VA 22304.

A GUIDE TO OBTAINING INFORMATION FROM THE USGS
Written by P.F. Clarke, H.E. Hodgson and G.W. North; 42 pages; revised 1982; USGS Circular C0777; available free of charge from USGS at the address given above.
**CART LAB NEWS**

Jim Hilliard, Acting Associate Director of the UW-Cartographic Lab, provides the following information. For details, contact him at 385 Science Hall, Madison, WI 53706, 608/262-1363.

**Historical Boundary Data File**

The UWCL has completed a computer-assisted cartographic data base of the following states for the Newberry Library: Maryland, Delaware, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, WISCONSIN, Minnesota, Iowa, Missouri, North Dakota, and South Dakota. The data base contains historical and geographic information in digital form, including the boundary changes, location of government seats, and relevant geographic names for territories, states and counties in the United States since 1788. The data base itself is available on magnetic computer tape or as individually-plotted maps containing selected information from the data file. Interested persons should contact the Cart Lab or:

The Newberry Library
60 West Walton Street
Chicago, IL 60610.

**Special Scientific Areas Map**

Recently the UWCL completed a four-color map at 23" x 28" for special coastal areas in Wisconsin. It depicts the following information: state forests, state scientific areas, state wildlife areas, state fish management areas, state parks, erosion and flood hazard areas, natural recreation areas, and water-related economic development. Copies of the map may be obtained from the Wisconsin Department of Administration, Office of Coastal Management, GEF II, 101 South Webster, Madison, WI 53707.

**History of Madison**

The UWCL has completed the cartographic work for the History of Madison Project's History of Madison by David Mollenhoff. Included in the book are 48 historical and reference maps pertaining to the development of the city of Madison and the surrounding area. The publisher is Kendall Hunt Company.

**Cartographic Data Base of Madison**

Currently the UWCL is preparing a computer-assisted map data base containing the following data for the City of Madison:

1. Bureau of the Census census tract boundaries,
2. Bureau of the Census census tract block centroids,
3. Major roads and hydrography,
4. Planning analysis areas, and
5. Traffic analysis zones.

The data base is being prepared in conjunction with the UW Department of Planning and Construction, the UW Student Affairs Office, the UW Parking Office, and the Dane County Regional Planning Commission. It can be used for the thematic mapping of data geocoded to census tracts and census tract blocks.
COMING EVENTS

TRAVERSE AND CURVE SHORTCUT CALCULATIONS
An education program on November 22 at Iowa State University in Ames, Iowa; Jud Rouch, instructor. Sponsored by the Society of Land Surveyors of Iowa and Iowa State University Engineering Extension, presented through the Am. Congress on Surveying & Mapping/Am. Society of Photogrammetry Education Program. For information call Carol Baker (515) 294-8815.

LAND SURVEYING REFRESHER
This refresher course is intended for those surveyors who are preparing to take the Wisconsin Land Surveying registration exam. Both the fundamentals and principles and practice sections of the examination will be covered. Topics include the U.S. public land system, math, legal aspects, instrument adjustment, state plane coordinates, astronomy, photogrammetry, route surveying and property descriptions.

The Land Surveying Refresher will be presented in eight, two-hour sessions over the Statewide Extension Education Network (SEEN), January 5-February 23, 1983 (Wednesday evenings). If you would like more details, contact Donald M. Walker, Course Coordinator, UW-Extension, Department of Engineering & Applied Science, (608) 262-7988.

MAPS AND GRAPHICS FOR THE VISUALLY HANDICAPPED
The Assoc. of American Geographers is sponsoring the first international symposium on maps and graphics for the visually handicapped March 10-12, 1983 at the Dupont Plaza Hotel, Washington, D.C. Emphasis is on recent research and experimental work in spatial communication. Contact Patricia J. McWethy, AAG, 1710 Sixteenth Street NW, Washington, DC 20009 (202) 234-1450.

REMOTE SENSING OF ENVIRONMENT
The 17th International Symposium on Remote Sensing of the Environment will be held in Ann Arbor, MI, May 9-13, 1983. For more information contact Dr. J.J. Cook, ERIM, P.O. Box 8618, Ann Arbor, MI 48107 (313) 994-1200.

MAPPING THE GREAT PLAINS
The Center for Great Plains Studies at the University of Nebraska-Lincoln will sponsor a conference on mapping the plains in the 18th and 19th centuries. The conference will be held on April 28-29, 1983. Additional information can be obtained from the Program Committee, The Center for Great Plains Studies, 1213 Oldfather Hall, University of Nebraska, Lincoln, NE 65588.

PROCESSING REMOTE SENSING DATA
The ninth international symposium on machine processing of remotely sensed data (with special emphasis on resource evaluation) will be held June 21-23, 1983 at Purdue University, West Lafayette, IN. Symposium coordinator is D.B. Morrison of Remote Sensing (LARS). Contact him at Purdue University, 1220 Potter Drive, West Lafayette, IN 47906 (317) 494-6305.

NATIONAL COMPUTER GRAPHICS ASSOC.
The 1983 NCGA conference will be in Chicago June 27-30, 1983 at McCormick Place. Over 1,000 computer graphic exhibitors are expected. A computer graphics art exhibit is planned at the Art Institute of Chicago. More information is available from Cade Ross, NCGA, 8401 Arlington Blvd., Fairfax, VA 22031 (703) 698-9600.
The five federal agency cooperative program to acquire high-altitude aerial photography has made significant progress towards its goal of total national coverage within its authorized five-year time frame. In the case of Wisconsin the program is well on the way to completion.

Two types of imagery are being acquired: black-and-white (B&W) photography at 1:80,000 scale (1 inch = 6,667 feet) and color infrared (CIR) at 1:56,000 scale (1 inch = 4,667 feet). The photography is acquired by a high-altitude aircraft with two camera systems. The B&W imagery is held by the EROS Data Center of the U.S. Geological Survey located at Sioux Falls, SD 57198 (contact User Services Unit 605/594-6151). The CIR imagery is processed by the Aerial Photographic Field Office of the USDA-ASCS, 2222 West 2300 South Street, P.O. Box 30013, Salt Lake City, UT 84130, 801/524-5856.

Through its affiliation with the National Cartographic Information Center (NCIC), the State Cartographer's Office has current NHAP map indexes. In addition we have ordering forms and price information for the CIR coverage held by the USDA-ASCS. Anyone interested in additional information on this coverage may contact the office at 608/262-3065. The current price for a standard 9" by 9" CIR print is $7.00 from the USDA-ASCS.

During the summer the Wisconsin State Journal of Madison published 5 CIR photography prints over various cities.

The cities were Verona (May 16), Waunakee (June 30), Portage (July 18), Wisconsin Dells (August 9), and Milwaukee (October 4).

It is anticipated that the spring 1983 acquisition will complete the NHAP photography for Wisconsin. Refer to Bulletins v. 7, no. 2 and v. 8, no. 1 for more information.
MEET BLM

The Bureau of Land Management (BLM) is part of the U.S. Dept. of the Interior. One of its functions is management of Federal lands. BLM manages 807 Federally-owned islands, 722 acres of Federally-owned uplands and 148,121 acres of Federal Mineral Ownership (FMO) in Wisconsin. Most of the FMO is located within the Nicolet and Chequamegon National Forests; however, some of the FMO underlies non-Federally owned surface. Several minerals of great potential in Wisconsin in the order of their commercial value are: copper, nickel, lead, gold, silver, tin, and cadmium. A recently discovered mineral with high potential is zinc which was discovered near Crandon in 1976. Since this discovery, many prospecting permit applications, most within the Nicolet National Forest, have been issued. Copper and nickel deposits are mainly located in central Wisconsin; one study area is Black River Falls. Lead and zinc studies are presently concentrated in southwestern Wisconsin.

One important program concerned with FMO is the Federal Minerals Management Mapping Program (FMMMP). In this program, maps are developed to portray all forms of public surface ownership and FMO acreage in the state. Seventeen maps for Wisconsin have been published.

The field office in Duluth, Minnesota is responsible for developing a management plan for BLM resources within Wisconsin. This plan, scheduled for completion in 1982, will identify management options for BLM surface and mineral ownership in the State including possible transfer of some parcels to state, local or other agencies. Their management plans intend to complement state and local plans whenever possible.

OTHER BLM PROGRAMS

BLM participated in the Wild and Scenic River Study for the Wisconsin River conducted in 1975 and 76. In the near future, they will conduct an inventory to determine the wilderness potential of BLM islands in Wisconsin. Currently BLM is conducting wildlife inventories on BLM lands in Wisconsin.

BLM has recently contracted for an inventory of cultural resources on BLM surface land in Wisconsin. The inventory will involve a narrative overview, a compilation of recorded sites on or within two miles of BLM-administered surface, and a sample field inventory of five percent of the BLM islands in Wisconsin.

BLM's Wild Horse and Burro Adoption Program, operated out of the BLM distribution center near Nashville, Tennessee, also involves Wisconsin. Over 48 adoptions in Wisconsin have taken place and applications are still being received. (See page 12 for related item.)

Source: BLM

FEDERAL ADDRESSES

Want to talk to someone at BLM? Have a question for USGS? Then hang on to your mailing cover. Inside it are addresses and phone numbers for 13 of Wisconsin's most favorite federal agencies. The numbers are guaranteed correct as of November 1, 1982, but no promises are made after that.
Gretchen L. Coles is the new county cartographic catalog assistant editor. She replaces Jerry Norenberg who graduated with an M.S. in the Environmental Remote Sensing Program. After a period of training with Jerry over the summer, Gretchen assumed a 50% Project Assistantship as assistant editor.

Gretchen received her M.F.A. degree in visual art (3-D) from Indiana University-Bloomington in 1974. She is presently working toward an M.A. in Cartography at U.W.-Madison. Gretchen is a studio artist and in the past several years has worked for various publications, map producers and land surveyors in the Boston area. She is a member of American Congress on Surveying and Mapping and the North American Cartographic Information Society.

Laurie Boyer is now in her second year of a 50% Project Assistantship as Production Manager. Under her guidance the student hourly part-time staff has improved the quantity and quality of its catalog page production. This is in spite of the high turnover nature of student employees.

Christine Reinhard, Catalog Editor, is quite pleased with the teamwork and enthusiasm Laurie and Gretchen generate.
CARTOGRAPHIC DATA INVENTORY

Since September 1982 the State Cartographer's Office has been inventorying cartographic data held in various offices located in eastern Wisconsin counties. This program was partially funded by the National Cartographic Information Center (NCIC) of the U.S. Geological Survey. Bulletins v. 8, no. 3, no. 1 and v. 7, no. 4 document the history of the project. Our application for continued funding was not approved by NCIC for FY-83 because of federal budget cutbacks that didn't allow NCIC to underwrite any state applications. This nonfunding forced us to discontinue the employment of Ms. Joan Koppa as a full-time field inventory specialist.

In October 1982, the Committee on State Cartography decided to continue the inventory with office funding but at a greatly reduced level. Mr. Kenneth Kailing has been hired as a 50% time Project Assistant for inventory field representative. Ken will spend approximately 6 inventory workdays in the field per month in the collection of cartographic data. His first assignment will be to complete the inventory in BROWN County.

What has been accomplished to date? Over 1,500 cartographic entries have been collected and 45% of these have been encoded into NCIC's automated system. We have completed the counties of CALUMET, DODGE, DOOR, KEWAUKEE and MANITOWOC. During the winter we will complete Brown County. In early 1983 we will fully describe the contents of this inventory and its automated output capabilities.

MAP LIBRARY DEDICATION

On Nov. 4th, people from across the country gathered to honor Professor Emeritus Arthur H. Robinson (Geography UW-Madison) at the dedication of the Arthur H. Robinson Map Library. The former Map and Air Photo Library recently moved into a remodeled, spacious wing of Science Hall. This provided a highly appropriate opportunity for the University to honor a man internationally considered a dean of cartography.

The ceremonies included an address by Walter Ristow, former Chief of the Geography and Map Division, Library of Congress and a formal opening by a representative of Chancellor Shain. Mary Elizabeth Robinson unveiled a portrait of her husband.

A reception in the Map Library capped the festivities.
KENOSHA AND RACINE FARM LAND PRESERVATION

The County Boards of Kenosha and Racine adopted farmland preservation plans earlier this year. The two county planning staffs prepared the plans with the help of the Southeastern Wisconsin Regional Planning Commission (SEWRPC). The plans include refined delineations of prime agricultural lands, of environmental corridors, and of areas in which urban development is anticipated to occur over the next two decades. The plans recommend that the prime agricultural lands and primary environmental corridors be protected from urban development to the maximum extent practicable. The Towns of Waterford and Burlington in Racine County have already adopted and applied Racine County’s exclusive agricultural zoning. The zoning district maps of these two towns have been reviewed and certified by the Wisconsin Agricultural Lands Preservation Board. Farmers whose land had been placed in the exclusive agricultural zoning district are now eligible to apply for tax relief under the state’s farmland preservation program. It is expected that most of the remaining towns in Kenosha and Racine Counties will apply exclusive agricultural zoning to preserve the prime agricultural lands delineated in the plans.

Full documentation is available in SEWRPC Community Assistance Planning Report No 45, A Farmland Preservation Plan for Kenosha County, Wisconsin, and SEWRPC Community Assistance Planning Report No. 46, A Farmland Preservation Plan for Racine County, Wisconsin. Contact SEWRPC, Old Courthouse, P.O. Box 769, Waukesha, WI 53187.

Source: SEWRPC

At long last, what we've all been waiting for! ZIP code maps for Wisconsin! The Bureau of Health Statistics conducted a ZIP Code Mapping Project and published the results in October. Population Estimates and Maps for Five-Digit Code Areas in Wisconsin, 1980-1981 describes the methodology employed in identifying and mapping ZIP Code areas and developing population estimates. It contains a list of all non-mappable five-digit ZIP Codes, a series of 72 county ZIP Code maps, and a table for use in converting minor civil division data into five-digit ZIP Codes. The table also includes population estimates by ZIP Code for 1980 and 1981. The tremendous task of collecting and processing the ZIP Code data was carried out by Russell S. Kirby under the supervision of Henry C. Krebs.

The Bureau of Health Statistics collects major data sets like the Hospital Discharge Survey and the Cancer Reporting System by ZIP Code. These data sets are used widely by health planners, epidemiologists and policy makers, yet the full value of the information couldn’t be realized because no population estimates or maps for those areal units were available. Now users of health data will be able to study health statistics more effectively. Marketing researchers, planners, analysts, and government officials will find this a unique and valuable publication. To order, send $5.00 (check or money order) to the Wisconsin Bureau of Health Statistics, One West Wilson Street, Room 480, P.O. Box 309, Madison, WI 53701. Be sure to indicate the name of the report, Population Estimates for Five-Digit ZIP Code Areas in Wisconsin, 1980-81. For more information, contact Russell Kirby, (608) 266-8745.
STATE HIGHWAY MAPS

Photographs of Wisconsin governors will no longer appear on the covers of state highway maps, according to the State Department of Transportation.

As is common in many states, photographs of governors and a message of greeting to motorists have appeared on official Wisconsin maps for more than 20 years. Gov. Lee Dreyfus, for example, has been pictured since he took office in 1979.

"We can save time, money and everything else," Transportation Secretary Owen Ayres said in announcing that the new map will feature a scenic picture of the State Capitol.

Thomas E. Carlsen, chief of special services under Ayres, said the savings will come from reduced obsolescence of the maps, 2.5 million of which are printed at 84 cents a piece over a two-year publication cycle.

"The picture dates the map," Carlsen said. "Roads aren't changing much anyway. We hate to have people just throw the maps away."

Carlsen added that the new edition of the state map will not be dated—another change to reduce perishability.

Source: The Capital Times

PUBLIC LAND SURVEY REPORT

During the past 18 months, State Cartographer Art Ziegler has been a member of the Committee on Integrated Land Data Mapping of the National Research Council, National Academy of Sciences. Representatives from various states and federal government agencies studied the current state of the national Public Land Survey System.

The study was part of an overall effort to define the need for cadastral mapping procedures in the United States. The initial report of the National Research Council was the Need for a Multipurpose Cadastre (National Academy Press, 1980).

The Committee studied the current needs of the Public Land Survey System as well as the demand for continuance of the Survey. The level of accuracy required for coordinates on survey monumentation as needed for large-scale mapping programs was a major concern. Also the latest methods of determining positions and the costs involved were included in the study.

In October 1982, the National Academy Press published the Committee's report. It is a 74-page document entitled Modernization of the Public Land Survey System. A limited number of copies were printed and single copies may be ordered from the Bureau of Land Management while the supply lasts. Contact Mr. Douglas Wilcox, Division of Cadastral Survey 420, Bureau of Land Management LLM 720, 18th and C Streets NW, Washington, D.C. 20240.
NEW MAPS

DUBUQUE, IА-WI-IL
The Dubuque 1958, 1:250,000 (1" = about 4 miles) is revised to 1981. Sheet size is about 22 x 32 inches. It includes woodland information and 50-foot contours. $3.25 from the U.S. Geological Survey (address below).

FLOOD OF JULY 1-5, 1978, ON THE KICKAPOO RIVER, SOUTHWESTERN WISCONSIN

The Kickapoo River Valley in southwestern Wisconsin had a devastating flood ($10 million estimated damages) during July 1-5, 1978. The flash flooding was caused by intense storms on June 30-July 2. Total rainfall accumulation ranged from 5.8 inches near Ontario to 9.5 inches at La Farge. Elevation and delineation of the flood are shown on mosaics of black-and-white aerial photographs. The 100-mile reach from Wauzeka to Wilton is shown on the aerial photography.

GEOLOGIC MAP INDEX OF MICHIGAN
Compiled by W.L. McIntosh, M.F. Eister, and D.M. Sparks. 1978 (1982). Free on request from the U.S. Geological Survey (address below).

GEOLOGIC MAP INDEX OF WISCONSIN
Compiled by W.L. McIntosh, M.F. Eister, and D.M. Sparks. 1978 (1982). Free on request from the U.S. Geological Survey (address below).

1:100,000 MARINETTE, WI-MI
This intermediate scale map is prepared on a 30' x 60' format. The contour interval is 10 meters. It's available for $3.25 from the U.S. Geological Survey (address below).

Order the USGS maps listed above from the Eastern Distribution Branch, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

LAND USE/LAND COVER TWO HARBORS
Open-file report 82-0010, Land use and land cover and associated maps for Two Harbors, MN-WI-MI, consists of a map coded for statistical data development. It's keyed to the U.S.G.S. Two Harbors topographic 1:250,000 map. Also included is a positive of the cultural base of that map. Order from the U.S.G.S. Midwest-Continent Mapping Center, NCIC-M, 1400 Independence Rd., Rolla, MO 65401.

PRELIMINARY SURFICIAL GEOLOGIC MAP OF THE IRON RIVER 1° BY 2° QUADRANGLE, MI & WI
U.S.G.S. Open-File Report OF 82-0301 by W.L. Peterson is 28 pages with two over-size map sheets at 1:250,000 (1" = about 4 miles). Available from the Open-File Services Section (OFSS), Western Distribution Branch, U.S. Geological Survey, Box 25425, Federal Center, CO 80225 (telephone: 303/234-5888). When continued
NEW MAPS, cont.

ordering, please use the open-file number and full title. Microfiche $4.50; paper copy $6.75.

BLM SURFACE MINERALS MAPS
Three more maps showing the location of public lands and Federal mineral ownership in northern Wisconsin are now available for $2.00 each from the Bureau of Land Management (BLM). The new BLM maps cover the areas around OUTER ISLAND, RHINELANDER, and WABENO. They are part of a series of maps produced for a BLM program to map areas of mineral exploration interest coinciding with significant acreage of Federally-owned mineral rights. They are published at the scale of 1:100,000 (one centimeter represents one kilometer) and cover an area approximately 34 x 49 miles. The maps show contours and elevations in meters; highways, roads, and other cultural features; water bodies; and geographic names. To order the maps or to obtain a free BLM map index, contact the Bureau of Land Management, Duluth Field Office, 125 Federal Building, Duluth, MN 55802. (See related article on page 6.)

NORTHEASTERN WIS. ROAD MAP
Milwaukee Map Service has completed its series of full-color road maps for the state with the publication of the Northwestern Wisconsin Road Map. The map covers 19 counties and shows their recreational attractions.

The accompanying book, with its humorous cover, contains indexes to cities and villages, county road names, parks, golf courses, X-C and downhill ski areas, as well as hunting and fishing grounds. The Northwestern map sells for $5.00 (plus sales tax and $2 UPS delivery). The other road maps are: Southeastern $5, Northeastern $5, and Southwestern $4. Order from Milwaukee Map Service Inc., 4519 W. North Ave., Milwaukee, WI 53208, phone 414/445-7361.

AGRICULTURE ATLAS
The U.S. Bureau of the Census recently released a new graphic summary report using multi-color pattern and dot maps to illustrate the Nation's agricultural picture. The county data used for the maps and charts came from the 1978 Census of Agriculture. Topics include the number, size, and type of farms; land use; tenure, occupation, and characteristics of operators; farm tenure; value of products sold; crops harvested; livestock inventories; selected farm expenses; etc. The 1978 Census of Agriculture: Graphic Summary, Volume 5, Part 1, is available for $8 from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.