

*** VOLUME 4 ***

✓ The Wisconsin Mapping Bulletin begins its fourth year of publication with issue No. 1 containing 10 pages. Comparing this to all 4 issues of Volume 1 in 1975 which totaled 10 pages, it seems that either there is an increase of cartographic activity in the state or the Office is doing a better job of collecting information; we assume it is the former. Bulletin distribution is approaching 900 and we are concerned about postal expenses. With the April issue we will attempt to verify our mailing list. In the meantime we would appreciate receiving address corrections and discontinuation notices.

WISCONSIN UNIFIED AERIAL PHOTOGRAPHY PROGRAM

Since October 1977 representatives of the Departments of Administration, Agriculture, Natural Resources, Revenue and Transportation along with the State Cartographer have been meeting to prepare a proposed budget revision item for submission to the legislature for the acquisition of statewide aerial photography during 1978 and 1979.

The driving force behind the requirement for this aerial coverage is a potential cooperative agreement between DNR Forestry and the U.S. Forest Service to perform a total state inventory of forest and woodland stands. Additional requirements such as wetlands mapping, agricultural preservation mapping and tax verification are considered in this joint proposal.

The proposed plan is to acquire at 1:20,000 scale (1" = 1667') color infrared transparencies and prints plus black-and-white enlargements (1" = 400') centered on four Public Land Survey sections. If acquired the photography would be available for purchase in a variety of contacts and enlargements from the Department of Transportation, Engineering Services.

In this proposal all federal agencies who normally acquire aerial photography on Wisconsin have been contacted for their possible cooperation in funding and/or purchase after acquisition.

The current schedule will have the proposal through the budget review and up for consideration by the legislature prior to June 1978. The April Bulletin will update the status of this proposal.

LAND RECORDS COST PROJECT

During the last six months the State Cartographer's Office has assisted the Department of Administration and the UW Institute for Environmental Studies in a project briefly entitled "Land Records; the Cost to the Citizen". The information presented here is from the final draft of the study which is due to be published within 3 months.

Title: "Land Records - The Cost to the Citizen to Maintain the Present Land Information Base - A Case Study of Wisconsin"

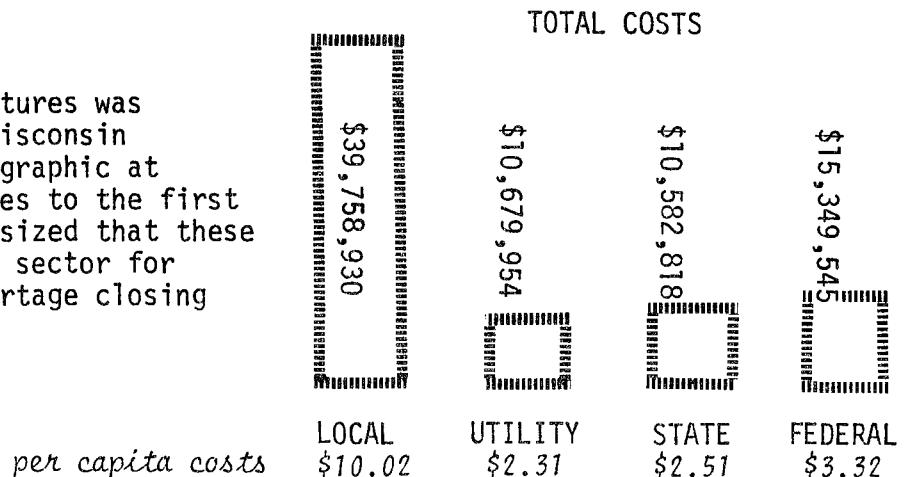
Definition: Land records are defined as "those spatially-related documents that record governmental interest in the physical, legal and environmental aspects of the land - whether in, on, above or under the surface of the earth, including maps, plats, inventories, logs, microfilm, publications, field notes, reports and files."

Sponsor: The United States Geological Survey (Department of Interior) RALI program (Resource and Land Investigations) has funded a series of studies on land records problems. As part of this effort, RALI has arranged for the Council of State Governments to conduct case studies in Texas, Connecticut and Wisconsin. *Wisconsin's case study was the only one to derive cost factors.*

Methodology: By dividing the state into eight equal strata for area and for population a random sample of eight civil towns for area and eight civil towns for population were selected. In addition any village or city that fell within or abutted the civil town was included as were the county and regional planning agencies in the collection of cost data. The city of Milwaukee was collected separately as was the cost of public utilities. Finally the state and federal costs were collected. The year utilized was 1976. All accumulated cost figures were weighted and projected to a cost per resident of the state of Wisconsin population

Total Cost:

The total arrived at for expenditures was \$77,371,247 or \$18.16 for each Wisconsin citizen for the year 1976. The graphic at right breaks down the cost figures to the first level of summation. It is emphasized that these costs do not include the private sector for such items as title searches, mortgage closing costs or land surveys.



D.N.R. WETLANDS MAPPING

Late in the last session, the Wisconsin Assembly passed Substitute Amendment 3 to the 1977 Assembly Bill 794 which requires mapping of wetlands and makes an appropriation to the Department of Natural Resources for carrying out the program. A senate committee has since considered the amendment and approved it for consideration by the full Senate. Final action on the Substitute Amendment is scheduled for late winter and will be reported in this Bulletin.



FARMLAND PRESERVATION ACT

CHAPTER 91 -- WISCONSIN STATUTES

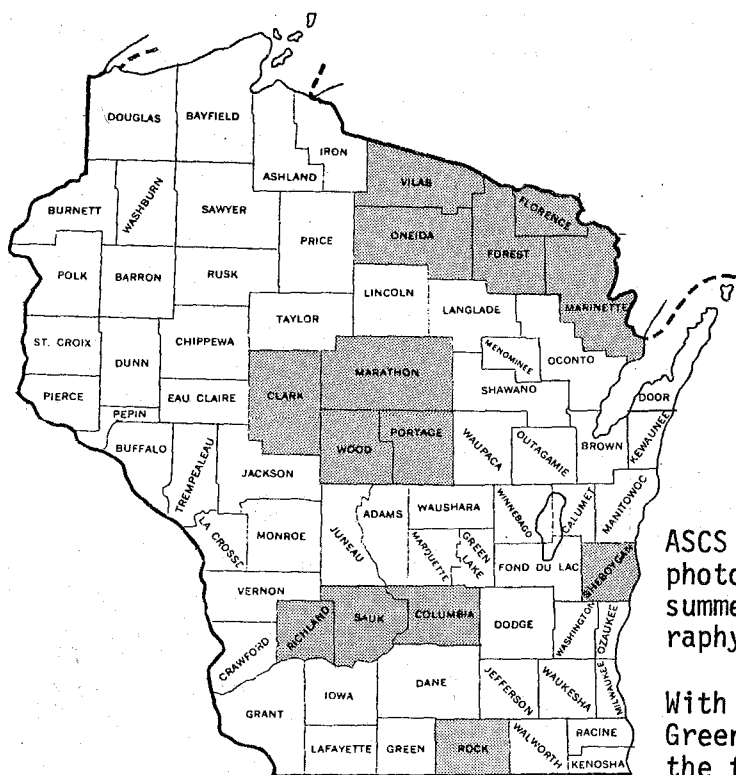
In meetings from October through December 1977 a technical advisory committee to the Department of Agriculture, Trade & Consumer Protection finalized standards and procedures for mapping, planning, and zoning as required under the Farmlands Preservation Act. By January 1, 1978 this information was distributed to all county offices. In addition, during January a team from the Departments of Agriculture and Local Affairs and Development is planning meetings at various locations throughout the state to explain these procedures to county officials and University of Wisconsin-Extension personnel.

It is extremely important that county officials involved in agricultural preservation or zoning at the local level be aware of this activity since there is a very tight timetable in making applications for funding assistance during the remainder of the state's fiscal year.

For additional information contact your local county U.W.-Extension Agricultural or Resource personnel.

A. S. C. S. AERIAL PHOTOGRAPHY PLANS

As a result of an inquiry from the state's Unified Aerial Photographic Committee (see p. 1) the Agricultural Stabilization and Conservation Service has informed this Office of their plans for the acquisition of hi-flight photography at a scale of 1:40,000 (1" = 3,333') for fiscal year 1978 (Oct. 1977 through Sept. 1978). The ASCS plans to acquire black-and-white photography over the following 14 Wisconsin counties:



Clark	Portage
Columbia	Richland
Florence	Rock
Forest	Sauk
Marathon	Sheboygan
Marinette	Vilas
Oneida	Wood

ASCS usually acquires their crop stabilization photography during the late spring or early summer. As ASCS actually collects this photography, it will be announced in the Bulletin.

With the exception of the 4 counties of Dane, Green, Iowa, and LaFayette in 1976, this will be the first major acquisition by ASCS since 1974.

SURVEYORS' PAGE

PUBLIC LAND SURVEY SECTION CORNER REMONUMENTATION



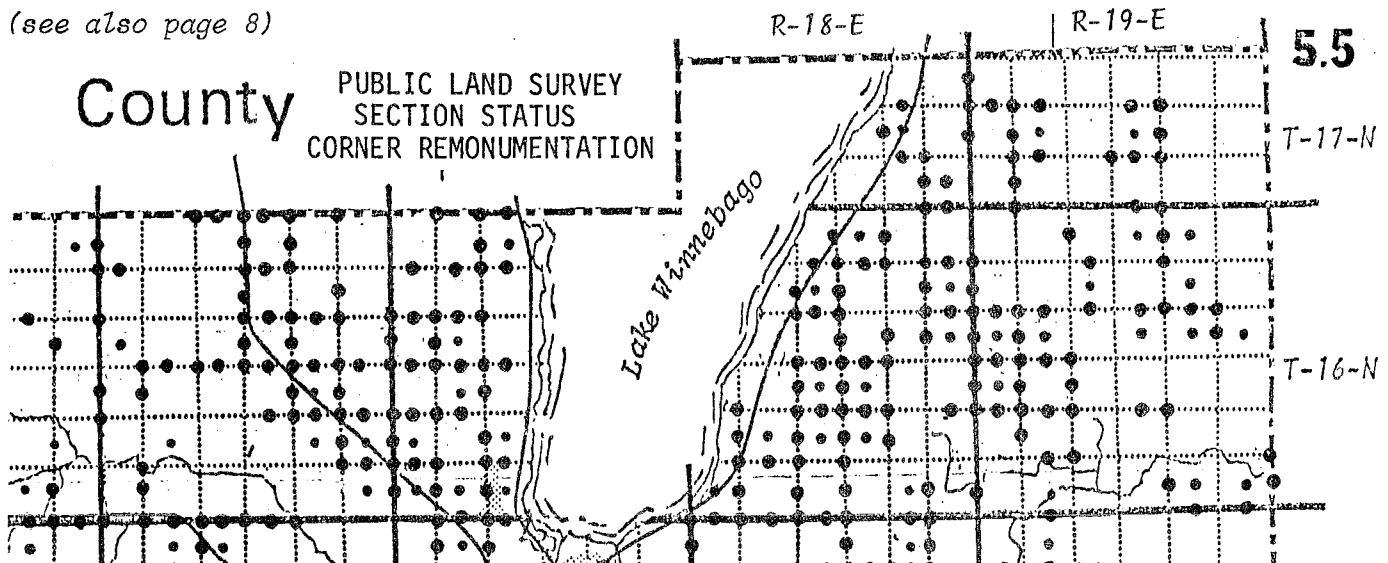
Art Ziegler, the State Cartographer will be addressing the Wisconsin Society of Land Surveyors (WSLS) at the annual Institute, held at Stevens Point on January 25, 1978. Mr. Ziegler will talk on "Current State of Mapping Programs" with particular emphasis on the recently completed Land Records Cost Study by the UW Institute of Environmental Studies, The Department of Administration and the State Cartographer's Office (see page 2 of this Bulletin).

Another subject that will undoubtedly be discussed will be the WSLS proposal for a state program on Section Corner Remonumentation. Currently this Office is undertaking a study to determine the extent of existing section corner "locations", that is, the corner has been found, and is not at this time ascertaining any criteria as to the validity or accuracy of any remonumentation effort.

This Office would be interested in receiving information from county surveyors, other county offices and private surveyors as to the status of section corners. Primarily the Office is concerned with only the number and location of corners "found" and not the official documentation of the survey, so a summary graphic is preferred. The Office will supply a section index of the county at 1:250,000 scale for annotation of this status, if requested.

The following sample for a portion of one county illustrates the type of status graphic this Office would like to acquire statewide. As of the end of December 1977, a partial survey has resulted in status summaries from 14 counties. Anyone interested in assisting in this survey should contact the State Cartographers' Office.

(see also page 8)



STATE PLANE COORDINATES---NEW NORTH AMERICAN DATUM--1983

Of interest to all involved in using state plane coordinates is an article by Mr. Joseph F. Dracup, Chief, Control Networks Division, National Geodetic Survey, NOS, NOAA in the November 1977 issue of the American Congress of Surveying and Mapping Bulletin, page 27 and 28. The article details the National Geodetic Survey review of coordinate reference systems and summarizes their decision with regard to the 1983 datum as recorded in the Federal Register, Vol. 42, No. 57, March 24, 1977, pp. 15913-15914.

SOILS INFORMATION

U.S.D.A. SOIL CONSERVATION SERVICE (SCS) IMPORTANT FARMLANDS MAPPING

The SCS has recently printed the initial two "important farmland" county maps for Wisconsin. Lithographed in four colors (black, blue, green, and yellow), maps are available for La Crosse and Rock Counties. Washington County is currently at the Government Printing Office with publication expected by April 1978. The maps are at 1:100,000 scale (1" = 8,333'), a land section being approximately 5/8" square. In addition to standard map information they depict the following:

Prime farmland
Unique farmland
Farmland of statewide importance
Farmland of local importance

Public Land Survey section grid
Urban and built-up areas
Wisconsin plane coordinate system
UTM metric grid

Currently in the final stages of production with printing scheduled by the end of 1978 are the following counties:

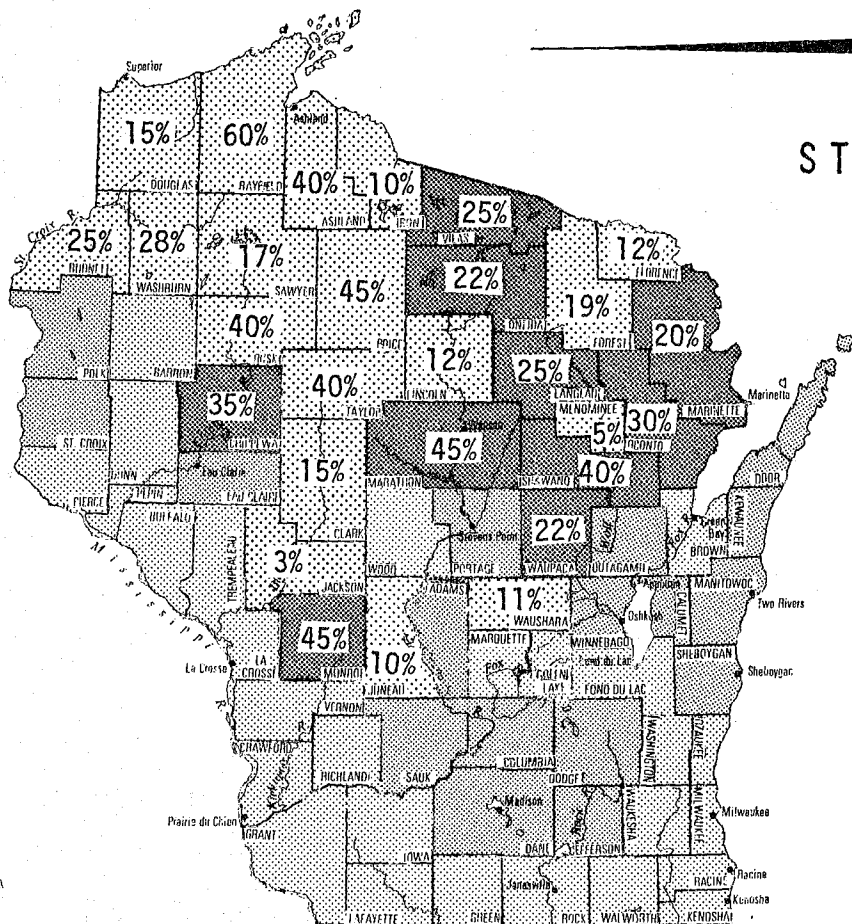
Brown
Kenosha

Milwaukee
Ozaukee

Racine
Walworth

Waukesha






Copies of La Crosse and Rock have been distributed to the district conservationist in the county and are available for issuance to cooperators of the SCS and all levels of government within the county. General public distribution is by the Government Printing Office. Contact the local SCS office for purchase information.



STATUS OF SOIL SURVEYS

SOIL CONSERVATION SERVICE

January 1, 1978

- January 1, 1970
- | | |
|---|--|
|  | Modern published soil survey |
|  | Modern soil survey with field mapping completed; to be published |
|  | Modern soil survey being conducted with date for completion set |
|  | Old published soil survey |
|  | Percent of county with modern soil survey completed |

↑ INCREASED PRODUCTION FROM U. S. G. S. ↑

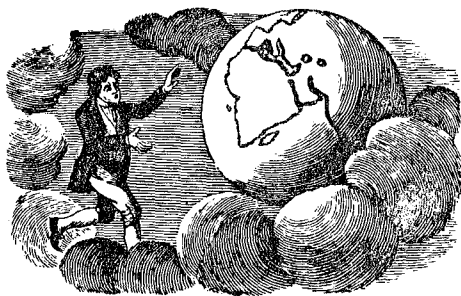
1977 proved to be a year of increased map production for Wisconsin from the Topographic Division of the U.S. Geological Survey. This is in large part due to the state's continued cooperative program and the workings of the state's coordinating group, the Wisconsin Topographic Committee and its chairman, M.E. (Buzz) Ostrom, the State Geologist. To briefly summarize the year's results:

- a. 86 new 1:24,000 maps ($7\frac{1}{2}'$ quads) received ---- 8% of state's total
- b. 119 new orthophotoquads, 1:24,000 scale ----- 10% of state's total
- c. 33 1:24,000 topo maps photorevised ----- 3% of state's total
- d. 10 county base map reproducibles available --- 14% of counties
- e. 8 30' by 1° quad reproducibles available ---- 10% of state

Cooperative monies have allocated new $7\frac{1}{2}'$ topographic quad production for all areas of the state to replace every planimetric 1:48,000-scale quad and all 15' (1:62,500) topographic quads that are pre-1960. During 1977, production was authorized for 136 new $7\frac{1}{2}'$ quads from both cooperative funding and the Geological Survey's internal funding programs. If this funding rate continues, all $7\frac{1}{2}'$ quad areas will be authorized for production by 1979.

Schedules received from the Mid-Continent Mapping Center, Rolla, MO indicate 1978's production of new 1:24,000-scale topographic maps should increase over that of 1977. The goal of printed $7\frac{1}{2}'$ topo quad coverage of the entire state by 1983 continues to appear attainable, dependent on cooperative funding.

COMMENTS OR SUGGESTIONS WANTED

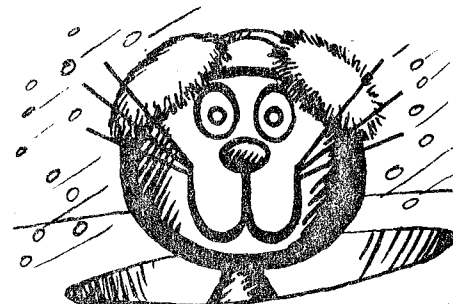


As discussed above the continued high rate of production of topographic maps at 1:24,000 scale ($7\frac{1}{2}'$ quads) causes the U.S. Geological Survey state map index to become outdated as soon as it is distributed. The current index dated August 1976 needs over a hundred annotations to be current.

This Bulletin attempts to keep readers aware of this mapping status with graphics and listings as shown on the facing page. We are not convinced that this is the best way to update status and are requesting reader comments or suggestions on how to more easily keep you informed. Send any suggestions, pro or con, to the State Cartographer's Office, 144 Science Hall, Madison, WI 53706.

MAP SAMPLE DELAYED

The Office experienced an unforeseen delay in producing a sample of a portion of a 1:100,000-scale county map from the U.S. Geological Survey as announced in the October 1977 Bulletin. This black-and-white sample copy will be available by the end of January and will be sent to all requestors.



NEW PRODUCTION FROM U.S. GEOLOGICAL SURVEY

These newly published 7½' topographic quadrangle maps (1:24,000) are listed by their location on the superseded 15' topographic map of the area. They are available from the Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706 Map Sales (608) 263-7389. Topographic quadrangles \$1.50; orthophotos 50¢.

1 NEW RICHMOND 15' TOPO
NE¼ New Richmond North '74
NW¼ Somerset North '74
SW¼ Somerset South '74
SE¼ New Richmond South '74

2 RIVER FALLS 15' TOPO
NE¼ Roberts '74
NW¼ Northline '74
SW¼ River Falls West '74
SE¼ River Falls East '74

3 BALDWIN 15' TOPO
NE¼ Baldwin East '74
NW¼ Baldwin West '74
SW¼ None
SE¼ El Paso '74

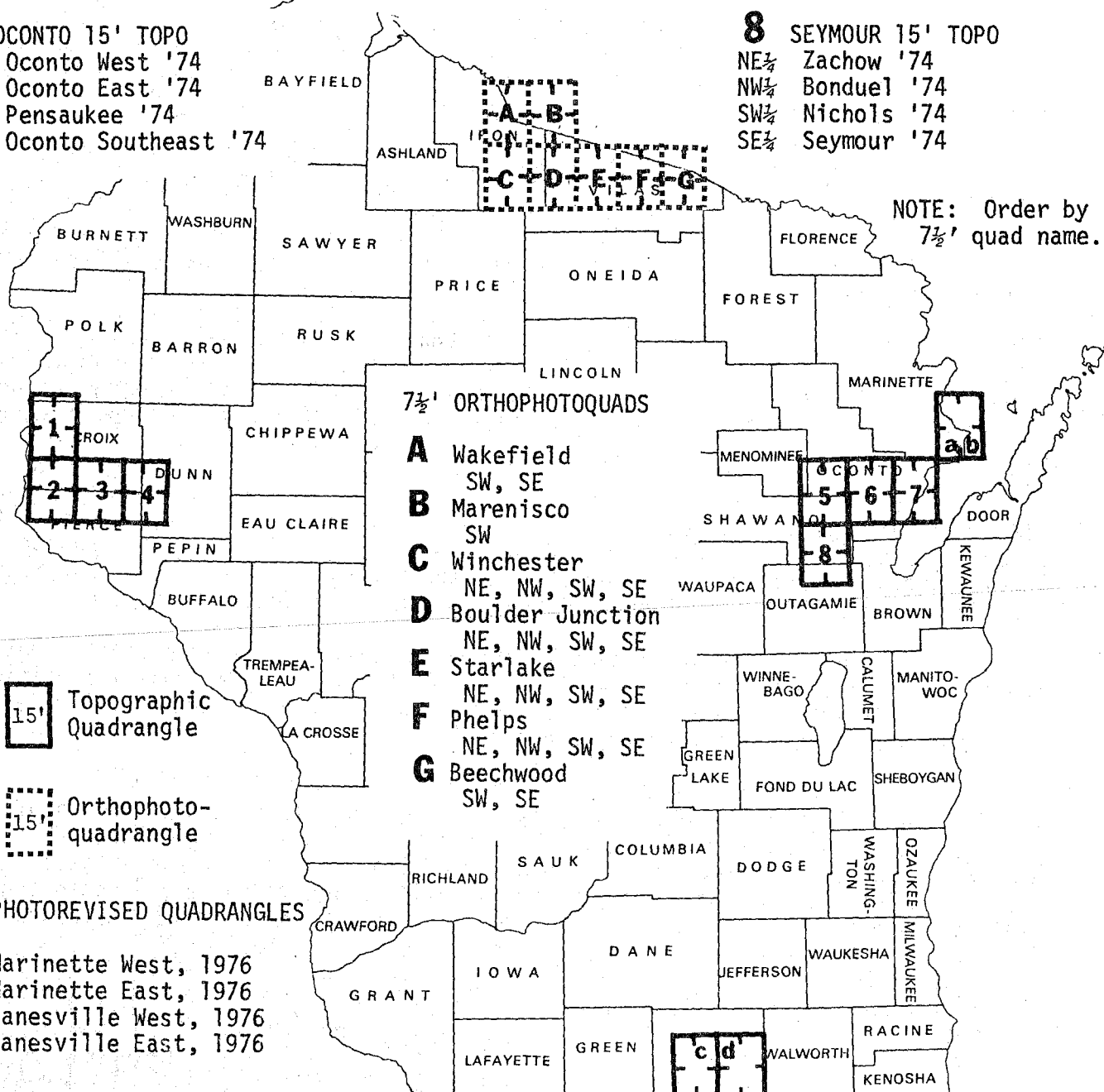
4 KNAPP 15' TOPO
NE¼ Knapp '74
NW¼ Wilson '74
SW¼ Spring Valley '74
SE¼ Weston '74

5 GILLETT 15' TOPO
NE¼ Gillett '74
NW¼ Berry Lake '74
SW¼ Cecil '74
SE¼ Krakow '74

6 OCONTO FALLS 15' TOPO
NE¼ Lena '74
NW¼ Oconto Falls North '74
SW¼ None
SE¼ Abrams '74

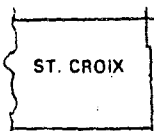
7 OCONTO 15' TOPO
NE¼ Oconto West '74
NW¼ Oconto East '74
SW¼ Pensaukee '74
SE¼ Oconto Southeast '74

8 SEYMOUR 15' TOPO
NE¼ Zachow '74
NW¼ Bonduel '74
SW¼ Nichols '74
SE¼ Seymour '74



7½' PHOTOREVISED QUADRANGLES

a Marinette West, 1976
b Marinette East, 1976
c Janesville West, 1976
d Janesville East, 1976



COUNTY CARTOGRAPHIC CATALOG SYSTEM



This Office has a statutory obligation to gather and disseminate information on mapping, geodetic control, and aerial photographic coverage for Wisconsin. To accomplish this a county cartographic information and catalog system is being planned. The purposes of the system are to:

- (a) assist local government elements by providing a convenient access to multiple sources
- (b) collect information on the holdings of local governments for its availability to state and regional levels, and
- (c) provide the widest possible dissemination of information on the cartographic resources of the state to the general public.



A standard page-size format has been developed at a scale of 1 inch = 4 miles for each county. Information on the various types of maps (both current and historical), aerial photography, and geodetic control available for a single county is indexed on the black-and-white index maps.

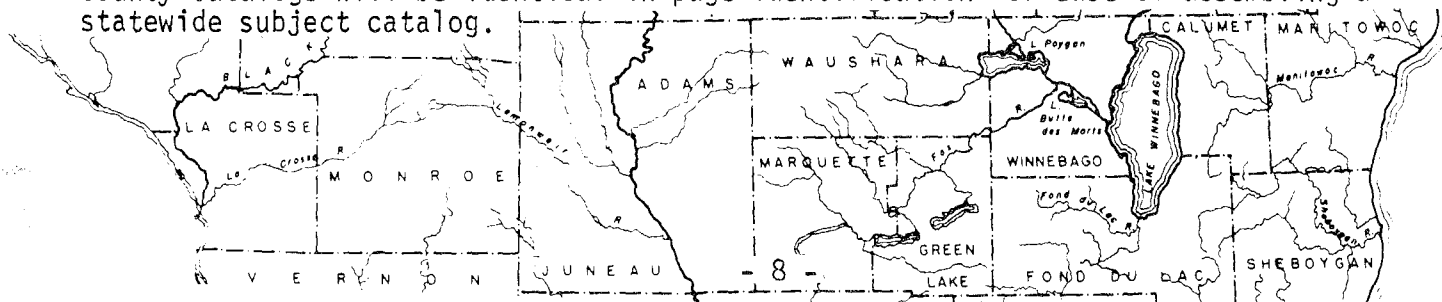
A limited number of first-edition county catalogs are printed which contain all the data currently available to the State Cartographer's Office. This copy is sent to county offices along with blank index maps on which additional local information can be annotated. The local input will then be incorporated in a second, revised edition which will be widely distributed. Catalogs on specific subjects will also be possible from the system. Individual pages can be used to answer inquiries.

At the present time first-edition catalogs are available for Eau Claire (52 pages), La Crosse (56 pages) and St. Croix (53 pages) Counties. Counties in the final stages of preparation with possible publication by June 1978 (dependent on printing funds) are Ashland, Iowa, Jefferson, Kenosha, Kewaunee, Portage, Racine, and Washington.

It is the Office's plan that during the two-year period, July 1978 to June 1980, the catalogs for all county areas of the state will be published. In part the extensiveness, quality, and content of the final catalog depends on the support of local sources of cartographic information. Under the present budget authorization of the Office there is no intention to charge for these catalogs.

To those county and regional offices interested in this project sample pages and table of contents pages are available for review. For additional information on the purpose and intent of the system or for sample pages contact either Art Ziegler or Chris Reinhard at the State Cartographer's Office.

A small portion of a county catalog page is illustrated on page 4 of this Bulletin under the paragraphs dealing with the "location of section corners". The number in the upper right, 5.5, is the assigned page number for this subject. All county catalogs will be identical in page identification for ease of assembling a statewide subject catalog.



COMING EVENTS



A.C.S.M. - A.S.P. CONVENTION
Feb. 26 - March 4 Washington, D.C.



"Measuring and Interpreting the Shape of Things" is the theme of the 1978 American Congress on Surveying and Mapping - American Society of Photogrammetry convention. Program topics will be on cartography, photography, remote sensing, photo interpretation, land and control surveys, and photogrammetric surveys. For more information contact: Ron Brewer, Publicity Chairman, 9206 Fairhaven Avenue, Upper Marlboro, MD, 20870

** ENVIRONMENTAL INFORMATION SHARING CONFERENCE, APRIL 27-29 **

Environmental information disseminators and information users, their methods, needs, and problems, will be the topic at the fourth Environmental Information Sharing Conference to be held on the University of Wisconsin-Madison campus.

The program begins on the afternoon of April 27th with registration and guided tours. Friday morning will feature university information disseminators and educational and citizen information users. There will be a panel presentation on environmental impact statements Friday afternoon. Demonstrations, films, and a poster session will be given Friday afternoon and Saturday morning.

For more information contact Barbara Arnold, Natural Resources and Environmental Resource Center, Steenbock Library, University Wis., Madison, WI 53706.



ITEMS OF INTEREST



SEA GRANT DIRECTORY

1976-1978 Sea Grant Project Directory lists research, education, and public service projects of the Sea Grant Program. Contact: Sea Grant Communications Office, 1800 University Ave., Madison, WI 53706.

A.G.S. LIBRARY NOT HERE YET

The American Geographical Society's extensive library is still in New York with no move to UW-Milwaukee foreseen until late spring, if at all. A decision by the New York Attorney General regarding the removal of the collection from the state of New York has not yet been made according to Gerry Hock of the UW-Milwaukee Library.

COASTAL HABITAT MAPS

A series of maps designating the location and quality of fish and wildlife habitat along the Lake Michigan and Superior shorelines has been completed by the Wisconsin Dept. of Natural Resources (DNR).

The maps are part of an inventory of the physical and biological features of Wisconsin coastal townships conducted by the Wisconsin Coastal Zone Program, the State Planning Office, and the DNR. Each map covers a single township. The maps were drawn from aerial photos and have a scale of 1:24,000.

The original map set which covers 123 townships and over 700,000 acres of habitat, is on file at the DNR, 4610 University Ave., Madison. Anyone wishing to use the maps should contact Ted Lauf at (608) 266-0160.

MICHIGAN MAP SOCIETY FORMED

People interested in maps of the Great Lakes region should be aware of the new Michigan Map Society. For more information contact: June Harris, Map Division, William L. Clements Library, Univ. Michigan, Ann Arbor, MI 48104.

1977 INDEX

Aerial photography *see also* Orthophotos
acquisition, no. 4, p. 3
catalog, no. 1, p. 1; no. 2, p. 1
U.S.D.A. consolidation, no. 4, p. 4

American Geographical Society library--
no. 2, p. 5; no. 3, p. 6

Atlas of Great Lakes Indian History--
no. 2, p. 5

Cartography award--no. 2, p. 1

Census news--no. 1, p. 5

Conferences and meetings--
no. 1, p. 4; no. 2, p. 6;
no. 3, p. 4; no. 4, p. 5

County boundaries no. 2, p. 2

County real estate listors--no. 4, p. 4

County surveyors assoc.--no. 3, p. 6

Farmland Preservation Act--no. 4, p. 4

Fellowship awarded--no. 3, p. 6

Geodetic network--no. 4, p. 6

Index 1976--no. 1, p. 6

Jefferson County geology--no. 2, p. 2

Land resources inventory--no. 3, p. 1

Magnetic declination--no. 4, p. 5

Maps *see also* Topographic maps
1:100,000-scale maps,
no. 3, p. 2; no. 4, p. 2
crushed stone production, no. 2, p. 4
dissolved solids in aquifers, no. 2, p. 4
early vegetation, no. 3, p. 1

Maps, *cont.*

glacial deposits, no. 1, p. 2
groundwater availability, no. 2, p. 4
groundwater pollution, no. 2, p. 4
photo-mosaic soil map, no. 4, p. 1
principal inland waterways, no. 1, p. 4
standard metro. statistical areas,
no. 3, p. 1
types of maps folder, no. 4, p. 1
W.G.S. map sales, no. 4, p. 1

Orthophotoquads--no. 1, p. 3; no. 4, p. 3

Publications of interest

Auto-Carto II, no. 2, p. 6
Land data system, no. 3, p. 6
Mineral and water resources, no. 3, p. 5
Soils of Wisconsin, no. 1, p. 1
U.S.G.S. Wisconsin program, no. 3, p. 5
Water-resources investigations, no. 3, p. 5

Remonumentation, Racine Co.--no. 1, p. 3

Topographic maps *see also* Orthophotoquads
coverage, no. 4, p. 2
index, no. 3, p. 3
metrication, no. 1, p. 1
new production, no. 1, p. 3; no. 2, p. 3;
no. 3, p. 3; no. 4, p. 3

U. S. Forest Service--no. 4, p. 4

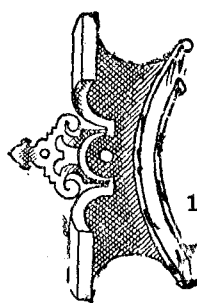
U. W. Cartographic Lab--no. 2, p. 1

U.W. Whitewater map library--no. 1, p. 4

Walworth County geology--no. 3, p. 6

Wisconsin Geological Survey
list of publications, no. 4, p. 4
map sales, no. 4, p. 1

Wisconsin Map Society--no. 1, p. 5;
no. 2, p. 5



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ANY COMMENTS SHOULD BE SENT TO THE STATE CARTOGRAPHER'S OFFICE,
144 SCIENCE HALL, UNIVERSITY OF WISCONSIN, MADISON, WI 53706 (608) 262-3065.
ART ZIEGLER, STATE CARTOGRAPHER C. REINHARD, EDITOR

