



WISCONSIN MAPPING BULLETIN

Volume 5 No. 4 October 1979

INFORMATION ON CARTOGRAPHIC ACTIVITIES AND AERIAL
PHOTOGRAPHIC COVERAGE IN THE STATE OF WISCONSIN;
PUBLISHED QUARTERLY BY THE STATE CARTOGRAPHER'S
OFFICE, 155 SCIENCE HALL, MADISON, WI 53706



AIR PHOTO ACQUISITION COMPLETED

During the last week of September the two commercial contractors and the Department of Transportation completed flying the entire state as part of the Legislatively directed air photo acquisition for 1978 and 1979. While the photography acquired during 1979 still has to be developed and contact prints have to be made for quality checking for cloud cover and location, the completion does mark a milestone in the ambitious project to photograph the entire state at 1:20,000 scale.

Each photo shows over 4 square miles (centered over 4 township sections). It is produced from black-and-white infra-red film to a scale of 1" = 1,667' or enlarged to 1" = 400'. Photos are identified by township, range, and section numbers. Approximately 29,000 exposures were required for total stereographic coverage.

The processing of accepted photography for the 1 inch to 400 feet enlargements is continuing. About 40% of the state is now available. The Special Services Bureau of the Department of Transportation has a contract to produce these enlargements and can vary the areas in work. If you or your organization have a special or urgent need for the enlargements, contact Special Services, D.O.T., P.O. Box 7916, Madison, WI 53707 (608) 266-0309 for the possible expediting of your area.

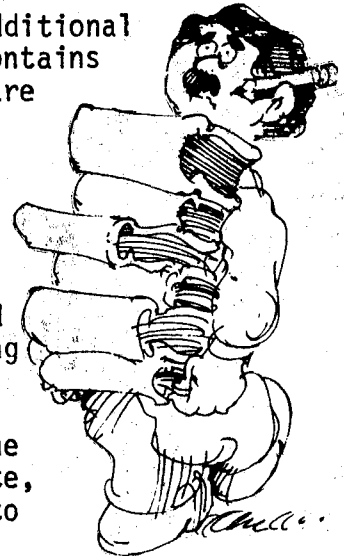


RESOURCE DATA COLLECTION

The recently passed 1979-81 Budget Authorization contained an additional statute for the Department of Administration. Section 85 now contains an added paragraph 16.967 which requires the Department to prepare for consideration at the next biennial budget a plan containing recommendations for "collection, storage, recall and display of resource data by public agencies of the state."

The statute also states that this plan will be prepared "in conjunction with the state cartographer." Resource items to be considered are "topography, soils, land use and land cover, land survey, surface water and planimetric data collection and mapping efforts."

The Department has hired a Planning Analyst for the task. In the near future the analyst will be contacting various units of state, regional and local government to fulfill the statutory charge "to seek the advice and counsel of those public agencies collecting resource data." The Bulletin will announce the progress and status of this resource plan.

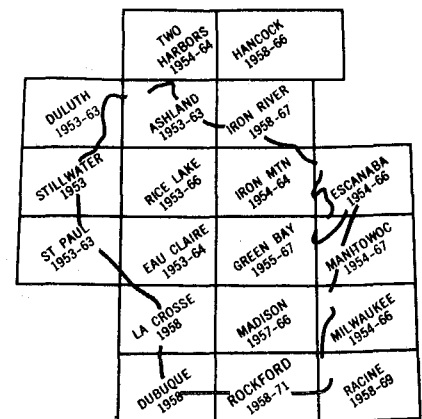


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1:250,000 MAP UPDATE

The 1:250,000-scale U.S. Geological Survey series of 18 map sheets covering the state has existed for approximately 20 years. While some of the sheets were updated about 10 years ago no significant action has taken place with this series until recently. In the April 1978 Bulletin we reported 5 of the map sheets were assigned for, or in, revision. A recent update indicates a total of 10 sheets, covering approximately 80% of Wisconsin, are either assigned for revision or have recently been printed in a revised version.

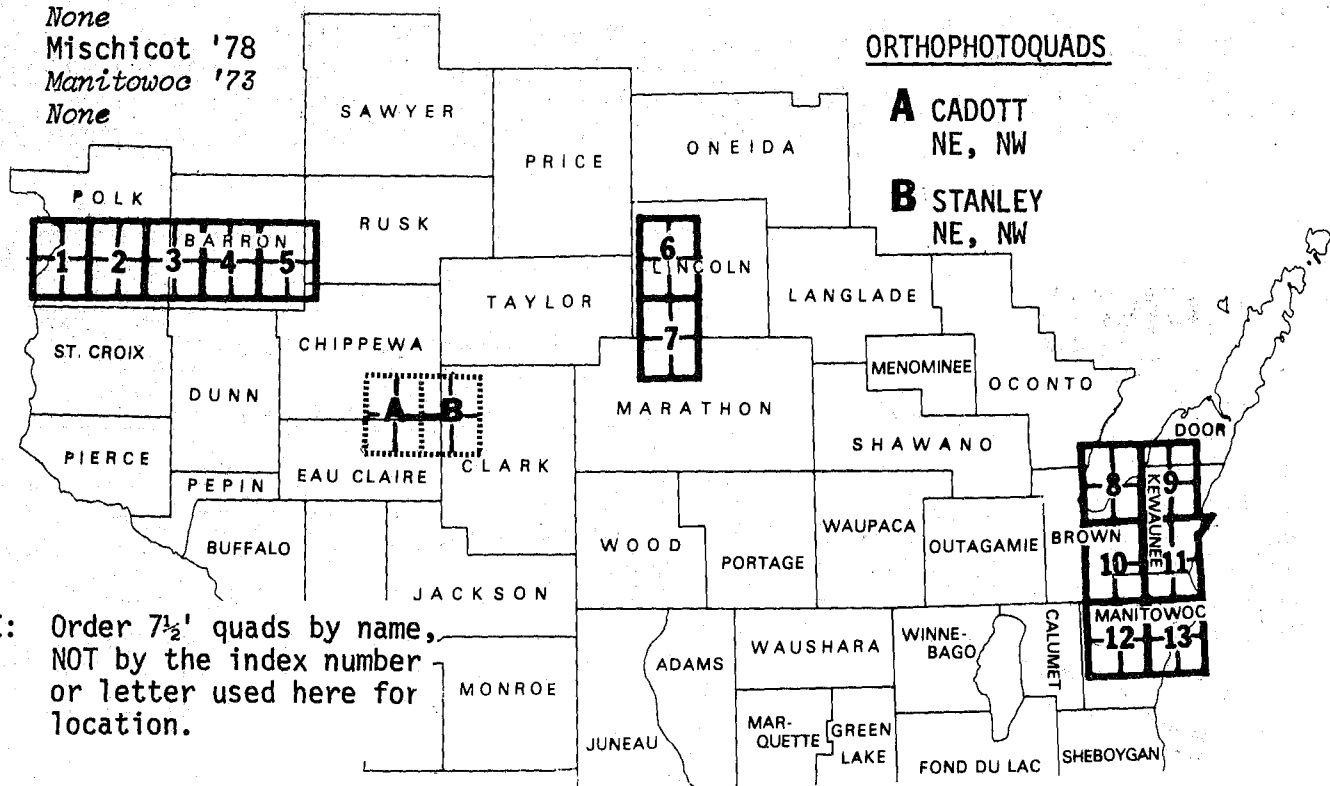
| <u>Name</u> | <u>Number</u> | <u>Printing Status</u> |
|-------------|---------------|------------------------|
| Stillwater | NL-15-8 | 3,4/80 |
| Rice Lake | NL-15-9 | printed |
| Iron Mtn. | NL-16-7 | 9/80 |
| St. Paul | NL-15-11 | 2/80 |
| Eau Claire | NL-15-12 | printed |
| Green Bay | NL-16-10 | 9/80 |
| La Crosse | NK-15-3 | printed |
| Madison | NK-16-1 | 9/80 |
| Dubuque | NK-15-6 | 12/80 |
| Rockford | NK-16-4 | 9/80 |



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 or planimetric map of the area. They are available from the Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706 (608) 263-7389. Topographic quadrangles are \$1.50 each; orthophotoquads are \$1.00 each.

- | | | |
|--|---|---|
| <p>1 ST. CROIX DALLES 15' TOPO NE¼ Centuria '78 NW¼ St. Croix Dalles '78 SW¼ Osceola '78 SE¼ Nye '78</p> | <p>2 BALSAM LAKE 15' TOPO NE¼ Range '78 NW¼ Balsam Lake '78 SW¼ Wapogasset Lake '78 SE¼ Amery '78</p> | <p>3 TURTLE LAKE 15' TOPO NE¼ Alma '78 NW¼ Turtle Lake '78 SW¼ None SE¼ Arland '78</p> |
| <p>4 BARRON 15' TOPO NE¼ Barron '78 NW¼ Poskin '78 SW¼ Dority Creek '78 SE¼ Dallas '78</p> | <p>5 CHETEK 15' TOPO NE¼ Strickland '78 NW¼ Rice Lake South '78 SW¼ Chetek '78 SE¼ Moose Ear Lake '78</p> | <p>6 SPIRIT FALLS 15' PLAN NE¼ Coffee Creek '78 NW¼ Spirit Falls '78 SW¼ Natzke Camp '78 SE¼ Grandfather Falls '78</p> |
| <p>7 HAMBURG 15' PLAN NE¼ Alexander Lake '78 NW¼ Fromm Lookout Tower '78 SW¼ Hamburg '78 SE¼ Little Chicago '78</p> | <p>8 NEW FRANKEN 15' TOPO NE¼ Dyckesville '78 NW¼ Little Tail Pt. '74 SW¼ Green Bay East '71 SE¼ New Franken '78</p> | <p>9 CASCO 15' TOPO NE¼ Brussels '78 NW¼ Namur '78 SW¼ Luxemburg '78 SE¼ Casco '78</p> |
| <p>10 DENMARK 15' TOPO NE¼ Poland '78 NW¼ Bellvue '71 SW¼ Morrison '78 SE¼ Denmark '78</p> | <p>11 KEWAUNEE 15' TOPO NE¼ Kewaunee '78 NW¼ Stangelville '78 SW¼ Larrabee '78 SE¼ Two Creeks '78</p> | <p>12 REEDSVILLE 15' TOPO NE¼ Whitelaw '78 NW¼ Reedsville '78 SW¼ Valdars '78 SE¼ Clarks Mills '78</p> |
| <p>13 MANITOWOC 15' TOPO NE¼ None NW¼ Mischicot '78 SW¼ Manitowoc '73 SE¼ None</p> | | |



NOTE: Order 7½' quads by name, NOT by the index number or letter used here for location.

NEW MAPS

LAND USE AND LAND COVER AND ASSOCIATED MAPS FOR STILLWATER, MINNESOTA, WISCONSIN

This data set consists of four maps keyed to the U.S.G.S. topographic map Stillwater at 1:250,000. These maps are coded for statistical data development. They are (1) land use and land cover, (2) political unit, (3) hydrologic units, and (4) census county subdivision. Also included is one positive of the cultural base for Stillwater at 1:250,000. For ordering information contact the U.S. Geological Survey, Mid-Centent Mapping Center, 1400 Independence Road, P.O. Box 133, Rolla, MO 65401.

CENSUS BUREAU CUE MAPS: APPLETON-OSHKOSH, LA CROSSE, EAU CLAIRE

Three additional CUE maps for Wisconsin cities have been released by the Bureau of the Census. For background information see the July Bulletin page 8. The price of a single map sheet is \$2.60: Appleton-Oshkosh has 22 sheets, La Crosse 5 sheets, and Eau Claire 8 sheets. Prepayment is required. Orders made payable to "Commerce-Census" should be sent to the Customer Services Branch, Data User Services Division, Bureau of the Census, Washington, D.C. 20233

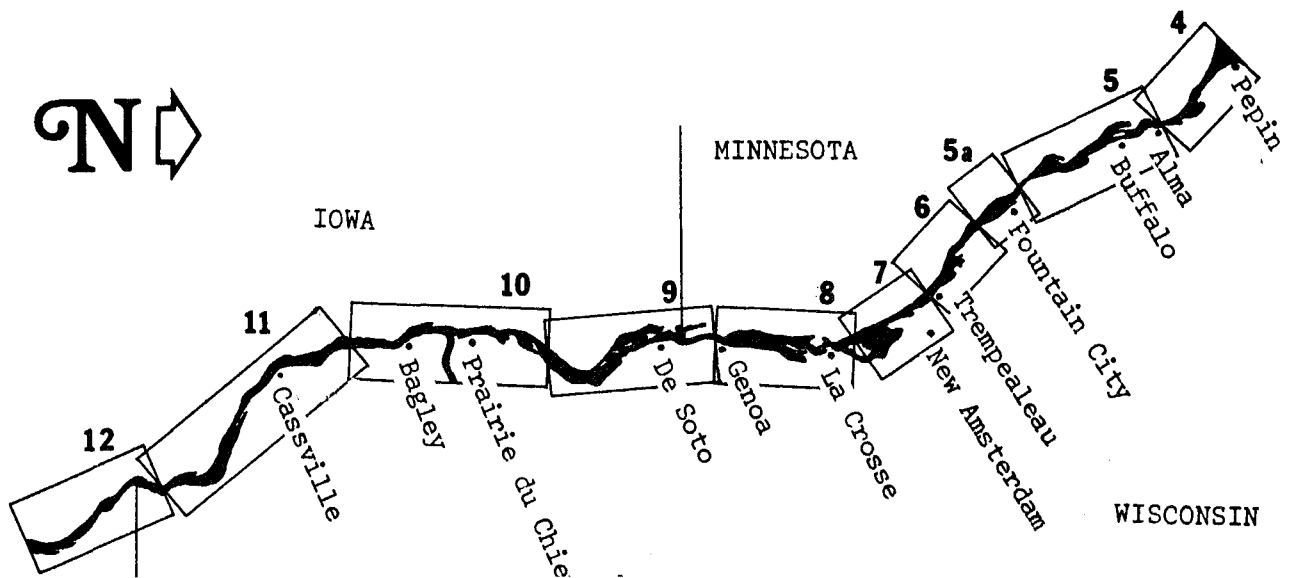
ECOREGIONS MAP

The U.S. Forest Service has recently published a map entitled Ecoregions of the United States. It shows the country divided into ecosystem regions within which ecological conditions are relatively uniform. A 78-page booklet supplements the map and provides descriptions of the regions and a list of sources from which the descriptions were compiled. For further information contact the Forest Service Regional Office, 324 25th St., Ogden, UT 84401 (801) 626-3484. Both the map and booklet are provided free of charge.

UPPER MISSISSIPPI RIVER WILD LIFE AND FISH REFUGE MAPS

River maps are now available at a scale of 1 1/2" to 1 mile for 284 miles of the Upper Mississippi River from Lake Pepin to Rock Island, Illinois. These four-color maps show islands, channels, sloughs, navigation aids and provide general information on how to enjoy the U.S. Fish and Wildlife Service's 195,000-acre fish and wildlife refuge. The maps are available for 35¢ each from the U.S. Government Printing Office, Superintendent of Documents, Washington, D.C. 20402. They must be ordered by navigation pool name and stock number.

| | | | |
|--------------|-------------------------|---------|-------------------------|
| Pools 4 & 5 | Stock # 024-010-99418-5 | Pool 9 | Stock # 024-010-00421-5 |
| Pools 5A & 6 | Stock # 024-010-00417-7 | Pool 10 | Stock # 024-010-00422-3 |
| Pool 7 | Stock # 024-010-00419-3 | Pool 11 | Stock # 024-010-00423-1 |
| Pool 8 | Stock # 024-010-00420-7 | Pool 12 | Stock # 024-010-00424-0 |

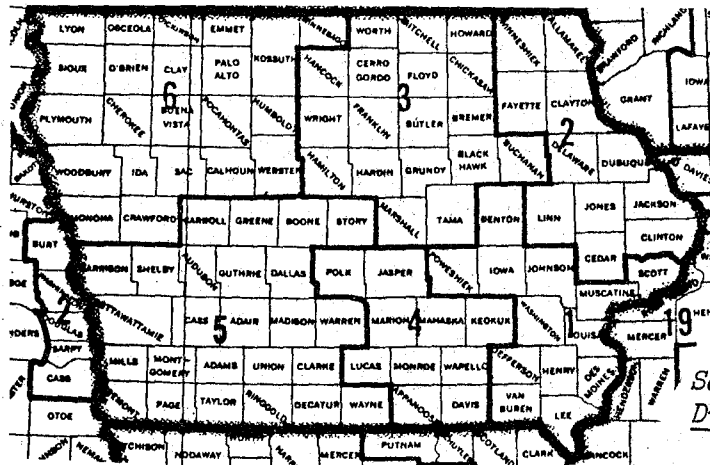


MORE NEW MAPS

LAKE SUPERIOR GEOLOGICAL AND GEOPHYSICAL DATA SOURCES by R.J. Wold and D.R. Hutchinson. 1979. Three sheets: (1) scale 1:600,000 and (2) & (3) scale 1:1,200,000. \$2.25 per set from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

CONGRESSIONAL DISTRICTS FOR THE 96TH CONGRESS

This three-color map by the Bureau of the Census shows all U.S., State, congressional district, and county boundaries, and identifies each district by number. The number of representatives by State and the number of non-voting members by area are also shown. The map GE-50, No. 75 Congressional Districts for the 96th Congress is at a scale of 1:5,000,000. Copies may be obtained for \$2.50 each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (GPO Stock No. 003-024-01936-1).



Sample from Congressional Districts map; Iowa

DANE COUNTY IN COLOR

Color photography will be flown in the spring of 1980 over Dane County. The Dane County Regional Planning Commission has planned to obtain color, leaf-off, stereo photography which will be very multi-purpose. The photos will have an initial scale of 1 inch = 800 feet. One photo will cover approximately one square mile of territory.

Local municipalities will be able to purchase the photography for the cost of reproduction. Photos will also be available to the public through the contractor for a nominal fee. Costs have not yet been determined.

Anyone interested in photo coverage of a specific area should contact the Dane County RPC in advance in order to benefit from bulk film processing rates. For more information contact Jon Corson-Rikert at the Dane County Regional Planning Comm., Room 114 City-County Bldg., Madison, WI 53709 (608) 266-9108.

D. O. T. MAPS

Enclosed with this Bulletin is a new price list for the Department of Transportation's maps and documents. Of special interest to "shun pikers" are the county road maps which show all those little-travelled roads that twist through scenic Wisconsin. They are a real bargain at 15¢ each (page size). Additional price lists can be obtained from Document Sales, Dept. of Transportation, P.O. Box 7426, Madison, WI 53707.



A. S. C. S. V S S. C. S.



State Conservationist J.C. Hytry has responded to our comment in the July Bulletin regarding the duplication of U.S.D.A. Agricultural Stabilization and Conservation Service and U.S.D.A. Soil Conservation Service photography. He explained that the flying season for S.C.S. is from April 16 - May 31 and is to be snow and vegetation free. S.C.S. is primarily interested in maps suitable for recording soil survey information. On the other hand, the flying season for A.S.C.S. is April 15 - October 31 without regard to existing vegetation. A.S.C.S. is primarily interested in measuring acres of various fields.

A.S.C.S. photography is generally flown at a scale of 1:40,000 while S.C.S. photography is almost always flown at 1:48,000. Mr. Hytry explained that the scale of the S.C.S. soil survey publication (1:20,000) is the smallest that will clearly show the various soil delineations. Sheet layout and size at 1:20,000 requires 1:48,000 photography. If 1:40,000 photography were to be used, a mosaic would need to be prepared. The cost of preparing this mosaic would greatly exceed the cost of the aerial photography to fly it at the correct height. There would be much additional expense in mapping at a different scale and then adjusting and transferring to the publication scale.

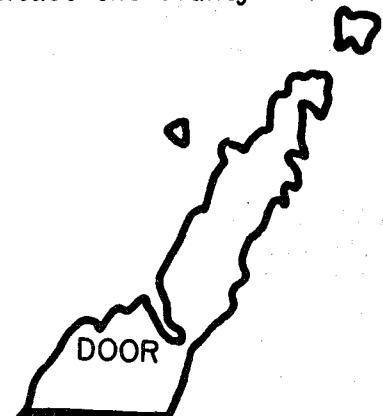
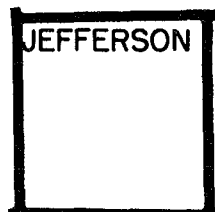
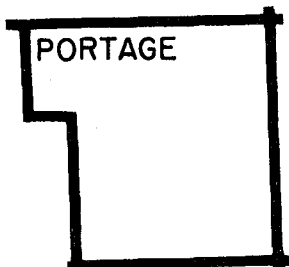
Contracting for USDA aerial photography is done by ASCS, and they make every attempt possible to coordinate this in such a manner that only one flight is necessary. Attempts are made to anticipate future photography needs much earlier than in the past. Even so, there will be times when the final objectives to be achieved clearly indicate that flights at different altitudes will produce not only an overall savings in money but will help produce a highly specialized product of higher quality.

We are grateful for Mr. Hytry's detailed explanation which has been printed here with only minor deletions. Please bear this information in mind while reviewing the status report on the facing page.



SOIL SURVEYS

Since the soil survey status map was presented in the January Bulletin, three counties have been published by the U.S.D.A, Soil Conservation Service. Modern soil surveys are now available for DOOR, JEFFERSON and PORTAGE Counties. Polk County is expected by the end of the year. Sauk County will be available early this spring. For more information contact the County Soil Conservation Service Field Office.



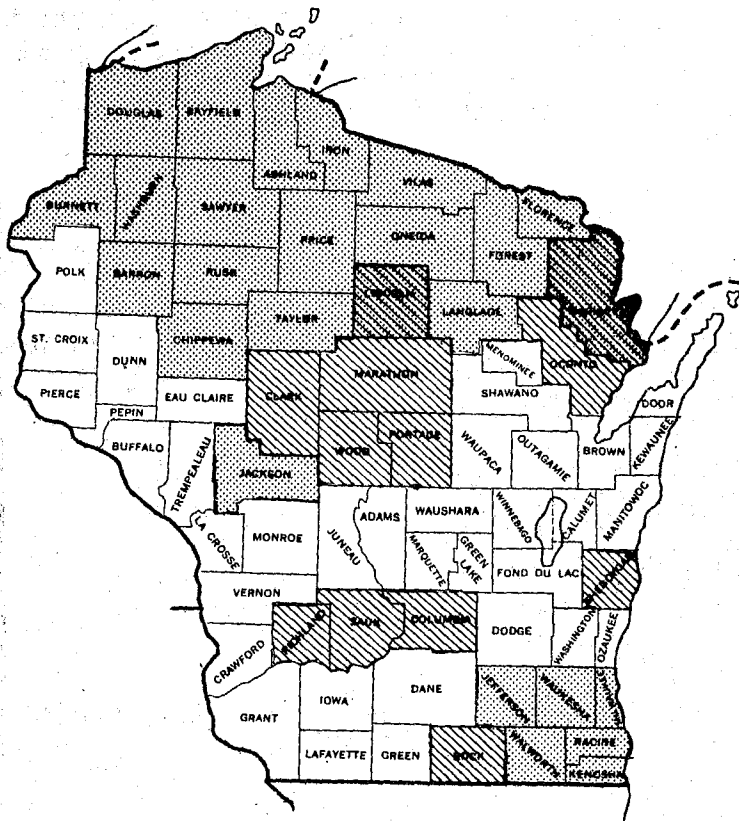
UPDATE: U. S. D. A. PHOTOGRAPHIC ACQUISITIONS

The programs of the U.S.D.A. Agricultural Stabilization and Conservation Service (A.S.C.S.) and the Soil Conservation Service (S.C.S.) for the acquisition of black-and-white aerial photography have changed since the July Bulletin. The following information is summarized from the Sept. 9, 1979 report:

COUNTY PHOTOGRAPHY ACQUIRED (A = A.S.C.S. S = S.C.S.)

| COUNTY | SCALE | DATE ACCEPTED | COUNTY | SCALE | DATE ACCEPTED |
|-------------|----------|---------------|-------------|----------|---------------|
| A Clark | 1:40,000 | 3/22/79 | A Rock | 1:40,000 | 2/15/79 |
| A Columbia | 1:40,000 | 2/15/79 | A Sauk | 1:40,000 | 2/15/79 |
| S Lincoln | 1:48,000 | 7/10/79 | A Sheboygan | 1:40,000 | 1/08/79 |
| S Marinette | 1:48,000 | 7/10/79 | A Wood | 1:40,000 | 7/05/79 |
| A Marathon | 1:40,000 | 2/14/79 | | | |
| S Oconto | 1:38,000 | 7/12/79 | | | |
| A Portage | 1:40,000 | 7/05/79 | | | |
| A Richland | 1:40,000 | 1/08/79 | | | |

SCHEDULED THROUGH 1980 FLYING SEASON
(A = A.S.C.S. S = S.C.S.)



Accepted
 Planned

See the explanation on the facing page for those counties listed twice.

| COUNTY | SCALE |
|-------------|----------|
| A Ashland | 1:40,000 |
| A Barron | 1:40,000 |
| A Bayfield | 1:40,000 |
| A Burnett | 1:40,000 |
| S Burnett | 1:48,000 |
| A Chippewa | 1:40,000 |
| A Douglas | 1:40,000 |
| A Florence | 1:40,000 |
| A Forest | 1:40,000 |
| A Iron | 1:40,000 |
| S Jackson | 1:48,000 |
| A Jefferson | 1:40,000 |
| A Kenosha | 1:40,000 |
| A Langlade | 1:40,000 |
| A Lincoln | 1:40,000 |
| A Marinette | 1:40,000 |
| A Milwaukee | 1:40,000 |
| A Oneida | 1:40,000 |
| A Price | 1:40,000 |
| S Price | 1:48,000 |
| A Racine | 1:40,000 |
| A Rusk | 1:40,000 |
| S Rusk | 1:48,000 |
| A Sawyer | 1:40,000 |
| S Sawyer | 1:48,000 |
| A Taylor | 1:40,000 |
| S Taylor | 1:48,000 |
| A Vilas | 1:40,000 |
| A Washburn | 1:40,000 |
| A Waukesha | 1:40,000 |

1:100,000 INTERMEDIATE SCALE MAPPING

During the last year the U.S. Geological Survey, Topographic Division has devoted a significant effort to the production of 1:100,000-scale (1 inch = 8,333 feet) intermediate coverage in Wisconsin. Generally the production is planimetric (no contours). A limited number have been printed in several versions. The basic printing reproducibles are available for purchase and can be utilized in a variety of cartographic presentations. It is formatted in either a county version or in a 30 minute by 1 degree quad. The specifications for both formats are identical. This will allow a county base to be framed-out of a quad sheet.

The basic reproducible plates are as follows:

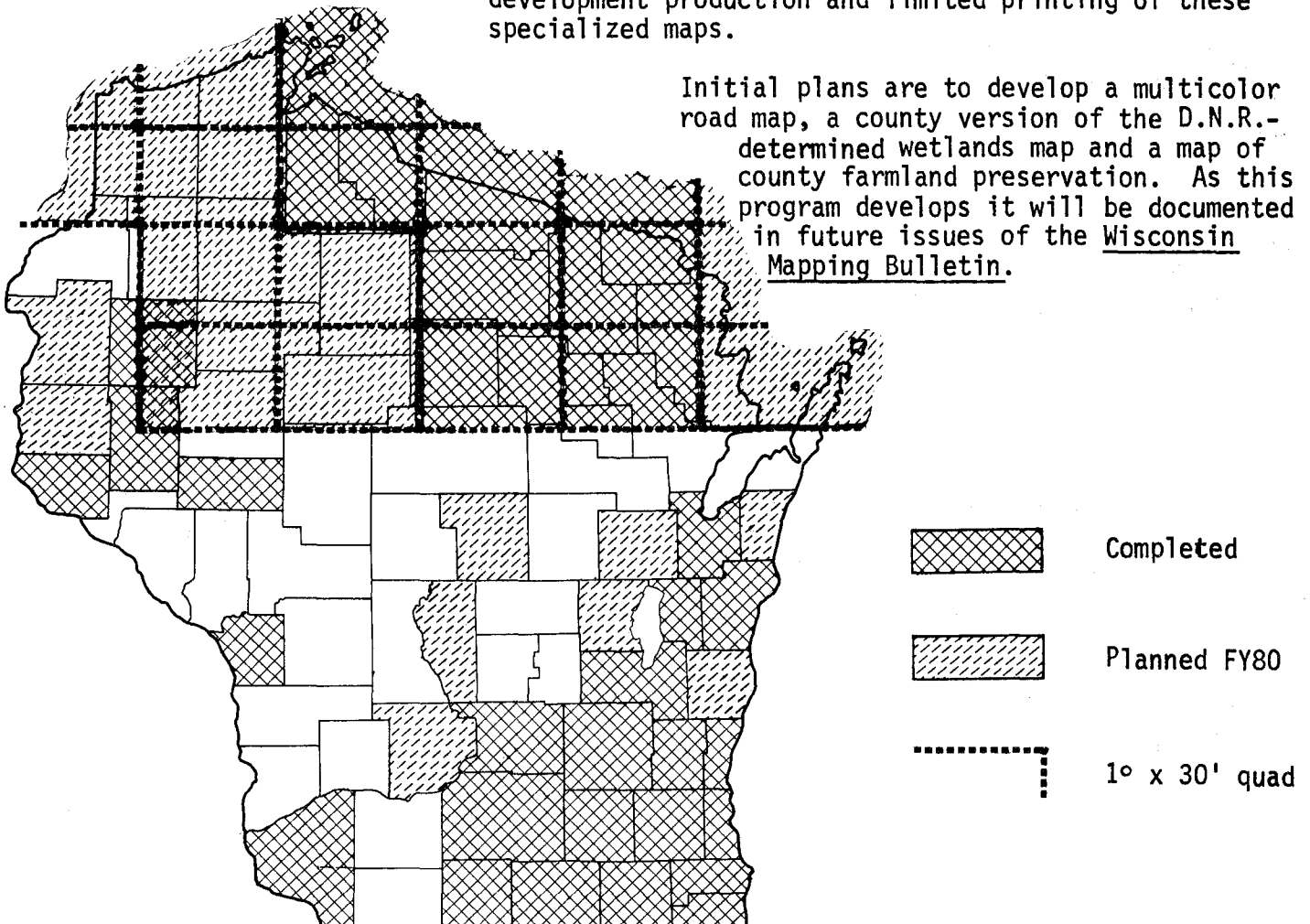
- Black: border, projection, boundaries, railroads, lettering, road identification and features such as airports, quarries, etc.
- Blue: all hydrography, swamps and marsh, water tint and drainage type
- Red: all roads, divided into 3 classes on separate plates
- Grey: Public Land lines.

The graphic illustrates the total number of counties available:

| | |
|-----------------------------------|----|
| Completed in county format..... | 23 |
| County format in work..... | 7 |
| Counties (framed from quads)..... | 16 |

With the availability of 46 counties (64% of the state) in this format and scale, the State Cartographer requested and received approval for a limited program utilizing this copy in producing county format maps using the U.S. Geological Survey reproducibles as a base map. University funding was approved for development production and limited printing of these specialized maps.

Initial plans are to develop a multicolor road map, a county version of the D.N.R.-determined wetlands map and a map of county farmland preservation. As this program develops it will be documented in future issues of the Wisconsin Mapping Bulletin.



★ A. A. G. CARTOGRAPHIC SESSION ★

At the 30th Annual Meeting of the West Lakes Division of the Association of American Geographers, the Newberry Library in Chicago hosted a special session on "Training and Employment of Academically Trained Cartographers." A panel discussion session followed brief presentations by:

Prof. Richard Dahlberg, Northern Illinois University speaking on academic training of cartographers,

Mr. Jon Leverenz, Head of the Cartographic Division, Rand McNally and Co. speaking on opportunities for cartographers in the commercial fields,

Mr. William Roselle, University of Wisconsin-Milwaukee speaking on library requirements and opportunities for cartographers,

Mr. Art Ziegler, Wisconsin State Cartographer discussing government opportunities for cartographers.

Following the presentations an informative discussion period ensued. All present basically agreed that, considering current employment trends, the current course of study for academic cartographers was in need of a detailed study.

COUNTY CATALOGS AVAILABLE



The lead article in the July 1979 Wisconsin Mapping Bulletin announced the finalization of the State Cartographer's Office publication of some County Cartographic Catalogs. Delays have occurred in the printing of covers, collating and binding. However by mid-November we expect to be able to distribute the following county catalogs:

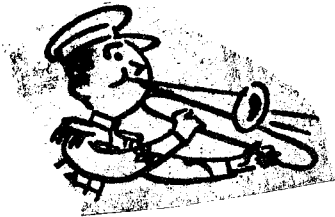
| | |
|-----------------|----------|
| Eau Claire..... | 75 pages |
| Pierce..... | 62 pages |
| Rock..... | 67 pages |
| Winnebago..... | 72 pages |

The remaining 12 counties of the initial printing order are in final stages and distribution is planned by January 1980. As stated in the July Bulletin when completed, automatic distribution will be made to all county offices on our mailing list.

~~~~~ COASTAL MAPPING WORKSHOP ~~~~~

On September 12 and 13 the State Cartographer attended the Coastal Mapping Workshop hosted by the Great Lakes Basin Commission and sponsored by the Topographic Division, U.S. Geological Survey, the National Ocean Survey and the Office of Coastal Zone Management, N.O.A.A. The conference was held at Ann Arbor, Michigan and representatives of 6 states, Canada and numerous federal agencies involved in the Great Lakes region attended.

During the session on state mapping needs the State Cartographer stressed the need to complete modern topographic mapping and orthophoto coverage of coastal areas. Also high on the priority list was the completion of intermediate scale mapping at 1:100,000 scale. (Status of this program is updated on page 8.)



## PUBLICATIONS OF INTEREST

### MAPS FOR AMERICA

This 265-page, clothbound book presents the background of the American mapping effort as a whole and contains a detailed presentation of information about the maps produced by the U.S. Geological Survey. It explains the meaning of lines, colors, images, symbols, numbers, captions, and notes that appear on maps; the possible errors and anomalies affecting the reliability and interpretation of maps; the different kinds of maps and map data; and the various sources of maps and related information.

Maps for America is available for \$11.00 from either the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202 or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, stock number 024-001-03145-1.

### LANDSAT DATA USERS NOTES

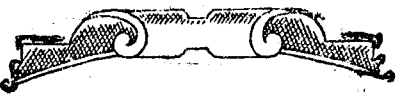
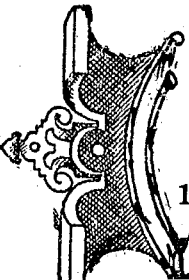
The Landsat Data User Notes is published bi-monthly in order to present information of interest to the user community regarding Landsat products, systems, and related remote sensing developments. There is no subscription charge. Individuals and organizations wishing to receive Notes should contact the User Services Section, U.S. Geological Survey, EROS Data Center, Sioux Falls, S.D. 57198 (605) 594-6511.

## NEWS ITEMS REQUESTED

The Mapping Bulletin provides a means of exchanging map related information to a very diverse audience. Reader input is necessary if the Bulletin is to be comprehensive and current. News regarding completed or ongoing projects, published maps or reports, and conferences/workshops would be welcomed by the editor. Local and regional information is especially needed to present a balanced picture of the status of mapping in the state. Please send all news items to Christine Reinhard, State Cartographer's Office, 155 Science Hall, Madison, WI 53706.

## MAILING LIST UPDATE

Beginning with the January 1980 Bulletin approximately 1/4 of our readers will receive their copy by first-class mail rather than by bulk mail as it now is delivered. The purpose of this special mailing will be to update and revise our ever-growing mailing list which is approaching 1,000 addressees. Bulk mailing does not allow mail to be forwarded or returned. Therefore a first-class mailing is necessary to trim our long list. If you no longer wish to receive the Bulletin please notify the editor as soon as possible.



THE WISCONSIN MAPPING BULLETIN IS DISTRIBUTED FREE OF CHARGE ON REQUEST. ARTICLES MAY BE REPRODUCED WITH ACKNOWLEDGEMENT GIVEN. ANY COMMENTS SHOULD BE SENT TO THE STATE CARTOGRAPHER'S OFFICE, 155 SCIENCE HALL, UNIVERSITY OF WISCONSIN, MADISON, WI 53706 (608) 262-3065. ART ZIEGLER, STATE CARTOGRAPHER 10 C. REINHARD, EDITOR

