

# Information Bulletin

Volume 18 Number 1

November 1986



Western Association of Map Libraries

*"... to encourage high standards in every phase of organization  
and administration of map libraries..."*

The **Information Bulletin** is published three-times-per-year by the Western Association of Map Libraries, but opinions expressed herein do not necessarily reflect an official position of the Association.

Membership in WAML is open to any individual, institution, or business interested in furthering the Purpose of the Association, which is "to encourage high standards in every phase of the organization and administration of map libraries." Membership checks should be sent to Production & Subscription Manager shown below. Checks payable to "WAML."

**Membership Dues: Individual Members** residing in the Principal Region, may attend meetings, serve as an Officer, vote, and receive the **Information Bulletin** and announcements of meetings. \$15.00 per year.

### Principal Region

Alberta  
British Columbia

Alaska  
Arizona  
California  
Colorado  
Hawaii  
Idaho  
Montana  
Nevada  
New Mexico  
Oregon  
Utah  
Washington  
Wyoming

**Associate Members** reside outside the Principal Region.

They may attend meetings, serve on committees, and will receive the **Information Bulletin** and announcements of meetings. \$15.00 per year.

**Lifetime Individual Membership** is open to individuals only, for a onetime payment of \$200. In addition to full Membership, all issues of the **Information Bulletin** and all **Occasional Papers** will be sent as published.

**Institutional Members** are commercial firms or educational organizations. The institution may designate one of its staff as its Representative. The Representative has all rights as Individual Members, but may not hold office. The Institutional Member will receive one copy of each issue of the **Information Bulletin** and each **Occasional Paper** issued during the year of membership. \$35.00 per year.

**Subscriptions** to the **Information Bulletin** are \$20.00 per volume-year; three issues per volume-year: November, March, June. \$3.00 post out of US.

MEMBERSHIPS AND SUBSCRIPTIONS ARE AVAILABLE ON A FISCAL YEAR/VOLUME YEAR BASIS ONLY. Mid-year joiners/subscribers will receive back-issues for that year. The Fiscal Year/Volume Year is July 1st through June 30th.

Back issues of the **Information Bulletin** are available for \$10.00 per volume or portion thereof from Subscription Manager. All issues available.

Production  
&  
Subscription  
Manager:

Stanley D. Stevens  
Map Librarian

University Library (408) 429-2364  
University of California  
Santa Cruz, CA 95064

### Editorial Staff:

#### Editor:

Larry Cruse  
University Library C-075-P  
University of California-San Diego  
La Jolla, CA 92093  
(telephone 619/452-3338)

#### Atlas & Book Review Editor:

Peter L. Stark  
Map Librarian  
University of Oregon  
Eugene, OR 97403  
(telephone 503/686-3051)

<u>ASSOCIATION NEWS:</u>	Attendance Fall 1986, Eugene -----	84
	Call for Papers: 20th Anniversary	
	Meeting, Reno, Nev; Sept. 10-12, 1987 -	3
	New Member & Subscriber Rates for 1987/88 -	1
	WAML Fall Meeting, Eugene, Final Agenda ---	83
	WAML Membership & Subscription List -----	85
	WAML Officers 1986-1987 -----	3
	WAML Spring Meeting, Provo, Apr. 23-24 ----	2

FEATURE ARTICLES:

Defining Map Areas in Cartographic Cataloging,		
by Robert E. Schreiber -----		29
Important Farmlands Maps - Update, by Larry Cruse -----		35
Report of the First National Meeting of NCIC State Affiliates,		
by Peter Stark -----		4
Wilderness Press 1986, a review by Stanley D. Stevens -----		42

REGULAR FEATURES:

Atlas & Book Reviews, edited by Peter L. Stark -----		73
<u>Atlas of the Bible</u> , reviewed by Herb Fox -----		79
<u>Atlas of the North American Indian</u> ,		
reviewed by Heather Rex -----		81
<u>Direct-line Distances</u> , reviewed by Philip Hoehn -----		73
<u>Namibia 1:1,000,000</u> , reviewed by Alvin Urquhart -----		78
<u>Settlement Patterns in Missouri: A Study of Population</u>		
Origins, with a Wall Map, rev. by Jim Coombs -----		75
<u>United States Coastal Charts 1783-1861</u> ,		
reviewed by Gary Meagher -----		76
Advancing by Degrees, by Mary L. Larsgaard -----		25
Cartography in the Newspaper, by Carlos Hagen -----		70
Caveat Emptor, by Paul Leverenz -----		34
Conferences/Meetings - Some Past, Some Future -----		21
Depository Matters, by Joanne Donovan -----		70
Duplicate Maps Available -----		24
Kindred Journals -----		26
MicroCartography, by Larry Cruse -----		59
Milestones -----		26
New Map Microforms -----		61
New Mapping of Western North America -----		39
New Mapping of Other Than Western North America -----		40
New Publications -----	45 & 57 &	62
Online Cataloging -----		34
Publications of Interest -----		49
Publications of Relevance -----		48
Publishers & Dealers Catalogs -----		23
Reprographics -----		63
Self Preservation -----		66
Thematic Maps, a continuing Portfolio, No. 2 -----		72

-----  
 © COPYRIGHT 1986 BY THE WESTERN ASSOCIATION OF MAP LIBRARIES  
 -----

## Advertising Manager Appointed

Information Bulletin Editor Larry Cruse has announced the appointment of Stephen Mullin, former WAML Secretary in 1985-86, as Information Bulletin Advertising Manager. His address is 456 Alcatraz Avenue, Oakland, CA 94609 and he may be reached by telephone at (415) 655-6799. He will be soliciting advertising to bring cartographic products and services to the attention of our readership.

### ADVERTISERS ATTENTION!

The WAML Membership, assembled at the Fullerton Meeting, Oct. 25, 1975, authorized the Editor of the Information Bulletin to accept paid advertisements.

The Editor will accept camera-ready copy for advertisements, based on the following rates (standard 8½" x 11" page), to be located on the inside back cover, the back cover, and inside front cover (at the discretion of the Editor):

1/4-page      1/2-page      &      Full-page ads accepted.  
Rate is \$100. per Full-page. Additional information is available from the Advertising Manager.

Deadlines for submitting copy are: November issue/Oct. 1; March issue/Feb. 1; June issue/May 1.

Advertising in the Information Bulletin will reach map specialists in need of products and services. This medium can provide a valuable supplement to advertising you presently are doing. We will encourage our Members and Readers to patronize your offering.

The type of advertising can be display copy which describes a product, service, or simply identifies your latest catalog - inviting inquiries. Copy may list maps, atlases, and related materials - stating prices and terms of sale.

TO: WAML Members and Subscribers

Effective 7/1/87  
for 1987/88 Year**Membership Dues and Subscription Price Change Announcement**

The Executive Committee of WAML, at its Sept. 11, 1986 meeting in Eugene, increased WAML rates \$5.00 per category as follows:

WAML Principal Region &amp; Associate Members Dues \$20.00 per year

WAML Institutional Members [includes IB &amp; OP] \$40.00 per year

WAML Information Bulletin Subscribers [see rates below]

**Information Bulletin of the Western Association of Map Libraries**  
LC # 72-625238 ; US ISSN 0049-7282.

The Information Bulletin is the principal publication of the **Western Association of Map Libraries (WAML)**.

Begun in 1969, it is issued three times during each Volume Year.

Issue # 1 of the Volume Year appears in November

# 2 in March

# 3 in June

The Information Bulletin may be ordered at the rate shown below, orders are accepted on a **volume year basis only**, which begins July 1 and ends June 30.

Subscriptions to the Information Bulletin are accepted on a Volume Year Basis Only, at the rates set for that volume. Our rates are based on costs of production, on a non-profit basis.

1987 - 1988 Volume 19 - = \$25.00 per volume year

Outside U.S. via Book Rate add \$3.00 per Volume Yr.

No extra postage required for Domestic U.S. Postage mailed via Library Rate.

Ordering address: Western Association of Map Libraries  
c/o Stanley D. Stevens, Sub. Mgr.  
[phone 408-429-2364] University Library  
University of California  
Santa Cruz, CA 95064

Checks must be made payable in U.S.\$ to Western Association of Map Libraries [not to the University of California]. Payment for Volume 19 (and each Volume Year thereafter) should reach WAML by August 1, 1987. Institutional Members receive issues of the Information Bulletin and each Occasional Paper issued during the year of Membership.

WESTERN ASSOCIATION OF MAP LIBRARIES (WAML)  
 SPRING MEETING - APRIL 23-24, 1987  
 BRIGHAM YOUNG UNIVERSITY - Provo, Utah

PRELIMINARY AGENDA

Thursday, April 23

- 9:00-12:00 Executive Committee in Friends Room, Lee Library  
 1:00- 1:30 Registration in Reynolds Room, Lee Library  
 1:30- 1:45 Welcoming remarks, Rosanna Miller, WAML President  
 Sterling Albrecht, Univ. Librarian  
 1:45- 2:45 WAML Business Meeting  
 2:45- 3:00 Break  
 3:00- 4:00 "Mapping the Arches in Arches National Park",  
 Dale Stevens, BYU Geography Department  
 4:00- 4:30 "Color Reproduction", Linda Newman, Univ. Nevada-Reno  
 4:30- 5:00 "Pilots and Aeronautical Charts", Brenda Crotts,  
 Butte County (California) Public Library  
 7:00-10:00 Dinner at the Tree Room at Robert Redford's  
 Sundance Ski Resort

Friday, April 24

- 9:00-10:00 Sounding Board  
 10:00-10:15 Break  
 10:15-11:00 "The English Map Scene", Tom Hinckley, BYU Geog. Dept  
 11:00-11:30 "Preserving the National Atlas", Randy Silverman,  
 Lee Library Conservation Laboratory  
 11:30-12:30 Lunch  
 1:30- 3:30 Tour of U.S. Soil Conservation Service Airphoto  
 Facility in Salt Lake City  
 3:30- 5:00 Tour of U.S. Forest Service Geometronics Service  
 Center in Salt Lake City

TRANSPORTATION

Provo is served by Amtrak from Southern California, Northern California, the Pacific Northwest, and Denver. The airport is in Salt Lake City, and ground transportation to Provo, 40 miles south, is by Utah Transit Authority or Key Limousines in the terminal. Particulars will be in the packet mailed to Principal Region Members, and Institutional Members within the Principal Region. Anyone else may request the information if you plan to attend.

ACCOMMODATIONS

A block of rooms has been reserved at the Provo Excelsior Hotel (801) 377-4700, at a 33% discount. Make reservations at least two weeks in advance and mention WAML. Alternative accommodations will be in the information packet.

HOST

Riley Moffat, Map Librarian, Harold B. Lee Library, Brigham Young University, Provo, UT 84602 (801/378-4482)

**1986-1987 WAML Officers**

**President**            **Rosanna Miller**  
Map Collection - Noble Sci & Engr Library  
Arizona State University    (ph. ac602/ 965-3582)  
Tempe, AZ 85287

**President-Elect**   **Jim Minton**  
Map Librarian - University Library  
University of Arizona        (ph. ac602/ 626-2596)  
Tucson, AZ 85721

**Secretary**         **Muriel Strickland**  
Map Curator, University Library  
San Diego State University  
San Diego, CA 92181-0511    (ph. ac619/ 265-5650)

**Treasurer**         **Stanley D. Stevens**  
University Library            (ph. ac408/ 429-2364)  
University of California  
Santa Cruz, California 95064

**Past-President**   **Steven Z. Hiller**  
Map Librarian                 (ph. ac206/ 543-9392)  
Suzzalo Library - Map Section FM 25  
University of Washington  
Seattle, WA 98195

---

**WAML TWENTIETH ANNIVERSARY CELEBRATION****CALL FOR PAPERS**

The Western Association of Map Libraries will celebrate its twentieth anniversary at the Fall 1987 Meeting in Reno. The meeting and Saturday field trip are scheduled for September 10-12.

Both WAML and map librarianship have changed significantly since 1967 and a significant part of the program will be devoted to examining these changes. A number of festive events are also planned to celebrate this milestone in map librarianship.

Anyone interested in making a presentation dealing with any aspect of WAML or map librarianship during this period should contact Linda Newman (MacKay School of Mines Library, University of Nevada, Reno, Nevada 89557) by December 31 with a specific topic. Presentations should be limited to thirty minutes. Papers will be published in either the Information Bulletin or in a special commemorative Occasional Paper.

**REPORT OF THE FIRST NATIONAL MEETING OF NCIC STATE AFFILIATES**

Denver Federal Center, Denver, Colorado, August 11-15, 1986

by

**Peter Stark**Map Librarian  
University of Oregon**I. Background.**

The National Cartographic Information Center [NCIC] was created in 1974 and placed administratively within the U.S. Geological Survey's Topographic Division, now called the National Mapping Division. NCIC replaced the old Map Information Office and was given broader responsibilities than those held by its predecessor agency to collect and disseminate information on all forms of cartographic materials, including aerial photography and satellite imagery in addition to maps and charts.

Soon after its establishment, NCIC placed branches in each of the four U.S.G.S. regional offices, in Reston, Virginia; Rolla, Missouri; Denver, Colorado; and Menlo Park, California. NCIC also began to enter into agreements with several states, which made possible the designation of a state agency as a state affiliate office of NCIC. The purpose of state affiliates was to give NCIC visibility at the state government level (most have been located in state capitals), improve data acquisition and to more efficiently serve state government and citizens. Affiliates receive from NCIC reference tools, information guides, and microfiche map, air photo and satellite imagery catalogs. In exchange, state affiliates provide NCIC with user statistics, information on state and local map publishing, and aerial photography availability. Also, the state affiliate must operate as a service to the public, answering reference questions, providing order forms, and, if necessary, referring inquiries to the proper commercial outlet or agency. State affiliates usually have regular contact with NCIC, obtaining the latest price information, news about new products and quantities of USGS brochures, indexes and order forms.

The first state affiliate was created in Texas on April 12, 1976. The most recent state affiliate was Vermont, which signed agreements with NCIC on July 3, 1986. To date, only five states, Colorado, Iowa, Kansas, Oklahoma and South Dakota do not have state affiliate offices.



State affiliate offices have been placed with state geological surveys, state libraries, state departments of environment, natural resources, water, planning and economic development as well as with university libraries and academic departments. At times, responsibilities of data acquisition and public services have been split and two state affiliates named. Time has proved that to operate a successful state affiliate office, two conditions must be present: first, a state affiliate office must have a tradition or at least a commitment to directly serving the public, and second, it must have people with the technical expertise necessary to deliver competent cartographic information. In the past, a few state affiliates have faltered because they lacked one or both of these two necessities.

As representatives of the state affiliates gathered in Denver for the first NCIC nation-wide meeting, one could count geologists, cartographers, engineers, computer programmers, photogrammetrists, historians, and librarians waiting for the meetings to begin.

## II. OBJECTIVES.

This was the first national meeting called for all state affiliate representatives. Not that NCIC state affiliates had never seen their counterparts. Eastern, Mid-Continent, Rocky Mountain, and Western regional NCIC offices have sponsored regional meetings of state affiliates for some time, though the frequency of these meetings have varied from region to region. Eastern NCIC affiliates have met quite regularly and have formed two well-organized groups, namely, the Northeast and the Southern NCIC Affiliates.

From what was said before and during the meeting, NCIC invited state affiliates to Denver in order to:

1. Instill the idea in all state affiliate representatives that they are acting in unison with a national organization with nation-wide goals and to dispell any feelings of isolation we might have;
2. Create a network spirit among state affiliates, for, being such a diverse group, no one professional organization could serve the whole;
3. Provide a standard baseline of training for each state affiliate representative in use of the various NCIC reference tools;
4. Familiarize state affiliates with the many products that the U.S. Geological Survey makes available to the public so that we could better market those products in our home states;

Also, with the naming of the 45th state affiliate in Vermont, the state affiliate system had become complete enough to warrant a national meeting.

From my own thoughts and those of my fellow state affiliate representatives, our motives for attending this meeting were:

1. To meet the assembled NCIC staff directly and connect names to faces;
2. To express our concerns and suggestions and to find answers to our questions regarding the operation of an NCIC state affiliate office;
3. To receive the training NCIC staff offered;
4. To see what future directions the U.S. Geological Survey will take;
5. To meet our colleagues from other states.

Another large factor influencing many to sacrifice time and money in order to travel to Denver was the opportunity to see the new centralized U.S. Geological Survey distribution center. On my mind, as I landed in Denver Monday morning, was the 1978 NCIC/Special Libraries Association meeting at the Denver Federal Center. This meeting proved to be a watershed in NCIC/U.S. Geological Survey and map library relations. Mary Larsgaard has preserved the events and spirit of that meeting in her article "NCIC/SLA Meeting, Federal Center, Denver, March 9-10, 1978 : a Mutual Discovery" (Bulletin, Special Libraries Association, Geography and Map Division, No. 113 (September 1978) p. 3-16). I hoped this meeting would be as exciting and as profitable as the one held in 1978.

#### AGENDA (Revised)

Monday, August 11, 1986 Bldg. 25, Denver Federal Center

- |             |  |
|-------------|--|
| 9:00- 9:30  | Registration   |
| 9:30-10:00  | Welcome. Walt Wagner, NCIC-Headquarters  |
| 10:00-10:30 | Introductions of State Affiliates  |
| 10:30-11:00 | NCIC - Present and Future: <b>John Wood</b> , NCIC Chief   |
| 11:00-12:00 | Tour, Branch of Distribution. Building 810<br><b>Bill Graser</b> , Chief, NCIC-Rocky Mt.<br><b>Jim Maness</b> , Branch of Distribution   |
| 12:00- 1:00 | Lunch  |
| 1:00- 1:30  | Film: "The National Domain"  |
| 1:30- 4:00  | Product Familiarization:<br>--Maps and Charts. <b>Denny White</b> , NCIC-Rocky Mt.<br>--Geodetic Control Data. <b>Corky Anderson</b> , NCIC-RM<br>--Aerial and Space Photography. <b>Hank Svehlak</b> ,<br>NCIC/NSTL, Bay St. Louis, Mississippi<br>--Satellite and SLAR Imagery. <b>Karla Sprenger</b> ,<br>EROS Data Center<br>--Map Separates. <b>Bill Graser</b> , Chief, NCIC-Rocky |

Tuesday, August 12, 1986 Bldg. 53, Denver Federal Center

- 8:30-12:00 Microfiche Training, **Hank Svehlak**, Moderator  
 --Introduction/History of Microfiche Accession Aids, **Karla Sprenger**  
 --Accessioning the Files  
 APSRS - **Steve Johnson**, NCIC-Rocky  
 MCIC - **Wendy Scratch**, NCIC-Rocky  
 CC - **Shirley Sheldrake**, NCIC-Rocky  
 GNIS - **Keith Elliot**, NCIC-Headquarters
- 12:00- 1:00 Lunch  
 1:00- 4:30 Accession Aids, **Hank Svehlak**, Moderator  
 --USGS Aerial Photography, **Hank Svehlak**  
 --NASA High Altitude Photography, **Hank Svehlak**  
 --NHAP, **Steve Johnson**  
 --SLAR, **Karla Sprenger**  
 --35mm Hist. Map File, **Steve Johnson & K. Elliot**  
 --LFC (Large Format Camera), **Jim Russell**,  
 Chicago Aerial Survey (company)  
 --Landsat/EOSAT, **Judy Collins**, EOSAT (company)
- 6:00- 9:30 Chuckwagon Dinner in the Colorado Front Range

Wednesday, August 13, 1986 Bldg. 25, Denver Federal Center

- 8:00- 9:00 EOSAT, **Roy Byrnes**  
 9:00- 9:30 NOAA (Landsat), **Howard Warriner**, NOAA/EROS Data Center, Sioux Falls, South Dakota  
 9:30-10:00 EROS Data Center Operations, **Karla Sprenger**  
 10:00-10:30 Film: National High Altitude Program, USGS  
 10:30-12:00 Slides: NCIC State Affiliate Offices, **Walt Wagner**  
 12:00- 1:00 Lunch  
 1:00- 4:00 NCIC State Affiliate Reports  
 5:00- 6:30 Tour of Coors Brewery, Golden, Colorado

Thursday, August 14, 1986 Bldg. 25, Denver Federal Center

- 8:00-11:00 State Affiliate Round Table  
 11:00-12:00 Report: State Affiliate Round Table to NCIC Staff  
 12:00- 1:00 Lunch  
 1:00- 2:00 Digital Cartography Products, **Shirley Sheldrake**  
 2:00- 2:30 Geographic Information Systems, **Mike Cone**, USGS-RM  
 2:30- 3:30 Directory of Digital Data & Software Information, **Keith Elliot**, NCIC-Headquarters  
 3:30- 4:00 Closing Remarks, **John Wood**, Chief, NCIC

Friday, August 15, 1986.

- 8:00-10:00 Tour, Rocky Mountain Mapping Center, **Bill Graser**

## III. REPORT.

MONDAY, AUGUST 11, 1986

The meeting began with the ritualistic handing-out of name tags and materials. The state affiliates had been asked to bring to Denver any promotional or informational materials generated in their state offices. Many obliged. The stage area of the conference room was littered with accession lists, publication guides, geologic postcards, newsletters and directories. The Pennsylvania Geological Survey brought buttons proclaiming their 150th anniversary, 1836-1986. NCIC staff added nothing to the mound of material on the stage, which was quite odd considering their generosity in other meetings, particularly the 1978 SLA meeting.

Walt Wagner, the organizer of the meetings, welcomed the group to Denver by stressing our common goal of quality cartographic information delivery. Wagner suggested that the NCIC "family" might benefit from reading the 1980's titles of Thomas Peters, In Search of Excellence and Passion for Excellence. State affiliates then introduced themselves. Of the 45 state affiliates, 30 were present. John Wood, NCIC Chief, provided a brief talk on the state of NCIC with encouraging remarks about the future. Wood also introduced another acronym: NCIC CARES, meaning Contours, Affiliate, Responsive, Efficient and Service.

After such light fare, it was with some relief that we adjourned at 11:00 am to tour the new national distribution facility for all U.S. Geological Survey publications, maps, texts and open--files. Led by Bill Graser and Jim Maness, we were taken to Building 810, the old General Services Administration's western warehouse (one federal agency decentralizes while another centralizes). Maness explained that centralizing distribution would result in about a 400-million dollar savings each year as space in Alexandria, Virginia (the eastern distribution point) costs \$12.00 per square foot, while Building 810 costs \$3.00. Huge and cavernous, 810 does have a human-scale office area which will house an enlarged public sale and display area along with administrative offices.

Building 810 covers a full 17 acres of the Denver Federal Center. Its ceilings must be at least 60 feet high and distances were difficult to determine since the further reaches of the warehouse were unlit. The building holds all the maps published by the USGS, including the geologic maps. Maness explained that there are two stocks, one, the map room or "pull" stock used to fill orders day to day and, two, the bulk stock in dense storage to be used to replenish the pull stock. East and west bulk stock now fills the warehouse. Imagine a massive pile of maps 12-15 feet high, unsorted and uninventoried waiting to put on the shelves. Eastern state affiliates were a bit shaken at the sight. The western pull stock is still intact and in good order in

another building on the Federal Center's grounds, but it too will eventually find its way to Building 810.

Supposedly, the quadrangle maps of the east were to arrive in Denver after the shelving had been installed. Unfortunately, the shelving was not in place due to ordering, construction and safety delays. As the semi-trucks arrived in Denver full of eastern's stock, the quadrangles and text products were simply off-loaded into the warehouse until the shelving was put up. As we toured the warehouse, people were actively pulling apart the massive stacks of maps and placing them on the shelves that had only recently been approved by the safety officer. Maness was hopeful that everything could be sorted out by the end of the year. A question was asked about increased staffing in Denver due to the closing of the Alexandria, Virginia distribution point. Maness said that he expects that only two employees will transfer from Alexandria to Denver. Formerly, 99 employees worked in distribution. Now, only 67 work in distribution, all in Denver; the rest have found other positions back east. There are hopes to increase staff in Denver soon.

Many complained about delays in receiving orders. Just looking at the stacks upon stacks of maps still in bundles did much to explain this problem. Orders are running far behind and there are about 6,000 unopened orders sitting in a safe in Denver, but Maness, forever the optimist, expects that the backlog will be taken care of early next year. More orders are received in the summer than in the winter. As orders taper off, more people will be assigned to organizing the eastern maps in building 810. The group was also taken to the text products distribution point and to the open-file offices. Fewer problems and delays will be experienced in these units. A few in our group noticed pallets of maps stacked outside of the warehouse and asked about their fate. Maness said that these were superseded bulk stock destined for the shredder. The tour left the eastern state affiliates quite moody as the overall impression was that it would be a long time before the distribution center would be up and running smoothly.

After lunch, a film was shown to the group entitled the "National Domain". The film's main point was that the U.S. Geological Survey had not spent a great deal of time and effort in the past to market their products. But, now, the realities of the 1980's has forced the Survey to look more closely at marketing and public relations. NCIC plays an important part in the marketing efforts of the Geological Survey.

To act as a marketing arm of the Survey, NCIC state affiliates must know what products are available, so, it was on to the next item on the agenda, product familiarization. "This is a topographic quadrangle; this is a 1:500,000 base map of the state of Colorado...." Someone in the audience said slowly, "This is going to be a long meeting." We did not believe that NCIC thought we needed such elementary "training". Granted, some participants

did need such information, but the majority did not. Geodetic control data was discussed next. Much of the information provided can be found in the Survey's popular publication "Measuring the Nation". The only really new information is that the Survey has ceased issuing its 1:250,000-scale geodetic control diagrams because of the establishment of the 1983 North American datum for horizontal control. The 1983 datum will be established by the National Geodetic Survey.

Hank Svehlak introduced aerial photography by saying that NCIC has a major data base for finding aerial photography of the United States - Aerial Photography Summary Record System or APSRS. Published now only in microfiche format, APSRS is the principal finding tool for most aerial photography for the nation. Hank also discussed the National High Altitude Program or NHAP. The first phase of the program or NHAP 1 is finished although numerous gaps in the record exist. NHAP 2 has started principally in the southern states. Black and white film at a scale of 1:80,000 and color infra-red at a scale of 1:58,000 are available. NHAP 2 was planned to be a 5 year project but realities now dictate a 6-7 year project consisting of same-year once over coverage of each state. Standard enlargements of the 9 inch by 9 inch print can be ordered 2x (18" x 18"), 3x (27" x 27") and 4x (36" x 36") the original. In answer to a question, Hank said that negatives of unclassified Army photography are held at the EROS data center.

Karla Sprenger discussed the Side-Looking Airborne Radar program (or SLAR). Coverage of the U.S. is spotty at best and the existing SLAR imagery has not yet been properly cataloged. Karla brought examples of this imagery and passed them around the room. SLAR data can be mixed with digital line data to produce shaded relief maps. Several questions about the EROS Data Center and its relationship to EOSAT, the new private company that markets Landsat data, were asked. Judy Collins of EOSAT took the podium to say that EOSAT has continued to market the same Landsat products and has lowered the prices on the computer products (magnetic tapes), but has increased the prices for photographic products. She said that another EOSAT representative would be coming later to further explain EOSAT's relationship to EROS Data Center.

Bill Graser then talked about map separates. Custom ordering of 7.5' quadrangle map separates accounts for 60% of NCIC-Rocky Mountain's income. There are two types of separates available, feature separates, such as contours, roads, grids, and color separates. The prices of 7.5' map separates start at \$36.00 for the first layer then \$9.00 for each additional layer. It generally takes about 2 to 3 weeks for delivery. There are order blanks for map separates, but it is best to handle an order over the phone.

The meeting adjourned about 4:00 pm. Since most of us were staying at the Compri Hotel, many gathered in the lounge to discuss the meetings and to arrange dinner plans. The state

affiliate representatives were not too pleased with how the meetings were going. Most thought that NCIC staff did not appreciate the skill level of the meeting's participants. NCIC was aiming too low in its training program though we admitted that some needed the introduction. We also noticed the decided marketing orientation of NCIC staff. All state affiliate representatives mixed well among themselves and it seemed that this would be a meeting that would prove the old theory that more business would be conducted outside the formal meetings than inside.

TUESDAY, AUGUST 12, 1986

The whole day was scheduled for training sessions. We gathered in a classroom in Building 53 as NCIC-Rocky Mountain staff unloaded microfiche readers for the sessions. We began with Karla Sprenger who provided an introduction to the various microfiche catalogs that each NCIC state affiliate has in its office. Training involved an explanation of the organization and use of the APSRS fiche, MCIS, (Map and Chart Information System, a listing of U.S. Geological Survey topographic maps), CC (Cartographic Catalog arranged by state), and GNIS (Geographic Names Information System).

Most of this training session did not hold the attention of the state affiliate representatives. Many wandered outside the classroom to get coffee and found themselves in conversations with others in the hallway. Two questions on the minds of several state affiliate representaives were not adequately answered. These were, 1:) what constitutes a complete set of fiche or is there an inventory of the microfiche collection, and 2:) when we receive new fiche, does this new fiche supersede any other older fiche?

There was a lively discussion about Landsat fiche. Many received fiche that they could not use, such as the Current Landsat Accessions, but did not receive the Image File, a collection of actual images which we could use. NCIC state affiliates also do not receive the Geographic Names Information System fiche. GNIS is an alphabetical listing of geographic names found on topographic sheets and must be purchased. Shouldn't we receive this fiche automatically?

Our unanswered questions, the elementary level of the training session and the conversations of the people in the hall made for a frustrating morning. The final straw came when Wendy Scratch, NCIC-Rocy Mountain, as she was explaining MCIS, admitted to the group that she never used this fiche collection anyway.

Many people needed coffee after this remark and the drift to the door was a bit more noticable. Outside, Patrick McHaffie (Kentucky), David Cobb (Illinois), and Larry Carver (California), had cornered John Wood, NCIC Chief, and were explaining their objections to the meetings and the training sessions. Their

points were that NCIC was aiming too low in the training sessions, that they could have taken advantage of the skills held by individual state affiliate representatives in the sessions, and that there was not enough scheduled time for state affiliate representatives to get together by themselves. At that time, John Wood cancelled the "cartographic inquiry exercises" for Thursday morning and gave the whole morning over to the state affiliate round table where a list of concerns could be drawn up.

The afternoon training sessions were much more interesting and informative. Karla Sprenger once again talked about Side-Looking Airborne Radar. She said that even though order forms are available, it is best to call the EROS Data Center. Steve Johnson, NCIC-Rocky and Keith Elliot from NCIC Headquarters discussed the historic map microfilm. The microfilm at one time contained only U.S. Geological Survey quadrangles. The microfilm collection has been expanded to include all National Mapping Division maps (state base maps, river surveys, etc.), maps of the U.S. Forest Service, the Fish and Wildlife Service, the Army Corps of Engineers and several other agencies including state Department of Transportation county maps. The catalog now shows a total of 408 rolls of film with 12 more rolls now in the process of being filmed. There has, unfortunately, been some production trouble at the National Archives, the agency that actually does the filming, so the recent rolls of film are not yet available. Each roll of film costs \$13.00 for diazo and \$20.00 for silver. These prices are expected to be increased soon.

Jim Russell from Chicago Aerial Survey introduced an entirely new topic, the Large Format Camera that has been mounted on the Space Shuttle. The Large Format Camera takes photographs and is not a scanner-based system that involves computer processing to produce a photographic image. Scales of the film images range from near 1:750,000 to about 1:1,200,000. These high-resolution photographs can be enlarged 10 times or more with little loss of image quality. A wide variety of film and paper products are available. With the Space Shuttle disaster of January 1986, the expansion of the system to include all areas of the world has been put on hold. A catalog of index maps showing "footprints" or the extent of each image is available for \$5.00 from LFC Department, Chicago Aerial Survey, 2140 Wolf Road, Des Plaines, Illinois 60018. Also available is a brochure describing the products available with a price list.

The microfilm catalog products produced by NCIC are available to the public for about two dollars per fiche. This includes the Cartographic Catalog (CC) for each state, the Map and Chart Information System (MCIS) for each state and an abbreviated national listing, the Aerial Photography Summary Record System (APSRS), and the Geographic Names Information System (GNIS). For a description of each fiche catalog and current price information, contact Steve Johnson, Cartographic Catalog Program Director, 509 National Center, U.S. Geological Survey, Reston, VA 22092.



WEDNESDAY, AUGUST 13, 1986

Roy Byrnes of EOSAT was the first speaker on Wednesday morning. EOSAT is a company owned jointly by Hughes Corporation and RCA Astro-Electronics. Before the advent of EOSAT, the EROS Data Center had one data base combining both aircraft photography and space imagery. This data base has now been split into its two components. The USGS will continue to provide access to the aircraft data and the government will continue to own the satellite and the data. EOSAT is a market developer for Landsat data. Howard Warriner of the National Oceanic and Atmospheric Administration gave the history and background of the privatization of Landsat and NOAA's present and future role in the Landsat program. Howard announced that all back issues of the Landsat Data User Notes, a recently cancelled newsletter issued by NOAA, is available on five color microfiche for \$25.00. It is available from the EROS Data Center's Customer Service Department, care of Paul Severson, Sioux Falls, South Dakota 57198. The newsletter chronicles the development of the Landsat program up to the time EOSAT entered the scene.

Karla Sprenger and Howard Warriner, in response to the many requests they had received from state affiliate representatives, went around the conference room contacting each representative in order to confirm or alter the automatic sending profile for Landsat microfiche catalogs. This one-on-one discussion of our various profiles with EROS staff was an unexpected benefit of attending the meetings for both NCIC and state affiliates.

A supply of brown lucite signs with white lettering was stacked in the back of the conference room. These signs were intended for state affiliate office entrances or display areas. Simply stated, the signs proclaimed that the office is a recognized NCIC state affiliate office and can provide information on the following subjects, such as geodetic control, digital mapping and so on. On the sign is the U.S. Dept. of the Interior's seal.

NCIC staff, I believe, were quite surprised that many objected to the sign. State affiliates located in state geological surveys took great exception to Interior's buffalo, saying they had enough of an identity crisis with the federal Geological Survey to feel secure in posting the sign. Furthermore, their superiors might not let them display it at all. Neither NCIC nor the affiliate representatives can supply much information about geodetic control, someone said, without referring to the National Geodetic Survey, so why have the sign indicate that we can supply information in-house? Having the affiliate representatives critique a preliminary design and message would have made a great deal of sense, especially on a sign intended to be placed outside our doors. Our criticism at the meeting was too late to do much good, this time.

Walt Wagner had asked each affiliate representative to send a

few slides of their state affiliate office and staff. He gathered them together into a slide show for presentation at the morning session, which everyone enjoyed.

That afternoon, Karla Sprenger showed a well-produced video tape on the National High Altitude Program which was followed by short presentations made by state affiliate representatives about their own affiliate operations. Once again, everyone was impressed with our diversity in terms of parent agency and individual specializations.

Back at the Compri, after a tour of the Coors Brewery in nearby Golden, the lounge was full of tired state affiliate representatives discussing the past three days of the meetings. By and large our impressions of NCIC and the meetings fell into three main areas: (1) That NCIC had ignored our local situations; (2) That NCIC did not consider our different skill levels in planning the program; (3) That NCIC exists in relative isolation within the National Mapping Division to its own disadvantage.

NCIC underestimates the importance of the local situations of each state affiliate in the delivery of cartographic information. NCIC may be a "family" but NCIC is not our entire lives. We generally re-interpret our NCIC status to fit our local situations and the objectives of our parent institutions. Other information networks exist in each state that serve as important communication devices and each state affiliate representative belongs to a professional organization that helps us in our work through education and current awareness. State affiliates have alternative tools with which to dig out cartographic information and do not always use the ones provided by NCIC. Furthermore, we were often told during the meetings that for older maps we should refer our inquirer to the National Archives or the Library of Congress. If they were sensitive to the local situations of their own NCIC state affiliates, they might have suggested that we contact our state historical societies, state libraries, or academic libraries after checking our own collections.

State affiliate representatives are a diverse group. Represented in our group were photogrammetrists, surveyors, librarians and many other professions. Yet this pool of talent and expertise was never drawn upon by the NCIC staff. Accessing geologic maps was not on the agenda despite the fact that some of us would have liked to discuss this subject and quite a few state affiliate representatives possessed a wealth of knowledge in this area. Perhaps geologic mapping was not on the agenda because NCIC is located in the National Mapping Branch and not the Geologic Branch. State affiliates could have participated in the meetings to a greater extent to the advantage of all.

State affiliates felt that NCIC exists in relative isolation within the National Mapping Division. No mention was made of the State Mapping Advisory Committees that serve an essential

communication and networking function for many NCIC state affiliates. Some state affiliates rely a great deal on the Geological Survey's Public Inquiry Offices, but these were not discussed at the meetings.

We sensed that NCIC is being seen more and more by the powers that be as a marketing agent for the National Mapping Division, as the NCIC program included nothing of other federal government mapping or photographic activities. National Mapping Division does not have it all, and to operate a state affiliate believing it does would be a disservice to our public. But we must be fair. NCIC, being located within the National Mapping Division, has responsibilities to its parent agency and division, at the same time it must fulfill its charge to supply the public with cartographic information. Thus, NCIC has to walk two fences, public service and loyalty to its parent organization.

THURSDAY, AUGUST 14, 1986

We had these concerns on our minds when we gathered for the state affiliate round table at 8:00 am. From our discussions, without the presence of NCIC staff, we put together a list of 20 action items. They append this report. Patrick McHaffie of the Kentucky Geological Survey reported our 20 concerns to the assembled NCIC staff. The best comment to come from the NCIC staff was to the effect that the NCIC state affiliate network has finally come of age. So, in a sense, NCIC staff and state affiliate representatives had made a mutual discovery, as had map librarians back in 1978. As we filed out for lunch, one state affiliate representative questioned another, "Why do I feel that I can go home now?"

Reassembling in the conference room, Shirley Sheldrake gave an overview of USGS digital cartographic products such as digital elevation models (DEM) at 1:24,000-scale and digital line graphs (DLG) at 1:100,000-scale. DLG's are being produced cooperatively with the U.S. Bureau of the Census. Mike Cone introduced geographic information systems as being a way to capture line or spatial data on computer and to manipulate that data to discover something completely new. We then toured the Rocky Mountain Mapping Center's GIS facility. The GIS staff has digitized several different kinds of line and polygon data from the Sugar House, Utah, 7.5' quadrangle, such as transportation net, emergency facilities (hospitals, fire stations, etc.) earthquake faults and soil types. By manipulating and mixing the data elements, the GIS system can produce new maps that will show, for example, bottlenecks for emergency vehicles or potential liquifaction areas after a major earthquake. State affiliate representatives are aware that GIS systems are now one of the most popular subjects among state agencies and frequently are placed high on the agenda for discussion in state mapping advisory committee meetings. After the tour, state affiliates knew much more about the possible applications of GIS systems than before and most agreed that this agenda item was a high point of the

conference.

Back in the conference room, Keith Elliot of NCIC Headquarters passed out copies of the Directory of Digital Data and Software Information that he compiled over a period of two years. The importance of this huge reference work will increase as more governmental agencies become more involved with GIS systems.

John Wood, Chief, NCIC, was the last speaker of the meeting. He had two bits of crowd pleasing information to share. First, the USGS topographic map index booklets will have a map sheet tucked away in the back that will be similar to the old single sheet map index. The Survey has heard the criticisms of the index booklets and has taken a positive step to meet them. Second, all state affiliates listed in the directory are now considered full-fledged affiliates despite the designations of "co-" or "sub" used in the past. This will probably mean that states with two affiliates who have in the past split-up the one set of reference tools sent to each state will now have the option to receive two sets.

In his closing remarks, Wood asked us to reach into ourselves and develop new, positive attitudes, to cooperate with one another in a true networking spirit, to take what we have learned from these meetings back to our workplaces and rededicate ourselves to quality cartographic information delivery.

FRIDAY, AUGUST 15, 1986

An optional tour of the Rocky Mountain Mapping Center was offered in the morning. Since I did not opt for the tour, I cannot say how many state affiliate representatives attended or what they saw. I remained at the comfortable Compri Hotel trying to re-write the agenda to fit reality and to pull together an accurate attendance list.

#### CONCLUSION

In conclusion, it is important to stress that no state affiliate arrived in Denver to purposefully make waves. We understand all too well that NCIC's purposes and reason for being are the same as all state affiliates, namely, public service. We all learned a great deal by attending the meetings. The problems we had with their progress was rooted in a desire to take back with us as much relevant and useful information as possible in order to justify the trip to Denver. Everyone in state government understands that time and travel funds are a limited resource and to attend the Denver meetings many state affiliate representatives reached into their own pockets. Our criticisms of NCIC will hopefully be seen as constructive.

Positive actions resulting from the meetings have already started to happen. Karla Sprenger has sent state affiliates a

video tape of the excellent film seen at the meeting "The Sky's the Limit" that describes the National High Altitude Program. Work is well underway on an NCIC state affiliate brochure with affiliate representatives doing most of the writing. I have received several newsletters from other state affiliates and our 20 edited action items will soon be submitted to NCIC. If state affiliate representatives and NCIC continue on the path set out in Denver, the second NCIC meeting will be a great success.

-----  
Appendix A

ACTION ITEMS

FIRST NCIC NATIONAL AFFILIATE MEETING

AUGUST 11-15, 1986

Thank you and Congratulations:

NCIC-Rocky Mountain is to be congratulated for an outstanding job of hosting this first national affiliate meeting. The accommodations have been superb and the hospitality has been second to none.

1. Affiliate requests for agenda items apparently were not incorporated into the agenda. In the future:
  - Other federal agencies should be invited to make presentations;
  - A variety of private firms should also be invited to make presentations;
  - "Hands-on" digital and GIS training was requested but not on the agenda;
  - Southeastern affiliates had requested that the agenda include time for regional affiliate groups to meet, this request should be met in the next national meeting.
2. Future meetings should offer split sessions, basic training for newer affiliates and more advanced sessions and programs for older, more established affiliates. Many affiliates would find it difficult to justify attending a second national meeting with an agenda similar to the first.
3. There should be a standard baseline training for new NCIC affiliates in the first year of affiliation. Perhaps adjacent state affiliates could be used in the training of new affiliates. A day or two in the office of an active state affiliate would benefit new affiliates.
4. NCIC should be more service oriented, less marketing oriented. Standard National Mapping Division products are not always the best answer for reference inquiries.
5. Repeatedly, it has been said that the meeting is for the state

- affiliates. If this is true, then affiliate representatives should have a more active role in setting the agenda for national and regional meetings. At least 50% of the agenda should be set by the state affiliates themselves.
6. One full day of future meetings should be made up of panels composed of specialists in particular areas of interest. The panels will be composed of federal representatives and state affiliates. Areas of interest could include geodetic control, digital cartography, remote sensing, and image interpretation.
  7. Speakers should be more knowledgeable on their given subject. If the best person available to speak on a subject such as historic maps or SLAR is a state affiliate, then that person should be utilized on the program.
  8. Before the closing of the Eastern Mapping Center NCIC office, state affiliates communicated their concern to NCIC officials that this move would result in less service for the eastern state affiliates. Now that the closure has taken place and NCIC Mid-Continent is responsible for 29 state affiliate offices, service has declined. NCIC-MC personnel have made every effort to maintain service, but with such an overload response-time and the service level to which the 29 state affiliates were accustomed has not been maintained.
  9. State affiliates report user statistics each month to NCIC regional offices. In order to advance the network spirit among state affiliates, affiliates should receive a summary of national and regional statistical reports.
  10. Press releases from the National Mapping Division should go directly to state affiliates.
  11. NCIC staff should be more responsive in answering questions and requests made by state affiliates, especially in regard to requests for publications and order forms. There should be no unreasonable limit placed on requests for informational brochures and order forms.
  12. At national meetings, affiliates should meet formally with regional officials to air concerns.
  13. The state affiliates will develop a computer list of affiliate capabilities to be distributed to affiliate offices.
  14. NCIC should provide a checklist of informational publications available in quantity and a comprehensive list of videos, slide presentations and exhibits that can be borrowed by state affiliates.
  15. Affiliates feel that the new signs are of high quality, but because we had no input in their design or message, many of us will have trouble displaying them due to conflicts with

our parent institutions.

16. On NCIC brochures, more mention should be made of state affiliates as a contact point. On the brochures the affiliates mail to inquirers, we would like to use rubber-ink stamps to identify our affiliate, but the glossy paper does not hold the ink. Could NCIC Headquarters or regional offices supply affiliates with gummed or crack-and-peel labels with the affiliates' address on them?
17. Proceedings or minutes of the meeting should be provided to all affiliate representatives, including those not attending. NCIC officials should take the minutes and then act upon those minutes.
18. Work should now begin for replacing fiche with machine readable products. More consideration should be given to computer capabilities of affiliates.
19. NCIC should provide current updates of USGS circular 934, Worldwide Directory of National Earth-Science Agencies and Related International Organizations.
20. The Maine affiliate has offered to host an electronic mail system. Some support from NCIC, such as an 800 number or FTS for affiliates, is needed for this to be a success.

---

## Appendix B

### ATTENDANCE

#### NCIC STAFF

Dennis Cole	NCIC-Western
Keith Elliot	NCIC-Headquarters
William Graser	Chief, NCIC-Rocky Mountain
H.C. Meaux	NCIC-Mid-Continent
Shirley Shel Drake	NCIC-Rocky Mountain
Karla Sprenger	NCIC-EROS Data Center
Hank Svehlak	NCIC-National Space Technology Laboratory, Bay St. Louis, Mississippi
Walt Wagner	NCIC-Headquarters
Howard Warriner	NOAA/Landsat, EROS Data Center
Denny White	Chief, NCIC-Mid-Continent
John Wood	Chief, NCIC
Dick Zorker	Chief, NCIC-Western

#### NCIC Federal Affiliate

Jack Dodd	Tennessee Valley Authority
-----------	----------------------------

NCIC State Affiliates

California	Larry Carver, Univ. of Calif. Santa Barbara
Connecticut	Patrick McGlammery, Univ. of Connecticut
Delaware	William Schenck, Delaware Geological Survey
Florida	James Anderson, Florida Resources and Environmental Analysis Center
Georgia	Mason Adams, Georgia Dept. of Community Affairs
Hawaii	Mabel Suzuki, Univ. of Hawaii at Manoa
Idaho	Larry Jones, Idaho Historical Society Elizabeth Jacox
Illinois	David Cobb, Univ. of Illinois Map Library Edward Scoggin, Illinois Geological Survey
Indiana	Dee Gillespie, Laboratory for Applied Remote Sensing, Purdue University
Kentucky	Patrick McHaffie, Kentucky Geological Survey
Louisiana	Dot McConnell, Louisiana Dept. of Transportation and Development
Maine	Louis Morin / Tom Brann, Univ. of Maine, College of Forest Resources Bob Tucker / Robert Johnston, Maine Geological Survey
Massachusetts	Dennis Swartwolt, Univ. of Massachusetts
Mississippi	Paul Davis, Mississippi Research and Development Center
Missouri	Keith Wedge, Missouri Div. of Geology and Land Survey
Montana	Hal James / Mayrose Thompson, Montana Bureau of Mines and Geology
Nebraska	Donald Rundquist, Nebraska Conservation and Survey Division
New Hampshire	Frank Adamovich, Univ. of New Hampshire Library
New Jersey	Bill Graff / Ron Kuzma, New Jersey Geological Survey
New Mexico	Amy Budge / Jeanette Albany, Univ. of New Mexico, Technology Application Center
Ohio	James H. Given, Ohio Division of Soil and Water Conservation
Oregon	Peter Stark, Univ. of Oregon, Map Library
Pennsylvania	Sandy Blust, Pennsylvania Geological Survey
South Carolina	Richard Lacy, South Carolina Land Resources Commission
Tennessee	James Moore / Carolyn Patton, Tennessee Division of Geology
Texas	Lou Falconieri, Texas Natural Resources Information System
Vermont	Suzanne Clark, Univ. of Vermont Library
West Virginia	Peter Lessing, West Virginia Geological Survey
Wisconsin	Christine Reinhard, Wisconsin State Cartographers Office



Wyoming

George Christopoulos / Andrew Beber, Wyoming State Engineer's Office

OBSERVERS

Kansas

James W. Merchant, Univ. of Kansas, Kansas Applied Remote Sensing Program

Oklahoma

Ken Johnson, Oklahoma Geological Survey

-----  
[ Editor's Note: For a description and current list of available NCIC newsletters, see: "Cartographic Information: NCIC Newsletters", by James Gillispie, in **Serials Review**, Winter 1985, pp. 23-25. (Serials Review Vol. 11, No. 4; ISSN 0098-7913)]  
-----

CONFERENCE/MEETINGS - SOME PAST, SOME FUTURE

-----  
1986  
-----

Oct. 15-18  
Philadelphia

North American Cartographic Information Society NACIS VI. Contact Denis L. White, NACIS Program Program Theme: "Maps and Charts for All Ages." Chair, Mid-Continent Mapping Center, NCIC, USGS, 1400 Independence Road, Rolla, MO 65401 tel.: (314) 341-0851

-----  
Oct. 15-18  
Philadelphia

International Map Dealers Association. Joint meeting with NACIS.

-----  
Oct. 22-24  
Marina Del Rey  
California

Annual California Shore and Beach Preservation Association Conference. Contact: CSBPA, P.O. Box 7707, Long Beach, CA 90807.

-----  
Nov. 10-13  
San Antonio

Geological Society of America. Contact GSA, P.O. Box 9140, Boulder, CO 80301 (tel: 447-2020) 1986 Annual Meeting and Exposition.

-----  
Nov. 20-22  
Edmonton

"Knowing the North: Integrating Tradition, Technology and Science" Contact: Nancy Gibson, Special Projects Coordinator, CW 401 Biological Sciences Bldg., University of Alberta, Edmonton, Alberta T6G 2E9 (tel: 403/432-2929 or 438-1804).  
-----

---

Nov. 25  
Lexington  
Kentucky

Seventh Workshop on Map Libraries in the South-east. Pre-convention workshop to the 41st Annual Meeting of the Southeastern Division of the Association of American Geographers. Includes map preservation, microfilming. Kentucky Cartographic Inventory, online cataloging and sounding board. Contact: Anita K. Oser, Hunter Library, Western Carolina University, Cullowhee, NC 28723 (tel. 704/227-7316. Meeting will be held at Campbell House in Lexington, Kentucky.

---

Dec. 4-10  
Nairobi

Twentieth International Symposium on Remote Sensing of the Environment. Contact: ERIM, P.O. Box 8616, Ann Arbor, MI 48107 (313/994-1200)

---

Dec. 9-11  
Arlington  
Virginia

Optical Information Systems '86 (formerly the Videodisc, Optical Disk and CD-ROM Conference.) Contact: Conference Management Corporation, 200 Connecticut Ave., P.O. Box 4990, Norwalk, CT 06856-4990. Proceedings available, \$30. Includes "Preparing a Document Image Database for Optical Disk: A Case Study for High-Resolution Color Aeronautical Charts," by L. Scott Randall, Pres., Image Technology; and "United States Geological Survey Projects on CD-ROM," by Jerry McFaul, Branch of Technology Assessment, U.S.G.S.

---

Dec. 9  
Washington, DC

"Preservation Photocopying in Archives and Libraries," the Second Annual National Archives Preservation Conference. Contact: Alan Calmes, Preservation Officer (NSZ), National Archives, Washington, D.C. 20408 (tel. 202/523-1546)

---

Dec. 17-19  
Toulouse  
France

"SPOT 1: First Inflight Results." Contact: SPOT Image Corporation, 1897 Preston White Drive, Reston, VA 22091-4326 (703/620-2200)

---

1987

---

Jan. 5-16  
Bangkok

11th U.N. Regional Cartographic Conference for Asia and the Pacific. Contact: Max C. de Henseler DC-1-724, United Nations, New York, NY 10017 (212/754-8567)

---

Apr. 23-24            Western Association of Map Libraries  
Provo, Utah           Spring Meeting. Riley Moffat, Host.  
Brigham Young University

See Agenda in this issue.

---

May 5-7               Pecora XI. "Satellite Remote Sensing: Current  
Sioux Falls           Programs and a Look to the Future." Contact:  
Pecora XI Symposium, EROS Data Center, Sioux  
Falls, SD 57198. Abstracts of papers by 12/1/86.

---

June 7-11            Special Libraries Association  
Anaheim               Geography & Map Division. Annual Conference.

---

June 27-Jul 2       American Libraries Association  
San Francisco        Map & Geography Round Table. Annual Conference.

---

Aug. 16-22           International Federation of Library Associations  
Brighton, UK        Map & Geography Sub Section

---

Sept. 10-12         Western Association of Map Libraries  
Reno, Nevada        **20th Anniversary Meeting**  
Linda Newman, Host.  
University of Nevada, Reno.  
College Inn (housing & meetings)  
(Annual Reno Balloon Races Sept. 11-13)

---

#### CATALOGS

**Catalog of Books on Photography.** Free. University of Texas  
Press, Box 7819, Austin, TX 78713.

**Documentation Cartographique sur la region d'Ile-de-France.**  
I.A.U.R.I.f. - DCID, Service diffusion - vente, 21-23 rue  
Miollis, 75732 Paris CEDEX 15, France

1986 National Geographic "Christmas Gift Catalog".  
Includes "Close-Up U.S.A." set of 15 sets, \$23.95; "Discount  
Books"; "Deluxe Mapcases" \$10.95; selected maps, calendars,

etc. National Geographic Society, Washington, D.C. 20036

Historic Urban Plans. Fall 1986 Catalog.

**Litografia Artistica Cartografica.**

**Istituto Geografico de Agostini.** Both map lines available from J.C. Tambe, My Heritage, 1049 S. Willow Avenue, West Covina, CA 91790 (tel. 818/960-2681)

Richard Fitch. Old Maps & Prints & Books. 2324 Calle Halcon, Santa Fe, New Mexico 87505 (505/982-2939)

**Americana:** Catalogue No. 44. Oct. 1986.

Three-hundred and forty items, 112 pages, 55 illustrations. All items fully described and annotated.

Sample copies are \$2.00 in the U.S. and North America, \$4.00 elsewhere. The descriptions are worth the price alone and one usually finds something you'd like to have.

**DUPLICATES**

Topographic Maps Available

The Manuscripts and Special Collections unit of the New York State Library, Cultural Education Center, Empire State Plaza, Albany, New York 12230, has the following U.S. Geological Survey topographic maps, 7 1/2' and 15' series available. For several states, the older topographic series are available with the current maps.

If interested, contact **James Corsaro** at the above address. Recipients will be responsible for mailing charges and should include address labels with their requests.

States Available 7/21/1986

Alabama	Illinois	Missouri	South Dakota
Alaska	Indiana	Montana	Tennessee
Arizona	Iowa	Nebraska	Texas
Arkansas	Kansas	Nevada	Utah
Colorado	Kentucky	New Mexico	Virginia
Delaware	Louisiana	North Carolina	Washington
Florida	Maryland	North Dakota	West Virginia
Georgia	Michigan	Oklahoma	Wisconsin
Hawaii	Minnesota	Oregon	Wyoming
Idaho	Mississippi	South Carolina	

---

**ADVANCING BY DEGREES**

by

**Mary Lynette Larsgaard**

Third in a Series

Colorado School of Mines  
Golden, Colorado  
(303) 273-3697Mary Larsgaard, Editor

---

## ROUND THREE!

Charley's contribution to this column was so good that it inspired me to follow up with a few comments of my own - really, mainly in response to statements Charley made, but also incorporating some suggestions I've received from our August Editor. I'd like to open with a quote from Charley's cover letter to me when he sent me his column:

I really think that the economics of Ph.D. work are going to change the nature of the beast...nobody has got the time or resources to write magnum opi anymore.

EXPENSE! this underlies all plans for further higher education, whereby came the Editor's suggestion that this column should inform its audience of fellowships available. Of course, we are all librarians, and therefore we all know enough to use the foundation directories and so forth, but a little extra info never hurts. If you're interested in doing work in geography, look at the Association of American Geographers Newsletter, which has a section (I think in every issue) on "Grant and Competition Deadlines" -- everything from post-doctoral fellowships to travel grants. If anyone else has any favorite sources for grants, and would be willing to share them, just let me know.

One point that Charley did not mention - probably because he already had taken the required courses, and then some - is the need for statistics courses, no matter if you are in geography or library science, or (as nearly as I can see) almost anything else. I had to take a beginning-level (translation: no credit) geographical statistics course, just to bring myself even with the sophomores. And to emphasize another point that he did mention, a doctorate takes a great deal of time, especially if you are going part-time as I am; the University of Denver is giving me until 1989 to finish my degree, and frankly, I'm going to need it. Also, realize that for a dissertation, again if you are going part-time, you will need to take at least one full summer (and maybe two) off work at the office in order to get your research and writing done.

Just heard from one of the troops - Jim Gillispie, at Johns

Hopkins - that he is planning on starting an MA (in geography, I suspect) at the University of Maryland in the fall; perhaps we can get news from the field!

Another column I hope to proffer you will be from a person who is contemplating getting an advanced degree in geography. Any of the rest of you who are involved in or considering this particular form of madness, let me know about your experiences and the information you need now or that you wish you had then.

---

### KINDRED JOURNALS

#### Index to the Map Collectors' Circle

The Map Collectors' Circle, Ronald Vere Tooley's journal published from 1963 to 1975, containing surveys and documentation on the history of cartography, has finally been rounded out with an index by Eric Wolf. It appears on pp. 13-15 of The Portolan, (journal of the Washington Map Society) Number 6, April 28, 1986. Published three times per year, single issues are \$3.00, annual subscriptions \$9.00, from the Editor, Jonathan T. Lanman, 9120 Burdette Road, Bethesda, MD 20817. Eric also contributes an excellent "Recent Publications" list to each issue.

---

### MILESTONES

The U.S. Geological Survey recently announced completion of 7.5' coverage for Texas, South Dakota and Wisconsin.

Texas was the 22nd state to be completed, with its 4,376th sheet. The count for South Dakota was 1,542 sheets, and Wisconsin requires "more than 1,100".

Iowa, Illinois and Colorado are also expected to be complete by the end of 1986.

[NCIC Newsletter No. 16, Summer 1986, and Carto Points, Univ. of Texas at El Paso Documents and Maps Department, Spring 1986, Vol. XI, No. 1]

-----

Lowell E. Starr has been named new Chief of the National Mapping Division, USGS. For a full bio, see NCIC Newsletter No. 16.

-----

The Carnegie Free Library at Braddock, PA. closed this year. It was the first of the Carnegie libraries in the U.S. from an appreciation by Simon Pepper, the Times Literary Supplement, May 9, 1986, No. 4, 3336.

-----

## 1986 MAGERT HONORS AWARD PRESENTED TO DAVID A. COBB

David A. Cobb, University of Illinois--Urbana/Champaign, received the 1986 Honors Award from the Map and Geography Round Table of the American Library Association (ALA) for his "outstanding contributions to map librarianship and to the Round Table." The award was presented at the 105th annual conference of ALA in New York City.

Cobb is the map librarian at the University of Illinois and is the editor of the 1986 ALA publication, GUIDE TO U.S. MAP RESOURCES.

[base line, newsletter of the Map and Geography Round Table, 8/86]

-----

## HAMMOND INCORPORATED/MAGERT AWARD WINNER: STANLEY D. STEVENS

Stanley D. Stevens, University of California at Santa Cruz, received the 1986 Hammond Incorporated/MAGERT Award for the best paper on map librarianship. Stevens is the first recipient of the award, presented July 1, 1986 in New York City at the 105th annual conference of the American Library Association (ALA). Consisting of a scroll and a prize of \$300.00, the award is presented by Hammond Incorporated. Stevens' paper was selected by ALA's Map and Geography Round Table as the best article or essay on map librarianship published in 1985. The article "Map Librarianship: Suggestions for Improvement," appeared in the October 1985 issue of the WILSON LIBRARY BULLETIN and describes the evolving relationship between librarians and federal mapping agencies. Stevens has been map librarian at Santa Cruz for the last 19 years. A list of the nominated papers is available from Linda Carlson Sharp, OCLC, Inc., 6565 Frantz Road, Dublin, OH 43017-0703.

[base line, newsletter of the Map and Geography Round Table, 8/86]

-----

Watersheds/Milestones

The last and final NCIC Rocky Mountain Affiliate Newsletter was issued Oct. 1, 1986, a victim of budget cuts. Future announcements on new products will be piggybacked in the regular mailings of Advance Material Indexes from the Rocky Mountain Mapping Center.

[William F. Graser, Chief, NCIC-R]

-----

The IPGH database "Directorio de Instituciones: Geograficas, Historicas, Antropologicas y Geofisicas de America Latina" now contains records on 20,000 constituent subunits.

-----  
The Government of Colombia will officially establish the Centro Interamericano de Fotointerpretacion" in 1987, with primary interests of regional, geologic, forestry, and civil engineering studies. For more information on its programs, contact Subdireccion Tecnica Cientifica del CIAF, Apartado Aereo 53754, Bogota 2, Colombia (tel. 2-68-0300).  
-----

Carlos Hagen's Review of D.W. Meinig's *The Shaping of America, a Geographical Perspective on 500 years of History*, vol. 1: Atlantic America, 1492-1800 (New Haven, CT: Yale University Press, 198?) \$35, appeared in the *Los Angeles Times*, The Book Review, Sunday, August 24, 1985, pp. 2, 11.

## **Map Index to Topographic Quadrangles of the United States, 1882-1940**

WAML Occasional Paper # 10

Now Available

see ordering information  
on rear cover



## DEFINING MAP AREAS IN CARTOGRAPHIC CATALOGING

by

Robert E. Schreiber

Map Cataloger  
Northern Illinois University

For the effective selection of maps for instruction or research, it is essential that the map cataloger accurately describe the area treated on each map processed. A study of current practice by those contributing to major data bases reveals considerable variety in the ways in which a specific map area may be described:

1. The coordinates appearing on a map nearest the neat lines may be entered "as is" in the mathematical area of the cataloging copy, even though following this practice may mean that substantial areas of a map are not accounted for (as in the example given, first set of coordinates).
2. By extrapolation,
  - a. the full extent of the map area may be described, or
  - b. an area of certain significant detail may be specified, (as in Stibbe: Cartographic Materials, p. 60 (map)),  
  
or
  - c. the borders of a political or geographic unit depicted may be characterized.
3. On maps having a greater degree of detail upon which to base the statement of coordinates, current practice reveals that the map cataloger may describe
  - a. the full extent of the map area, or
  - b. an area of certain significant detail, or
  - c. the borders of a political or geographic unit depicted.

The practice of assembling standard sets of coordinates for political or geographic units is helpful when the cataloger is describing outline maps. The use of such standard sets of coordinates when describing other kinds of maps may be misleading.

4. When faced with a map supplying no coordinate information, the map cataloger is encouraged by one set of rules to compare the area of the map at hand with another having identifiable coordinates. These are introduced into the mathematical area of the cataloging copy, as if they appeared on the map being described.

Few cataloging rules require the map cataloger to specify how coordinates have been selected for the area being described or to state when the coordinates have been derived from a study of similar maps.\* This variety of approaches results in mathematical descriptions of questionable authenticity and misleading statement.

Since the determination of coordinates is considered by some map librarians to be unnecessarily time-consuming, and in view of the fact that few map collections may be searched in terms of coordinates at the present time, it is sometimes proposed that a general adoption of the use of the 052 designation in cataloging copy, following the G schedule of Library of Congress, might become a more usable standard.

However, looking farther ahead, when map research facilities are more generally able to select maps of a given area by feeding coordinates into a computer, the accurate rendering of coordinates by map catalogers will become increasingly essential.

As matters now stand, some kind of statement of coordinates is recognized as essential to map cataloging copy; yet what the coordinates represent is not standardized. To more fully meet present and future teaching and research needs, at least two statements of coordinates for any map is desirable:

1. A statement of coordinates describing the entire area of a map, and
2. A statement of coordinates describing the extent of significant detail, along with a note specifying the detail considered to be significant.

A third statement of coordinates, using those considered to be standard for political or geographic units, would be valuable in providing immediate comparisons built into the cataloging record.

---

\* The Maps Format for OCLC mentions in the 255 section that:  
"Although uncommon, additional information about projection, coordinates, zone and equinox is entered as a note."

---

Until provision is made for the additional set(s) of coordinates in standard data banks,

(Which should be no problem, since, for example, in OCLC, the 034 line is already repeatable in a different context)

... a note explaining what the coordinate statement represents should be considered mandatory. When coordinates are supplied from other sources, a similar note should be included.\*

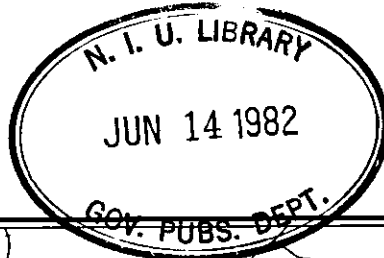
Such provisions are essential if map cataloging is to grow in stature and be worthy of the trust of teachers and researchers in all areas utilizing maps.

Robert E. Schreiber  
July 24, 1986

-----  
\* e.g.: Coordinates supplied by comparison with a similar area of (map name, date, and publisher).  
-----

OCLC COPY FOR MAP ILLUSTRATED

OCLC: 8566860      Rec stat: c    Entrd: 820701      Used: 860521  
Type: e    Bib lvl: m    Lang: eng    Source: d    Form:      Relief: b  
RecG: a    Enc lvl: I    Ctry: dcu    Dat tp: s    Govt pub: f    Indx: 0  
Desc: a    Mod rec:      Base: \*\*    Dates: 1979,  
1 010  
2 040      GPO c GPO d GSU  
3 007      a b j d c e a f n g z h n  
4 034 1    a b 16000000 d E0640000 e E0720000 f N0320000 g N0240000  
5 052      7640  
6 074      856-A-1  
7 086 0    PrEx 3.10/4:P 17/3  
8 090      G7640 1979 b .U5  
9 090      b  
10 049      JNAA  
11 110 1    United States. b Central Intelligence Agency.  
12 245 10    Pakistan.  
13 255      Scale [ca. 1:16,000,000] c (E 64°--E 72°/N 32°--N 24°).  
14 260 0    [Washington, D.C. : b Central Intelligence Agency,  
          c 1979]  
15 300      1 map : b col. ; c 21 x 17 cm.  
16 500      Relief shown by shading.  
17 500      "Base 504019 1-79."  
18 651 0    Pakistan x Maps.



## AUTHOR'S REVISION OF CATALOGING

OCLC: 8566860 Rec stat: c Entrd: 820701 Used: 860521  
 Type: e Bib lvl: m Lang: eng Source: d Form: Relief: b  
 RecG: a Enc lvl: I Ctry: dcu Dat tp: s Govt pub: f Indx: 0  
 Desc: a Mod rec: Base: Dates: 1979,  
 1 010  
 2 040 GPO c GPO d GSU  
 3 007 a b j d c e a f n g z h n  
 4 034 1 a b 16000000 d E0640000 e E0720000 f N0320000 g N0240000  
 4.1 034 1 a b 16000000 d E0590000 e E0773000 f N0390000 g N0200000  
 4.2 034 1 a b 16000000 d E0603000 e E0793000 f N0370000 g N0234000  
 5 052 7640  
 6 074 856-A-1  
 7 086 0 PrEx 3.10/4:P 17/3  
 8 090 G7640 1979 b .U5  
 9 090 b  
 10 049 JNAA  
 11 110 1 United States. b Central Intelligence Agency.  
 12 245 10 Pakistan.  
 13 255 Scale [ca. 1:16,000,000] c (E 64°--E 72°/N 32°--N 24°);  
(E59°-E 77°30'/N 39°-N 20°) : (E 60°30'-E 79°30'/N 37°-N 23°4 0')  
 14 260 0 [Washington, D.C. : b Central Intelligence Agency,  
 c 1979]  
 15 300 1 map : b col. ; c 21 x 17 cm.  
 16 500 Relief shown by shading.  
 16.1 500 The first set of coordinates are those printed on the  
 map nearest the neat lines; the second set of coordi-  
 nates have been extrapolated in order to indicate the  
 full extent of the map within the neat lines; the third  
 set of coordinates indicates the area of significant  
 detail (i.e. shading) which is also the extent of  
 Pakistan itself.  
 17 500 "Base 504019 1-79."  
 18 651 0 Pakistan x Maps.

-----

ONLINE CATALOGING

850 FIELD TO BE VALID FOR MAPS FORMAT

Library of Congress has begun using field 850, Holdings, in its map records. Field 850 contains NUC symbols for libraries reporting to the National Union Catalog. LC will define use of this field for maps in Update 14 to MARC Formats for Bibliographic Data, sometime this winter. Field 850 is for LC use only.

OCLC will validate this field for use in maps format prior to the next tapeload of LC map records. It does not print on OCLC cards and is not indexed in the OCLC online system.

<b>Linda Carlson Sharp</b> (OCLC Maps Format Specialist) (614) 764-6000	<b>Marketing &amp; User Services Div.</b> OCLC, Inc., 6565 Frantz Road Dublin, OH 43017-0702
---	--

---

CAVEAT EMPTOR

Thomas Brothers Maps is deleting some special format county atlases from its publication program.

Most recently dropped are the **Riverside** and **San Diego County** "Flood Hazard and earthquake study zone" volumes. There are no plans to reissue these items according to Thomas Brothers rep. Marla Saltman.

Write for a full catalog of in-print products to Thomas Brothers Maps, 17731 Cowan, Irvine, CA 92714, or phone (714) 863-1984.

**Paul Leverenz**  
Scripps Institution of Oceanography

---

## IMPORTANT FARMLANDS MAPS - UPDATE

by

Larry Cruse

The "Important Farmlands Maps" program was initiated at least in part as a reaction to the threat of urbanization to prime farmlands. The study on which these projections were made is the National Agricultural Lands Study (NALS), which concluded that the "annual rate of urban expansion had tripled since the 1960s, from about one million acres paved to about three million acres, and second, that a high proportion of the 'converted' acreage was prime cropland -- a million acres of the country's best soil being 'permanently lost to agriculture every year in the U.S.'" The Soil Conservation Service reduced these estimates in 1984.

Gregg Easterbrook contributed an important synopsis of this study, program and its revision to the July 1986 Atlantic (pp. 17-20, "Vanishing Land Reappears") which sets the record straight, and may explain the demise of the Important Farmlands mapping program.

In a related publication, California's Division of Mines and Geology issued Special Publication 88 in June 1986 -- Farmland Mapping and Monitoring Program, 1985 Status Report. 1986 (CDMG, 1416 Ninth St., Sacramento, CA 95814) Calif. Doc. Call#: C810 .S59 no. 88. [iii, 11 p. : 1 map ; 28 cm.]

The Introduction notes 40 California counties have been mapped, a total of nearly 35 million acres between 1982 and December 31, 1985. The compilation maps are 1:24,000 and the finished products are 1:100,000.

In 1984 the agency also published "Advisory Guidelines for the Farmland Mapping and Monitoring Program." The report describes the compilation procedures, which were executed by cartography students from Cal State Chico, Sacramento, and Northridge, under the direction of agency staff. The data was subsequently digitized and are now available on 7.5-minute and 1:100,000 scale quadrangles as well as printed acreage reports.

The program's current status is summarized on the accompanying tables, but also worth mentioning is the fact it is serving as a model for such studies in other states and countries. In 1984 the American Farmland Trust awarded the program its "National Farmland Conservation Award."

For further information on product status, availability and prices, contact Program Manager, Farmland Mapping and Monitoring Program, 1516 Ninth St., Room 400, Sacramento, CA 95814.

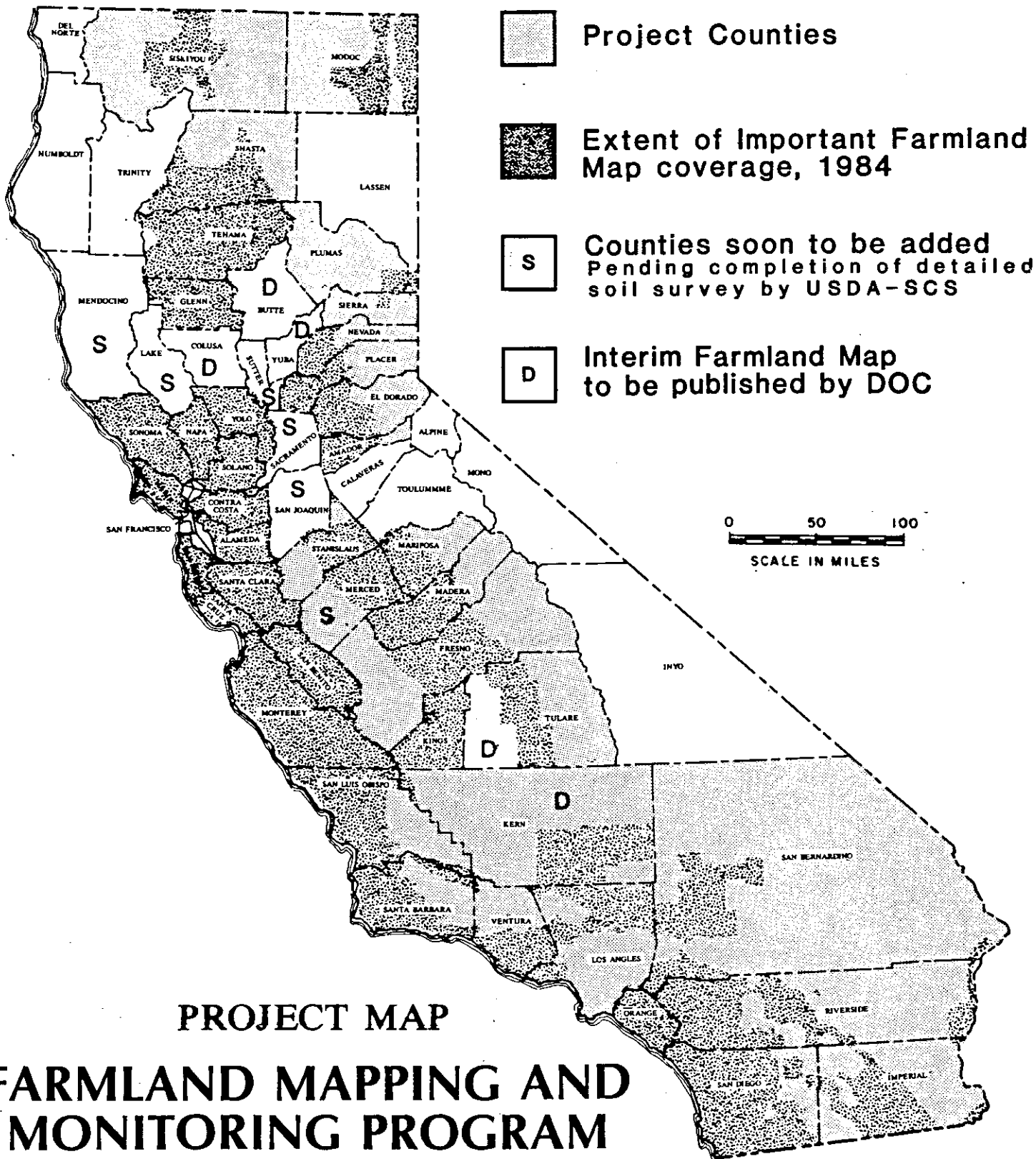




TABLE 1  
Farmland Mapping and Monitoring Program  
Project Counties, Acreages, and Planned Reports

PROJECT COUNTIES	PLANNED DATE FOR RELEASE OF 1984 BASE YEAR DATA	IMPORTANT FARMLAND				TOTAL IMPORTANT FARMLAND	GRAZING LAND
		PRIME	STATEWIDE	UNIQUE	LOCAL		
Alameda	November 1985	9,535	1,832	1,190	0	12,557	256,967
Amador	November 1985	3,555	1,509	2,297	4,450	11,811	192,416
Contra Costa	January 1986	41,137	15,523	8,057	50,875	115,592	185,418
El Dorado	June 1986						
Fresno	October 1986						
Glenn	January 1986	169,220	88,700	9,904	145,558	413,382	175,316
Imperial	May 1986						
Kern	June 1986						
Kings	February 1986	148,446	415,393	25,758	0	589,597	226,631
Los Angeles	June 1986						
Madera	November 1985	104,244	86,267	155,335	43,975	389,821	409,515
Marin	February 1986	179	307	106	72,860	73,452	94,794
Mariposa	February 1986	15	104	29	0	148	414,707
Merced	March 1986	163,254	124,465	80,554	48,548	416,821	215,126
Modoc	July 1986						
Monterey	July 1986						
Napa	March 1986						
Nevada	February 1986						
Orange	December 1985	19,737	2,091	4,485	0	26,313	40,681
Placer	March 1986						
Plumas (Note 4)	see Sierra/Plumas						
Riverside	May 1986						
San Benito	March 1986						
San Bernardino	August 1986						
San Diego	September 1986						
San Luis Obispo	August 1986						
San Mateo	December 1985	2,031	142	2,173	3,609	7,955	44,301
Santa Barbara	May 1986						
Santa Clara	December 1985	37,653	5,405	461	7,040	50,559	411,112
Santa Cruz	April 1986						
Shasta	August 1986						
Sierra/Plumas	December 1985	5,153	5,626	2,728	72,052	85,559	109,682
Siskiyou	February 1986						
Solano	December 1985	151,630	12,566	16,208	0	180,404	219,563
Sonoma	April 1986						
Stanislaus	November 1986	189,828	16,734	46,370	38,264	291,196	124,695
Tehama	September 1986						
Tulare	October 1986						
Ventura	April 1986						
Yolo (Note 5)	December 1985	272,189	23,051	56,940	96,275	448,455	121,593
TOTALS (data as available 12/31/85)		1,317,806	799,715	412,595	583,506	3,113,622	3,242,517

Note to Reader: Data not indicated are currently undergoing computerized revision using 1984 Base Year mapping. 1984 acreage reports and maps are scheduled for release as indicated above.

Note 1: Area mapped represents the extent of Important Farmland mapping, derived in part, from USDA Soil Conservation Service county soil surveys.

Note 2: Percent Mapped is that portion of each county as mapped by the Farmland Mapping and Monitoring Program (FMMP).

Note 3: Source: California Regional Framework Study, Base Year 1965. Prepared by the California Regional Framework Study Committee for Pacific Southwest Inter-Agency Water Resources Council.

Note 4: This is the tri-county survey of Sierra Valley, and includes 37,300 acres of grazing land and minor acreages of Important Farmlands in Lassen County.

Note 5: Yolo County's Local Important Farmlands include 33,349 acres of "Local Potential" lands.

TABLE 1 (Continued)  
 Farmland Mapping and Monitoring Program  
 Project Counties, Acreages, and Planning Reports

PROJECT COUNTIES	TOTAL AGRICULTURAL AREA	URBAN BUILT-UP LAND	OTHER LANDS	WATER AREA	COUNTY AREA MAPPED (Note 1)	% MAPPED BY FMMP (Note 2)	COUNTY AREA NOT SURVEYED	TOTAL COUNTY AREA (Note 3)
Alameda	269,524	127,245	75,102	56,399	528,270	100	0	528,270
Amador	204,227	6,061	84,541	5,357	300,186	78	84,624	384,810
Contra Costa	301,010	120,952	47,798	40,920	510,680	100	0	510,680
El Dorado					579,125	50	575,915	1,155,040
Fresno					1,423,472	37	2,415,348	3,838,820
Glenn	588,698	5,162	250,300	0	844,160	100	0	844,160
Imperial					1,048,688	36	1,893,652	2,942,340
Kern					1,411,316	27	3,817,684	5,229,000
Kings	816,228	12,879	89,564	119	918,790	100	0	918,790
Los Angeles					1,077,866	41	1,532,864	2,610,730
Madera	799,336	20,854	35,350	5,928	861,468	63	512,692	1,374,160
Marin	168,246	37,683	126,871	43,500	376,300	100	0	376,300
Mariposa	414,855	4,432	69,293	0	488,580	52	446,110	934,690
Merced	631,947	21,389	5,910	594	659,840	51	625,090	1,284,930
Modoc					824,124	30	1,953,746	2,777,870
Monterey					2,127,430	100	0	2,127,430
Napa					510,010	100	0	510,010
Nevada					291,313	46	343,697	635,010
Orange	66,994	228,042	205,594	1,810	502,440	100	0	502,440
Placer					411,655	43	552,485	964,140
Plumas (Note 4)					0	0	1,675,780	1,675,780
Riverside					1,932,144	42	2,703,396	4,635,540
San Benito					894,150	100	0	894,150
San Bernardino					1,474,484	11	11,430,476	12,904,960
San Diego					2,204,880	80	534,680	2,739,560
San Luis Obispo					1,302,107	61	826,693	2,128,800
San Mateo	52,256	3,277	113,365	0	168,898	50	170,792	339,690
Santa Barbara					1,636,550	93	120,030	1,756,580
Santa Clara	461,671	174,144	197,465	8,880	842,160	100	0	842,160
Santa Cruz					281,360	100	0	281,360
Shasta					1,020,455	41	1,443,685	2,464,140
Sierra/Plumas	195,241	732	2,157	0	198,130	32	415,370	613,500
Siskiyou					887,765	22	3,155,945	4,043,710
Solano	399,967	40,394	88,919	28,930	558,210	100	0	558,210
Sonoma					1,022,460	100	0	1,022,460
Stanislaus	415,891	41,166	15,796	5,327	478,180	49	495,400	973,580
Tehama					1,836,543	96	68,097	1,904,640
Tulare					815,360	26	2,285,350	3,100,710
Ventura					548,874	46	643,806	1,192,680
Yolo (Note 5)	570,048	20,813	63,915	6,984	661,760	100	0	661,760
	6,356,139	865,225	1,471,940	204,748	34,460,183	46	40,723,407	75,183,590

**NEW MAPPING OF WESTERN NORTH AMERICA**

ARIZONA

Wide World of Maps. 2626 W. Indian School Road, Phoenix, AZ 85017

**Metro Phoenix recreation and shopping map.**

No scale available. ca. 63 x 46 cm. \$1.95

**Hiking Map & Guide, Grand Canyon National Park.**

(n.p.: n.p., n.d.) \$3.95 plain paper; \$5.95 waterproof.

Topographic map of the Park from Hermit Trail to Grandview Trail.

CALIFORNIA [see also this issue: review of Wilderness Press]

Lane Publishing. Menlo Park, CA.

**California freeway exit guide.** 1986. \$9.95

Diagrams the state's 2,816 on and off ramps, legal services available. All the more valuable as an historical record, it was out of date when printed. Of equal utility to hitchhikers and land use specialists.

California. Department of Parks and Recreation.

**Guide to California state parks.** (Sacramento: the Dept; 1985)

Colored. Planimetric. Verso: alphabetical directory with codes. "Design and layout by Alex Eng." \$12 each from Publications Section, Department of Parks and Recreation, P.O. Box 2390, Sacramento, CA 95811.

[See also: "Important Farmlands Maps - Update" in this issue.]

COLORADO

Christiansen, Richard D.

**Colorado geologic highway map.** Canon City, Colo.: Western GeoGraphics, 1985.

1:1,000,000 full color, printed on Kimdura (plastic) material 22" x 34" sheet (folds to 8.5" x 11"). The map depicts 21 geologic units in various colors and patterns, plus location of settlements, highways, mileage between towns and junctions rivers and lakes, national parks and monuments. Legend gives geologic formations by units and areas.

\$6.00 Western GeoGraphics, P.O. Box 2204, Canon City, CO 81212 (303/275-8948) Mail fee .70 folded; \$1.50 rolled. Also available at the Geological Survey of Colorado.

OREGON

## U. S. Geological Survey

Mount Hood and vicinity. 1:24,000 and 1:100,000 (size not given). Reston, VA: USGS, 1986?) Flat or folded \$6. + \$1 p/p from USGS Distribution, Denver.

WESTERN U.S.

## U. S. Geological Survey

Advanced Very High Resolution Radiometer (AVHRR) multicolor satellite image mosaic of the western United States. Scale and price vary by size: 9 in./\$15; 18 in./\$35; 27 in./\$50; 36 in./\$70; 9-inch color infrared transparency \$25. From USGS Distribution, Denver.

WYOMING

## Christiansen, Richard D.

Wyoming geologic highway map. Canon City, Colo.: Western GeoGraphics, 1986.

1:1,000,000 col. map, 24" x 37" (folds to 4.6" x 8"). Maps 27 geologic units, cities and towns, federal and state hiways and selected local roads, mileage between towns and junctions rivers and lakes, national parks and monuments. Legend, rock column, block diagram, and cross section. A satellite photo and text are on back of this paper sheet.

\$6. Western GeoGraphics, P.O. Box 2204, Canon City, CO 81212 [1529 Park Ave.] (303/275-8948). Also available at the Wyoming Geological Survey. Mail fee: .70 folded; \$1.50 roll.

## NEW MAPPING - OTHER THAN WESTERN NORTH AMERICA

NEW AND FORTHCOMING - EUROPE

1. European Community. (Brussels: the Community, 1986) 1:4,000,000, 75 x 100 cm. Multilingual. Political. Insets; statistics (EC/US/USSR). Incorporates new members Spain and Portugal.
2. European Community. Forests. [2nd ed. 1986] On same base as above.
3. European Community. Farming. [2nd ed. 1986] On same base as above.

US\$ 5.00 ea, or 3-map set US\$ 10.00, Can\$ 14.00, from Office for Official Publications of the European Communities, L-2985 Luxembourg; or European Community Information Service, 2100 M Street NW, Washington, D.C. 20037 (tel. 202/862-9500).

MICHIGAN

Detroit, MI. Landsat photo poster from cover of Science Magazine. From same series: "combination of space covers in scroll format: 1 June 1979, 23 November 1979, 10 April 1981. \$5.00 each, prepaid, from AAAS, Department POST, 1333 H Street NW, Washington, D.C. 20005.

NEW ZEALAND

A population cartogram of New Zealand. (Auckland: Dept. of Geography, University of Auckland, 1986). n.s.; 64 x 90 cm Inset. NZ\$ 5.00 from Dept. of Geography, University of Auckland, Private Bag, Auckland, NZ. Text reference: NZ Journal of Geography, no. 79, 1986.

Brian Marshall (text) and Jan Kelly (maps). Status of New Zealand Boundaries. (Auckland: Dept. of Geography, University of Auckland, 1986). ISBN 0-908672-07-1; ISSN 0112-1545. Occasional Publication No. 20. NZ\$ 25.00 Available from Geography Library, University of Auckland, Private Bag, Auckland, NZ. Checks should be made payable to: "University of Auckland".

Supersedes "Regions and Districts of New Zealand" 1973 by Local Government Commission. Includes binder for updates. New sheets will be forwarded to purchasers as produced.

NEW YORK

Axonometric aerial view of Lower Manhattan. (New York: David Fox Studios, 1986) n.s.; 53 x 86 cm. on sheet 95 x 62. \$10.00 + \$3 p+p from David Fox Studios, P.O. Box 780, Narberth PA 19072.

WORLD

"Rare and Early Views of the World from the Archives of the Vatican Library."

The World map of Andreas Walsperger, 1448. 61 x 74 cm. \$75

The sea map of Iebuda Ben Zara, 1497. 67 x 106 cm. \$75

The sea map of Andrea Benincasa, 1508. 64 x 99 cm. \$75

Add 5% of total order for post & packing. Prepay. All three maps are reproduced on both sides in 6 colors with accompanying descriptive text. Order from Belvedere Press, Route 100, Millwood, NY 10546 (tel. 914/762-2200)

From the same publisher: The Cosmography of Ptolemy (URBINO, 1471 edition) limited edition facsimile of 500 copies, \$7,500. ISBN 0-8115-0903-6

Color prospectus available for these and other Vatican facsimilies from Anne E. Wette, Belvedere Press, Inc., 19 W. 36th St., New York, NY 10018; (tel. 212/307-1300) "20% discount to associations" [tell them WAML sent you?]

---

## WILDERNESS PRESS 1986

a review by

Stanley D. Stevens

Having previously reviewed the maps and guide books produced by this well respected publisher, I hope that the appearance of some new products will rekindle your enthusiasm for these quintessential maps of California parks and wilderness areas.

Beginning in 1986, Wilderness Press has begun to print its maps on plastic paper (Polyart 2) as new editions are produced or as the need to reprint older editions arises. The advantages for the outdoor user are fairly obvious: the map is impervious to water, grease and other liquids, it is tear resistant, easy to write on with washable marker, easy to fold and refold without the usual breaks along the seams, and the price is the same (\$2.50 for most 15' quads).

What more would the buyer want, you ask? Well, although the base map is the USGS topographic quad (in most cases the 15-minute quad), the Wilderness Press editions depict information about trails, roads, and other critical features so that one must say that the *de facto* national standard for mapping of California's Sierra Nevada mountains is the Wilderness Press. Furthermore, the USGS base maps have not been revised for 30-years and Wilderness Press' field surveyors keep their maps continually up-to-date for all information, including indexes to feature names, reformatting to cover areas beyond the standard 15' sheet lines, and text that provides geologic interpretation. Wilderness-Press-designed shading indicates areas where no-camping zones are located, where wilderness permits are required.

Jim Freeman, in his San Francisco Chronicle article of August 25, 1986 [pp. 67 & 71], describes USGS maps to the general newspaper readership and explains how to obtain government maps for hiking and recreation uses. But his text is accompanied by a copy editor's headline: "Maps You Won't Want to Consult", a reference to the unreliability of USGS maps for the Sierras. USGS officials do get the opportunity to counter the criticism with explanations of how the budget cuts have reduced support for field verification of aerial photography. Digital mapping will, perhaps, provide USGS with the ability to make revisions to the base maps, but Freeman suggests that Forest Service and Wilderness Press products are better buys.

Wilderness Press quadrangles were specifically issued with its High Sierra Hiking Guide Series, but nine of these are permanently out of print because they were not popular enough to warrant continuance. This situation evidently means that those nine quadrangles won't be revised by Wilderness Press on the same basis as the dozen more popular areas. I wonder whether Wilderness Press intends to issue its versions of 7.5-minute quads when USGS converts the old 15' maps to the 1:24,000 scale modern edition - USGS projects complete national coverage eventually.

The most recent Wilderness Press maps are:

#### LASSEN VOLCANIC NATIONAL PARK

Topographic map of Lassen Volcanic National Park & Vicinity / covers Lassen Volcanic National Park; Caribou Wilderness; Thousand Lakes Wilderness; Hat Creek Valley; McArthur-Burney Falls State Park. 1:62,000 4-colors on USGS base. 1981/1986 61 x 76.5 cm. folded to 20.5 x 13 cm. printed both sides.

[All of the area's recently completed Pacific Crest Trail is shown (the trail was not completed at the time of the 1st edition); new boundaries of the Caribou Wilderness are shown. It shows roads, trails, picnic areas, campgrounds, scenic turnouts, forested areas, lakes, streams, Lassen Park's roadside markers. Includes an index of all named places on the map.]  
"This map exceeds U.S. National Map Accuracy Standards." Remapped 1980-81 by Jeffrey P. Schaffer, minor corrections 1986.  
Available flat, rolled, (\$3.50); or with book, Lassen Volcanic National Park by Jeffrey P. Schaffer (2nd ed. 1986, \$12.95).

#### YOSEMITE VALLEY

Topographic map of Yosemite Valley. Shows: roads, trails, picnic areas, campgrounds, scenic turnouts, forested areas, waterfalls, streams, lakes, plus a new interpretation of the Valley's geological history, and an index of all places on the map.  
1:24,000 4-colors on USGS base. 1977/1986 48 x 101.5 cm. folded to 24 x 13 cm., printed both sides. "Trails, trailside features, roads and other cultural features remapped in 1976, 1981 and 1986 by Jeffrey P. Schaffer." [Several dozen minor changes include trails, bike paths, meadows and rock slides. Text changes: geology almost entirely rewritten to reflect Jeffrey Schaffer's ongoing research on Yosemite Valley.]

#### YOSEMITE NATIONAL PARK

Topographic map of Yosemite National Park and vicinity: covers Yosemite National Park, Devils Postpile National Monument, Ansel Adams Wilderness, and most of Hoover Wilderness and Emigrant Wilderness. Shows roads, trails, campgrounds, forested areas, restricted areas, lakes, streams, waterfalls. Includes an index plus a detailed text on the area and its use.

1:125,000 4-colors on USGS base. 1982/1986 76 x 76 cm. folded to 19.5 x 13 cm. printed both sides. Trails, trailside features, and trail related roads remapped in 1976-81, 1985 and 1986 by Jeffrey P. Schaffer (most of the area) and in 1977 by Ben Schifrin (Emigrant Wilderness, Hoover Wilderness and most of Yosemite National Park north of Tuolumne River and west of Spiller Creek.) Shading indicates area where campfires are prohibited, and/or where campfires are prohibited. The map is available separately flat or folded for \$3.50; but it is designed to accompany the Wilderness Press guidebook edition Yosemite National Park: A Natural-History Guide to Yosemite and its Trails, \$13.95 with map, by Jeffrey P. Schaffer [2nd ed. 1982 ISBN 0-89997-028-1].

[Boundaries for the newly created Ansel Adams Wilderness and Mono Basin National Forest Scenic Area are shown. Major text changes: 1) Wilderness permit information--detailed and current for 1986 season. 2) "Evolution of the Landscape" section was updated in light of the 1980s plate tectonics theory, including the author's original work.

The first edition had no illustrations, this one has seven; and the number of names in the index is 20% greater.

#### QUADRANGLES

The following 15-minute quadrangles have been published on the Polyart 2 plastic paper:

[Except where noted, each of the following is the USGS base map for the quad area named, enhanced by Wilderness Press' new information. Each map is printed in the four-color process with marginal notations that indicate date of revision, etc.]

1. Fallen Leaf Lake, Calif. 1985. 53.5 x 46 cm. printed 4-col. both sides. Trails, trailside features and trail-related roads were remapped in 1974-84 by Jeffrey P. Schaffer.
2. Mineral King, Calif. 1986. 53.5 x 46 cm.
3. Mount Whitney, Calif. 1984/rev. 1983.
4. Mt. Goddard, Calif. 1986/rev. 1985. 53.5 x 61 cm. Includes ca. 1/2 of the adjoining Big Pine quad.
5. Tuolumne Meadows, Calif. 1982/rev. 1976. 53.5 x 46 cm.
6. Yosemite, Calif. 1979/rev. 1976-78. 53.5 x 46 cm.

For those of you who have not previously acquired the publications of the Wilderness Press and are enticed by this review to pursue a further inquiry, you are invited to send for the latest catalog [mine is the 1986 edition]: Wilderness Press, 2440 Bancroft Way, Berkeley, CA 94704-1676 (tel. 415/843-8080) 9 to 5 Mon-Fri. The Map Center at the same location is their retail operation and may be reached at (415) 841-MAPS.



In addition to guides covering California, Wilderness Press publishes titles on Arizona, Hawaii, Idaho, Oregon, Washington, plus canoeing in Minnesota. The 2nd edition of *Hot Springs and Hot Pools ... of the Northwest, and of the Southwest* [two volumes] expand geographic coverage of these titles to Nevada, New Mexico, Montana, Wyoming, Utah, and Colorado. Subject matter encompasses hiking, skiing, mountaineering, canoeing, bicycling, and running (such as *55 1/2 Running Trails of the San Francisco Bay Area* by Tony Burke).

---

**NEW PUBLICATIONS: MONOGRAPHS**

Canada. Department of Energy, Mines and Resources.  
**National Atlas of Canada.** Fifth edition. (Ottawa: the Department, 198- ). Can\$ 142.50 (individual sheets \$5.00)  
 Order from Canada Map Office, 615 Booth St., Ottawa, Ontario K1A 0E9 (tel. 613/998-3865)

Donna P. Koepf (editor). **Exploration and Mapping of the American West: Selected Essays.** (Chicago: Speculum Orbis Press, 1986.)  
 Map and Geography Round Table of the American Library Assn. : Occasional Paper no. 1. ISBN 0-932757-01-4 \$18.95  
 Speculum Orbis Press, 207 West Superior, Chicago, IL 60610 (tel.: 312/266-1171)

**Contents:**

**Mapping the Trans-Mississippi West: an annotated cartobibliography**  
 by Kenneth Nebenzahl  
 The notorious Doctor Robinson, a Mexican revolutionary's map of North America, by Robert S. Martin  
 A tale of two cartographers: Emory, Warren and their maps of the Trans-Mississippi West, by Frank N. Schubert  
 Exploration and mapping of the Southwest Route, from Missouri to Southern California, by James A. Coombs  
 The wagon road surveys, by Charles A. Seavey  
 George M. Wheeler and the Geographical Surveys West of the 100th Meridian, 1869-1879, by Robert W. Karrow, Jr.  
 Mapping of the United States-Mexico borderlands: an overview, by Norman J.W. Thrower  
 Mapping the Southwest: a twentieth century historical geographical perspective, by John B. Garver, Jr.

---

[The following citations and annotations are by Michael Dulka, Map Librarian, Dag Hammarskjold Library, The United Nations. NY.]

United Nations. Department of Technical Co-operation for Development.

**Ground water in continental Asia (Central, Eastern, Southern, South-Eastern Asia).** New York: UN, 1986. (Natural Resources/Water Series No. 15)  
UN Sales No. E.86.II.A.2; UN Doc. No. ST/ESA/157; price has not yet been determined.

This is the fifth comprehensive regional review of ground water published in this series. 43 thematic maps are included for Asia and individual countries. Previous volumes covered Africa (E.71.II.A.16; ST/ECA/147); the Western Hemisphere (E.76.II.A.5 ST/ESA/35; \$20.00); the Eastern Mediterranean and Western Asia (E.82.II.A.8; ST/ESA/112; \$17.00); and the Pacific Region (E.83.II.A.12; ST/ESA/121; \$38.00).

**Food and Agriculture Organization of the United Nations. Forest resources 1980 = Ressources Forestieres 1980 = Recursos forestales 1980.** [Rome] : FAO, 1985.

"The tables of forest area show total forest area subdivided between coniferous and non-coniferous and further between closed and other wooded land. They also show the forest area as the percent of land area and an estimate of the area of forest fallows and shrubs not included in the forest area. The maps show, by country, forest as a percentage of land area and coniferous and non-coniferous forest as a percentage of forest area."

There are also tables and maps for forest loss and renewal. This is a slim, paper-covered atlas that is best suited for retention in a vertical file.

**Atlas of cancer in Scotland, 1975-1980: incidence and epidemiological perspective.** Lyon: International Agency for Research on Cancer, 1985. Distr. in the U.S. by Oxford Univ. Press, N.Y. ISBN 92-832-11723

"This atlas ... is the first of a series of cancer atlases to be produced jointly by the International Agency for Research on Cancer and national bodies." The IARC was established in 1965 by the World Health Assembly, as an independently financed organization within the framework of the World Health Organization. "The aim of this atlas is to indicate those areas in Scotland where a given cancer is unduly common or unexpectedly infrequent, thus providing a point of departure for further analytical studies to uncover possible determinants of risk."

---

N. N. Shinde (compiler). **Index of remote sensing imagery held by Federal Department of Forestry, Lagos, Nigeria.** Vol. 2: Side looking airborne radar. (Lagos: the Department, 1983) Working Document 20. Order FAO microfiche number 85X02082; US\$ 2.00

-----  
Food and Agriculture Organization of the United Nations. **Workshop on Remote Sensing Applied to Land Use Potential.** Cairo (Egypt), 23 October 1984. Report. (Rome: FAO Research and Technology Development Division, 1984). Available on microfiche, order FAO microfiche 85X02328; U.S. \$2.00

-----  
Food and Agriculture Organization of the United Nations. **Selected terms in remote sensing (English, Spanish, French).** Rome: FAO Publications Division, 1985). FAO Terminology Bulletin No. 36. Order FAO microfiche 85M02356; U.S. \$6.00 ISBN 92-5-002248-4

-----  
Food and Agricultural Organization of the United Nations. **World List of institutions engaged in forestry and forest products research.** Rome: FAO, 1985. FAO Forestry Paper No. 62. US \$12.50 ISBN 92-5-002324-3 Available from UNIPUB; FAO Doc. #6071-F2865.

All available from UNIPUB, 10033F King Highway, Lanham, MD 20706-4391 (tel/800-233-0506 (Canada 800-233-0504) Mailing list available from "UNIPUB Bulletin for Librarians, Information Managers & Booksellers" (free).

Pan American Institute of Geography and History.

Informe Cuadrienal del Secretario General (1982-85). no charge.  
T. Blachut. Cartografia y Levantamientos. US \$16.  
Guia de Instituciones que Cultivan da Historia en America (Pub 305). no charge.  
The Florida Republic. \$9.00  
Manual de Especificaciones para Maps Topograficos. \$16.00  
Buenos Aires: 400 anos. \$11.00  
Directorio de Antropologos. \$16.00

(Prices include postage & packing (add \$1 outside North America).  
Full publications list available from:  
Secretaria General del IPGH  
Ex-Arzobispado No. 29  
Col. Observatorio  
11860 Mexico D.F.

As of August 1, 1986, PAIGH has instituted a computerized sales system for all of its customers, using customer codes, these should be used on all orders and claims. A copy of this number has been sent to all regular customers.

-----

## PUBLICATIONS OF RELEVANCE

1. Cataloging

Library of Congress. Subject Cataloging Manual: Subject Headings. (Washington: LC, 1986). \$30 from Cataloging Distribution Service, Library of Congress, Washington, D.C. 20541.

Revised edition; 600 loose-leaf pages of instruction sheets, each on a specific topic, describing LC subject cataloging procedures. Incorporates new policies regarding "see also" refs, and a consolidated list of subdivisions used under place names. New topics include railroads and streets and roads.

2. Subject Headings

- a. Library of Congress Subject Headings, 10th edition. 1985 Supplement. (No price given). "This will be the last of the paper supplements."
- b. Library of Congress Subject Headings in Microform. Quarterly cumulations of currently authorized headings. "It provides the equivalent of the LCSH each quarter." \$70 per yr. \$75 foreign.
- c. LC Subject Headings Weekly Lists. Issued monthly, contains several weekly lists. Annual subscription \$100.
- d. Annual paper supplements will no longer be produced after the 1985 supplement. These will appear under Revised LC Subject Headings in the Cataloging Service Bulletin. Each entry will consist of the absolute form and its replacement form.

All of the above publications are available from the Cataloging Distribution Service, Library of Congress, Washington, D.C. 20541.

[ -- Excerpted from Cataloging Service Bulletin, no. 31, Winter 1986, pp. 77-78.]

3. The Index to the Cataloging Service Bulletin, No. 1-28, by Joan Dible. \$15. + 6% for California Residents. Order from Stanford University Libraries, Publication Sales Office, Green Library, Stanford, CA 94305. Loose-leaf.

4. U.S.G.S. Guide to Obtaining USGS Information. (Reston: VA: USGS, 1986). Circular 900.

5. Exhibit Catalogs

The James W. MacNutt Collection of Maps of the Gulf of St. Lawrence, with particular emphasis on Prince Edward Island. Confederation Centre Art Gallery and Museum, Charlottetown, P.E.I., June 5-September 7, 1986. Available for \$1 from museum Price Edward Island, Canada C1A 7L9. ISBN 0-920089-34-8

Lists the 45 exhibited maps, along with a brief, brilliant appreciation of their history and significance by Curator Mark Holton. Illustrated.

---

### Publications of Interest

**Lithographic views of California Towns, 1875-1889.** Introduction by John Reys. San Francisco: Book Club of California, 1986.

A portfolio of ten sheets. 18 x 12 in.

[citation courtesy of Peter Stark, Univ. of Oregon]

**Northern California atlas and gazetteer.** Freeport, Maine: LeLorme Publishing Company, 1986.

127 p., index. \$12.95

[citation courtesy of Peter Stark, Univ. of Oregon]

**Satellite Remote Sensing of the Marine Environment: Literature and Data Sources:**

North American Climate Data Catalog, Part 1. See "New Journals" - Environmental Data Review North American Climatic Data Catalog, Part 2.

Environmental Data Review. Irregular. Published by National Environmental Data Referral Service Office, NOAA, 1825 Connecticut Avenue NW, Room 522, Washington, D.C. 20235 (tel. 202/673-5404)

"Reports on new developments in the field of environmental data management." Issue no. 3, October 1986, detailed access to the NEDRES database through BRS online, has a bar graph of the 9 subject areas referenced by the database; includes tips on geographic search strategy, mentions "New Data" on Western Climate for Idaho, soon to be followed by Utah, New Mexico, Colorado, Nevada, Arizona, Washington, Wyoming, Montana, Oregon and California; lists basic climatic data catalog for North America, parts 1 \$10 and 2 \$10 (SuDocs C55.238:1 & C55.238:4/pt.2) as well as the "Specialized Data Catalog: Coastal and Estuarine Waters of California, Oregon, and Washington, \$10; includes hydrology, geology, geography, water quality, fishery biology and satellite data. The newsletter also discusses the agencies software for use with their data sets, available through BRS. A workshop on use of the software and NEDRS data was scheduled as a pre-conference to Online 86, Nov. 3, 1986.

---

Proceedings, Tenth Canadian Symposium on Remote Sensing. (no price at press time) Contact: Canadian Centre for Remote Sensing,

DEMR, 2464 Sheffield Road, Ottawa, Canada K1A 0Y7 (tel. 613/993-0121)

-----

Carter, D. J. The Remote Sensing Sourcebook: A guide to Remote Sensing Products, Services and Facilities, Publications and other Materials. (London: McCarta, 1986) no price given.

-----

Arthur Cracknell and Ladson Hayes (eds.) Remote Sensing Yearbook (London: Taylor and Francis, 1986) no price given.

-----

Edwin Scharda. Physical Fundamentals of Remote Sensing. (New York: Springer Verlag, 1986) no price given.

-----

Remote Sensing -- A Program in Crisis. (Washington: National Research Council, 1985) no price given. Space Applications Board, National Research Council, 2101 Constitution Ave. NW, Washington, D.C. 20418

-----

California. Business, Transportation and Housing Agency. California Index of Aerial Photography 1984/85 fiscal year. (includes separate "index key"). Sacramento: the Agency, [1986] Free from CalTrans, Division of Project Development, Geometronics Branch, P.O. Box 1499, Sacramento, CA 95807

-----

Instrumentation for Teaching, Newsletter No. 1. (n.p.: International Society for Photogrammetry and Remote Sensing, 1985?) Copies available from Dr. Ian Dowman, University College, Dept. of Photogrammetry, Gower St., London WC1E 6BT, England.

-----

#### NAMES

Schorr, Alan Edward. Alaska place names. 3rd ed. (Juneau: The Denali Press, 1986.) ISBN 0-938737-11-2 \$15.95 + \$1.50 Twenty year supplement to USGS Professional Paper 567, Dictionary of Alaska Place Names. "Cumulation of all decisions on Alaska rendered by the United States Board on Geographic Names from January 1966 through December 1985.

-----

NEW PUBLICATIONS : Silver cities -- Photography  
[Drawn from pages of History of Photography and other sources.]

Piero Becchetti. La fotografia a Roma dalle origini al 1915.  
(Rome: Editore Carlo Colombo, 1983). Lira 65,000.  
Inventories all photographers of Rome to 1915, including aerial views.

Paolo Costantini and Italo Zannier. Venezia nella Fotografia dell'Ottocento. (Venice: Arsenale Editrice, 1986). Lira 25,000. 100 pages of 19th C. photographs of Venice.

Christopher Siegfried. Guide to Canadian Photographic Archives. Ottawa: Public Archives of Canada, 1984. ISBN 0-660-52274-8  
Can\$ 35.00; elsewhere Can\$ 42.00. Canadian Government Publishing Center, Ottawa, Ontario K1A 0S9

Paolo Constantini and Italo Zannier. I Dagherrotipi della Collezione Ruskin. (Venice: Arsenale Editrice, 1986). Lira 25,000  
Photo collection of the author of The Stores of Venice (1851-53), recording the architecture of his time, with inevitable 'topological' associations.

[Continued on Page 52]

Peter E. Palmquist, with Lincoln Kilran.

Photographers of the Humboldt Bay Region. Arcata, CA.: Peter Palmquist, 1985. \$20 individuals, \$30 institutions. Vol. 1 of a projected 30 covering Humboldt County 1850 to present. Limited edition of 500 copies. [ Peter Palmquist, 1183 Union St., Arcata, CA 95521]

Louis Ginsberg. Photographers in Virginia: a checklist (1839-1900). Petersburg, VA: the author, 1986. LC 86-91138

Includes checklist to all named places photographed. [Louis Ginsberg, P.O. Box 1502, Petersburg, VA 23805] \$21.50.

Mark Junge. J.E. Stimson: photographer of the West. Lincoln, NE: University of Nebraska Press, 1985. \$29.95 ISBN 0-8032-2545-2 Record of the subject's 7,500 glass and nitrate negatives spanning the period 1890-1930, housed in the Wyoming State Archives Includes landscapes of Wyoming suitable for repeat photography.

Martha A. Sandweiss. Laura Gilpin: an enduring grace. Fort Worth : Amon Carter Museum, 1986. \$75. ISBN 0-88360-077-3 Includes southwestern landscapes and nature studies 1916-197- by a major artist. Includes full biography.

Fouad Debbas. Beirut, our memory: a guided tour illustrated with postcards from the collection of Fouad Debbas. Beirut, Lebanon : Nanfal Group, 1986. French francs 400; British pounds 45. Views of the city ca. 1880-1930.

Eyal Onne, with research assistance from Dror Wahrman. Jerusalem: profile of a changing city. Jerusalem?: Mishkenot Sha'ananim and The Jerusalem Institute for Israel Studies, 1985. No price given. ISBN 965-222-068-X  
By the author of Photographic heritage of the Holy Land, this work also concentrates on 19th c. views.

Allen A. Dutton. Phoenix then and now. (n.p.: n.p., n.d.) \$5.00 Repeat photography from ca. 1900 and 198-. Available from Wide World of Maps, 2626 W. Indian School Road, Phoenix, AZ 85017.

Kenny A. Franks and Paul F. Lambert. Early California Oil: a photographic history 1865-1940. College Station, TX: Texas A&M University Press, 1985. \$34.50 Graphic proof that no matter how bad things look, they once looked worse, and much environmental blight is reversible.

Gianfranco Maccaferri, et al. I fotografi della Valle d'Aosta 1870-1940. Aosta: Regione Autonoma Valle d'Aosta, 1986. \$\$ ?

Dennis Shanahan and Charles Elliott, Jr. Historic Torrance: a pictorial history of Torrance, California. Redondo Beach, CA: Legends Press, 1984. \$46.00 Order from Legends Press, Redondo Press, CA 90277.



-----  
Encyclopedia of Geographic Information Sources: U.S. Volume  
Fourth Edition. Jennifer Mossman, editor. Detroit: Gale Research  
Company, Nov. 1986. 450 p. \$105. (tel. 800-223-GALE)

First new edition since 1978. 300% more U.S. information sources.

In preparation: International Volume. \$130. Due late 1987; and a  
Supplement to EGIS, U.S. Volume. Subscription \$65. Due 9/1987.

-----  
Third Supplement to the Index to Maps in Books and Periodicals,  
American Geographical Society Collection.

Boston: G.K. Hall, April 1987. ISBN 0-8161-0458-1 \$175.  
Information catalogued between 1975 and 1984. \$200 export.

G.K. Hall, 70 Lincoln St., Boston, MA 02111.  
(800-343-2806) Suzanne Bravo, Library Reference Representative.

-----  
J. B. Post, Free Library of Philadelphia, provides this useful  
information on "Maps in home magazines":

"We are in the process of getting our kitchen remodeled and  
in the process look at a lot of the home magazines. I have found  
a few items of interest to the map world.

"On the cover of BUILDING IDEAS for Summer 1986, a MAP OF THE  
ROAD TO HELL is featured in the center, hanging over a fireplace.  
The house belongs to John & Mary Rust of Alexandria, VA, he an  
architect and she an antiques dealer.

"The cover on the May 1986 issue of WORLD OF INTERIORS has  
landscape/cityscape prints on the walls of the house shown.

"TRADITIONAL HOME for Spring/Summer of 1986 on pp. 86-96 has  
the article "Early Maps" which I didn't have a chance to read, but  
which does have a picture of a smiling Ken Nebenzahl among the  
reproductions of old maps.

-----  
John R. Sellers (compiler). Civil War Manuscripts. A guide to  
Collections in the Manuscript Division of the Library of Congress.  
(Washington: Library of Congress, 1986) SuDocs LC 4.2: C49;  
depository item. Index contains 85 map references.

NTIS Published Searches, \$45 each; order by PB# from NTIS Springfield, VA 22161, (tel. 703/487-4650)

1. Computer Aided Mapping, Feb 84 - Jan 85, (51 items) (Source data base: Engineering Information, Inc.) PB 85-853711/CAS
2. Computer Aided Mapping, May 82 - 1984 (233 items) (Source data base: NTIS) PB 85-851889/CAS
3. Photogrammetry: Equipment and Image Processing 1975 - Nov 85 (253 items) (Source data base: Information Services for the Physics and Engineering Communities) PB 85-872240/CAS

Other published search headings of interest are: Remote Sensing, Optics (several headings), geology, land use, Landsat, Mexican foods (tortilla manufacturing 1972 - July 85 (99 entries) PB 85-864114/ CAS (Food Science and Technology Abstracts data base). The catalog is free from NTIS.

-----  
P. William Filby (compiler). **A Bibliography of American County Histories.** Baltimore: Genealogical Publishing Co., Inc., 1985). \$24.95 GPC, 1001 N. Calvert St., Baltimore, MD 21202.

-----  
Carla Clivio Marzoli, (ed.). **Imago et mensura mundi: atti del IX congresso internazionale di storia della cartografia.** (Rome: Istituto della Enciclopedia Italiana, 1986). 2 vols. + index/plate vol. No price given. From: Istituto della Enciclopedia Italiana, Piazza Paganica 4, CP 717, 1-00186, Rome, Italy.

[Proceedings, 9th International Conference on the History of Cartography. Very important for all map libraries. (Mapline)]

-----  
I. Kretschmer, J. Dorflinger, and F. Wawrik (eds.) **Lexikon zur Geschichte der Kartographie** (Vienna: n.p., 1986) 2 vols. no price given. (Mapline)

-----  
Martin Fido. **Murder Guide to London.** (London: Weidenfeld and Nicolson, 1986). UK Pounds 9.95 ISBN 0-297-78806-X

"Perhaps the most intriguing aspect of Fido's guide is the pattern he discerns between types of murder and the social class, moves and architecture of the district in which it took place.... (from a review by P.D. James).

-----

**NODC Users Guide** (SuDocs C55.298:USZ) (Washington: GPO, 1985). Describes the data and information products and services of the National Oceanographic Data Center. Includes data sets, printed publications, computer data exchange formats.

-----

New York State Archives. "Selected Records Relating to New York State Canals." (13pp.) Free from Office of Cultural Education, Cultural Education Center, Albany, NY 12230.

-----

Kurt Dodd (compilere). **Guide to obtaining USGS Information.** (Reston: USGS, 1986) USGS Circular 900 (supercede! C # 777) SuDocs I19.4/2:900. Free from Books and Open-File Reports Section USGS, Federal Center, Box 25425, Denver, CO 80225.

-----

Defense Mapping School. Student pamphlet: **The Geoid.** (Fort Belvoir, VA: the School, 1983) SuDocs D5.352/2:202. DMS No. ST 202. "a sequel to the "Basic Geodesy" prepared by Mrs. Irene K. Fischer, USAES, in March of 1972."

-----

F. R. Stephenson and M.A. Houlden. **Atlas of Historical Eclipse Maps: East Asia 1500 B.C. - A.D. 1900.** (New York: Cambridge University Press, 1986). \$79.50

-----

Edward B. Espenshade, Jr., (ed); Joel L. Morrison, senior consultant. **Goode's World Atlas.** 17th ed. (Chicago: Rand McNally, 1986) \$16.96; paperback \$13.28

-----

#### LINGUISTIC ATLASES

James Mather and H.H. Speitel (editors). **The Linguistic Atlas of Scotland** (Scots Sections) Volume Three: Phonology. (London: Croom Helm, 198?) UK Pounds 135. ISBN 0-8566-4716-0 Continues Vol. 1 (1975) and Vol. 2 (1977) [Times Literary Supplement, May 9, 1986, No. 4,336].

-----

Lee Peterson (Editor). **Linguistic Atlas of the Gulf States.** Volume 1. (Athens, GA: University of Georgia Press, 198-). \$60. ISBN 0-8203-0715-7 "handbook" to the forthcoming atlas volumes, collectively a "general dialect survey in eight southern states." [Times Literary Supplement, May 9, 1986, no. 4,336]

-----

Rudolph Chelminski. "Chez Michelin it's tubby tires and a cachet of symbols." Smithsonian 17(3): 56-67, 142, June 1986.

An intertaining history of Michelin its maps and guides. Illus.

-----

U.S. Bureau of the Census. 1990 Planning Conference Series. Proceedings of the National Geographic Areas Conference. (Washington: GPO, 1984- ).

At least eleven volumes of the planning series for the 1990 Census have been issued so far. Numbers 6 and 11, both issued in 1985, contain proceedings of the Geographic Areas Conferences.

-----

U.S. Geological Survey. Research, investigations and technical developments; National Mapping Program 1983-84. (Reston, VA: USGS, 1985) Open File Report 85-0304. Copies available from USGS, Office of Geographic and Cartographic Research, 521 National Center, Reston, VA 22092.

-----

U.S. Geological Survey. New papers related to space image mapping by A.P. Colvocoresses. (Reston, VA: USGS, 1986) Open File Report 86-0001. Copies available from USGS, EROS Cartography, Mail Stop 520, Reston, VA 22092.

-----

Richard Oliver. The Ordnance Survey One Inch Seventh Series: a list of its editions and substates. Ed 1, May 1986; Ed 2 June 1986. (London: The Charles Close Society, 1986) no price given.

-----

U.S. Department of Defense. Atlas/State Data Abstract for the United States, Fiscal Year 1985. (Washington: GPO, 1985) SuDocs D1.58/4:985.

Prepared by DOD's Washington Headquarters Services, Directorate for Information, Operations and Reports, the atlas consists of state lists showing payrolls and prime contract awards, followed by state maps showing the location of major military installations by branch and type.

-----

U.S. Defense Mapping Agency. Hydrographic/Topographic Center. World Port Index. 10th Ed. (Washington: DMA, 1986) Pub. 150.

Shows country, coordinates, sailing directions, chart reference, features codes.

-----  
**NEW PUBLICATIONS - Open File & Related Publications**

**MAGERT OPEN FILE REPORTS**

The MAGERT Open File Reports listed below are now available. They are on-demand photocopies (in paper covers) which are provided as a service to the map library community. Titles in the growing series are generally of an ephemeral nature, or are too focused or specialized to warrant general distribution as formal publications. **Orders may be sent to Peter L. Stark, Map Library, 165 Condon Hall, University of Oregon, Eugene, OR 97403.** All orders must be pre-paid. There is a minimum charge of \$3.00 per order. [As of 7-16-86.]

- 86-1 Vick, Nancy J. GUIDE TO U.S. MAP RESOURCES: A PERSONAL NAME INDEX. [1986] 15 leaves. \$1.50.
- 86-2 Sunnen, Linda, and Daniel O. Holmes. MAP ROOM ACQUISITION PROCEDURES: UNIVERSITY OF CALIFORNIA, BERKELEY: A SYSTEMS ANALYSIS. 1984. 35 leaves. (An introductory examination of then current problems with some suggested solutions.) \$3.50.
- 86-3 COUNTY COORDINATES (4 corner latitude/longitude; degrees & minutes):
- CA Robertson, R. Bruce. CALIFORNIA COUNTY COORDINATES. 1984. 4 leaves. \$0.40.
- IL Wenner, Alex, and Marian Hunter. ILLINOIS COUNTY COORDINATES. [1985] 5 leaves. \$0.50.
- UT Robertson, R. Bruce. UTAH COUNTY COORDINATES. 1984. 3 leaves. \$.030.
- WY Walsh, Jim. WYOMING COUNTY COORDINATES: INCLUDING NATIONAL PARKS AND MONUMENTS, AND THE WIND RIVER INDIAN RESERVATION. 1986. 3 leaves. \$0.30.
- 86-4 Vick, Nancy J. LATIN AMERICA CUTTER LIST: FIRST AND SECOND ORDER ADMINISTRATIVE DIVISIONS. August 1985. 40 leaves. (An expansion of the Library of Congress "G" classification schedule; excludes Mexico) \$4.00.
- 86-5 Cobb, David A. UNITED STATES STATE COORDINATES. [1986] 4 leaves. (4-corner latitude/longitude for each state--degrees & minutes). \$0.40.

- 86-6 U.S. NATIONAL PARKS AND FORESTS CUTTER LIST. [1986]  
11 leaves. (Library of Congress expansion of "G" classification schedule). \$1.10.
- 86-7 SAMPLE MAP WORKFORMS FOR M.A.R.C. INPUT. 1986. 8 sheets  
(loose in folder). (Locally devised OCLC, RLIN and UTLAS  
input workforms). \$1.70.

Chair of the MAGERT Publications Committee is Brent Allison, Map  
Division, New York Public Library, Fifth Ave. & 42nd St., New  
York, NY 10018.

-----

Library of Congress Cataloging in Publication Data

---

Moffat, Riley Moore, 1947-

Map index to topographic quadrangles of the United  
States, 1882-1940.

(Occasional paper / Western Association of Map  
Libraries; no. 10)

1. United States—Maps, Topographic—Indexes. I. Title. II. Series:  
Occasional paper (Western Association of Map Libraries); no. 10.

GA405.M64 1985  
ISBN 0-939112-12-4

016.912'73

84-21984

---

Now Available

See ordering information  
on rear cover

**MicroCartography**

Twentieth in a Series

by

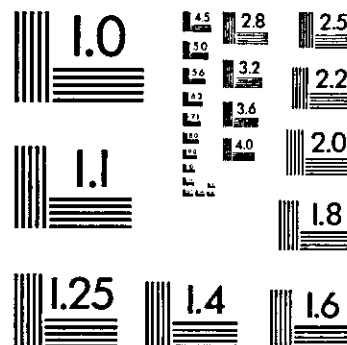
**Larry Cruse**  
 Map Section C-075p  
 University Library  
 Univ. of California  
 La Jolla, CA 92093  
 (phone 619/452-3338)

**TEST TARGETS**

Test targets are to microforms what eye charts are to optometrists: a predictable, invariant method for establishing relative fluctuations from a norm. The base test patterns used in domestic library work are those established by the National Bureau of Standards and known as NBS 10-10.

These are finely graded sets of lines set in various combinations on 2.5" cards. The cards are then placed on the platen where material is to be microfilmed, at the beginning and sometimes at set times per day; the National Map Collection of Canada films them at the start, midpoint and end of the working day. This procedure effectively calibrates the camera, the film and the microfilmed maps simultaneously. The test frames of each microfilm batch are then processed and the line pairs visually checked with a magnifying glass. Fine checks are made at the center and at each corner of the frame. Typically, resolution is predictably better at the center than the edges. So long as the line pairs are separable with 12x magnification, the image set is considered acceptable; if the test fails, then the entire day's work must be refilmed. The advantage of the NBS test patterns is their simplicity, measuring only the resolution of the lens, camera and film.

MICROCOPY RESOLUTION TEST CHART  
 NBS - 1010a  
 (ANSI and ISO TEST CHART No. 2)





UGRA Plate Control Wedge (PCW) in original size which contains the following left to right:

1. Continuous tone wedge
2. Micro-lines
3. Halftone wedge 60 lines/cm
4. Slur target
5. Small dot patches

Recently, a more sophisticated test pattern has been introduced, the UGRA Plate Control Wedge. Similar to a Ruler in shape, this device is split between negative and positive elements, a gray-scale progression of squares, concentric circles of uniform negative/positive halves, half tone progression for assessing screened printing, a "slur" or ghosting section, and dot patterns for establishing the transition valley between negative and positive printing. The "wedge" in the UGRA PCW denotes its progressive calibration for each of the five factors it covers. Depending on the type of filming to be done, each of them can be used to optimize the camera and film combination for maximum clarity of the resulting microfilm or contact print. The UGRA is also applicable to continuous tone materials such as air photos and has the secondary advantage of calibrating analytical hardware which may be used on the resulting microfilms. This might be applied, for instance, if the microfilm were to be printed or input into a computer, or used as an intermediate for digitizing or as an intermediate for making clear videotapes preliminary to optical disc mastering. If the original map included colored components, it would be possible to use the UGRA standard to reconstruct the color signatures from a black-and-white microfilm. Its only insufficiency would be in color microfilming; while its black and white factors would all be applicable to the quality of the image, it would not provide a color standard to compensate for the invariable shift of hues bound to occur as a result of color microfilms' inherent bias. But, save for that one limitation, the UGRA Plate Control Wedge provides a standard, calibrated reference for maps and for virtually any other film and print work.

If you are contracting map microfilming work, you can require the service bureau to use this wedge, alone or as a supplement to the NBS test pattern. In 35mm work, this can be filmed at the beginning of a roll, or for 105mm work, at the beginning of a project, to be processed like all your subsequent maps, air photos, or what have you. It is not usually necessary to supply a copy of the test patterns or wedges yourself, but you can supply them along with the maps or air photos. One or both should be used for all projects.

Copies of the NBS test squares are about \$10 each -- expensive because each is photographically prepared -- from Photographic Sciences Corporation (770 Basket Road) P.O. Box 338, Webster, NY 14580, (tel. 716/265-1600). A catalog is available for the asking. Copies of the UGRA Plate Control Wedge (only one is needed) are \$80 each from Graphtex Ltd., P.O. Box 215, Roseland, NJ 07068 (tel. 201/228-0689).



## NEW MAP MICROFORMS

United States.

**Tampa Bay Environmental Atlas.** Biological Resources, maps A - A18 ; Water Resources, maps B1 - B18.  
(Washington: GPO, 1985) SuDocs I49.89/2 : 85(15) map #.

36 105mm monochrome microfiche.

---

## NATMAP IS PLANNING TO PUT ITS MAPS ON VIDEODISC

The Australia Division of National Mapping (Natmap) is currently investigating the feasibility of putting the entire Australian collection of 1:1 M, 1:250,000 and 1:100,000 scale maps onto a videodisc. The actual maps themselves would of course continue to be available as in the past but the entire set could also be available on one videodisc, which could sell for as little as \$200 as compared to about \$8500 for the paper versions of the same maps.

A videodisc is able to store 54,000 colour pictures on each side. Thus one disc could hold 108,000 separate pictures, more than enough for the maps mentioned above. Each videodisc image would cover less than a full printed map, to ensure even the smallest print could be read when the picture was displayed on an ordinary domestic TV. For greater clarity and sharpness a more expensive, high quality video monitor could be used, but a domestic TV would be more than adequate for the majority of uses.

The videodisc, the size of an ordinary LP record, uses a similar laser technology to the compact sound disc. Videodiscs can also hold full stereo sound and movie pictures as well as stills. The maps on NATMAP's videodisc would of course be stills with no sound involved.

The videodisc player, which reads the pictures from the disc itself, can be operated manually, under in-built program control or be connected to a general purpose computer and be controlled by that computer. The standard RS232 link to a computer is used.

One of the most exciting applications would be to have the maps displayed on a touch sensitive colour TV screen. Any of NATMAP's maps could then be called up onto the screen within seconds with just a touch of one's finger. Initially, a map of Australia, would be automatically displayed, one could then touch that part of the country of interest to obtain the appropriate maps.

Touch controls would enable you to display any adjacent map in a split second. Maps could also be retrieved by place name or by latitude/longitude.

The current cost of purchasing a high quality videodisc player together with a touch sensitive screen is about \$6000 although this price is expected to drop considerably as the use of videodiscs increases.

[NM 85/264 6/6/86]

---

## NEW PUBLICATIONS

### New Journals

#### Soil Survey and Land Evaluation Vol. 1, 1986.

"A primary journal which acts as a forum for communication between those engaged in soil survey, in land evaluation, and in the application of the results ... to land-use planning and management. ... substantive articles, technical notes, reports on survey developments in different countries, and reviews of books and survey memoirs and maps."

\$11 per year from GeoAbstracts Ltd., Regency House, 34 Duke St., Norwich NR3 3AP England.

#### Coastline Quarterly

#### The S. Klein Computer Graphics Review Vol. 1, 1985?

Quarterly beginning Fall 1986. Free subscriptions to "qualified professionals", from Technology & Business Communications, Inc., 730 Boston Post Road, Sudbury, MA 01776 (tel. 617/443-4671).

### Focus

Recently revamped, Focus will add a regular column on maps and mapmaking.

\$12 per year from American Geographical Society, 156 Fifth Ave., Suite 600, New York, NY 10160. [from SUC Bulletin 19(2): 105]

### Sea Grant Abstracts

Vol. 1, No. 1, Spring 1986. Quarterly. ISSN 0887-4220. (free)  
"Sea Grant Abstracts provides the results of ... projects as distilled from publications generated at 29 institutions and 200 private and public research and development facilities by over 3,000 professionals. Includes map related reports. Free from Sea Grant Abstracts, P.O. Box 125, Woods Hole, MA 02543.

### Map Flasher

A sometimes new products newsletter by Wide World of Maps, 2626 W. Indian School Road, Phoenix, AZ 85017. Features new guidebooks, gazetteers and maps added to stock. (free)

Cartomania

No. 1, Spring 1986. Quarterly. "Newsletter of the Association of Map Memorabilia Collectors; Siegfried Feller, 8 Amherst Road, Pelham, MA 01002 (tel. 413/253-3115). \$8 per year US & Canada / \$10 elsewhere. Scope: "Maps themselves -- & in a variety of other forms: postcards, greeting cards, envelopes & cachets, stamps & souvenir sheets, pictorial postmarks, postal stationery, publicity labels (you name it!)." Make checks payable to the Association.

GEOCARTO International

No. 1, 1986. Quarterly. "A Multi-disciplinary Journal of Remote Sensing." International Editorial Committee. Geocarto International Centre, G.P.O. Box 4122, Hong Kong. Individual, US\$30; Institutional \$60.

## Canada

Environment Canada. Canada Land Use Monitoring Program. Fact Sheet series -- Land Use in Canada: "Urbanization of Rural Land in Canada"; and in: Quebec-Levis; Chicoutimi - Jonquiene; Sherbrooke; Vancouver; Victoria; Montreal. Forthcoming: Wetlands; lands in the national economy.

Free from Lands Directorate, Environment Canada, Ottawa, Ontario K1A 037. (specify English or French)

---

**REPROGRAPHICS**Same Size Xerox 2510

Xerox Corporation recently unveiled a copier as revolutionary for its low price as for its capabilities. The Xerox 2510 is a 36" wide by any length engineering copier for only \$3,695.

It will copy from transparencies, translucents, tracings, standard maps and is suitable for any oversize library material which can be fed through its aperture a page at a time. Other applications might include the preservation copying of newspapers and old maps, run through between two thin sheets of Mylar, old music scores, posters and the like. It should be popular with instructors in various disciplines, computer print out people, chart, seismic profile, and other "long but narrow" format discipline specialists. In the right hands, it could also be used for creating a profit from inexpensive facsimiles to be sold in local bookstores, or by the library itself.

For a descriptive brochure, contact your local Xerox sales rep, or Xerox Corporation, Engineering and Graphics Products, 1350

Jefferson Road, Rochester, NY 14644.

### Large Format Reduction Copiers

A new class of copiers has been developed by what seems like every manufacturer in the business. Generically described as "Conference Copiers", they look and are used as portable chalk boards. However, they contain a copier mechanism capable of reducing (usually) one-quarter of their surface area to 8.5" x 11". Since each of these subscreens is about 3' x 4' and will make a copy of anything in contact with their surface (the manufacturers claim), they might serve as reduction copiers for map and other oversize graphic works.

As you might guess, there is a catch or two: resolution is poor so don't expect fine topographic detail to be retained, and the output is thermal paper. The limited 1.48 lines per millimeter resolution of copies is a by product of the simple charge coupled device (CCD) "sensor plane scan" system, which should improve in sensitivity to the copiers 6 l/mm capabilities if the devices become popular.

The thermal paper seems a concession to weight and size; in order to keep both to a minimum, the same technology is used here as is found on inexpensive computer printers. Okidata has already made the next logical step in the evolution of this process and introduced a computer interface which hooks up to their unit. Thus, the board can act as a large, free hand etch a sketch reduction device to impart drawings into computers, where they can be "formalized" into standard drawings using existing CAD software.

Even cleaner, Okidata has also provided a special clear overlay sheet option which can be placed over a printed sheet -- such as a map -- the clear sheet can then be modified in any way and from 1 to 99 copies of t! composite can be produced.

at last contact, Okidata was looking for 10 places to install conference boards for 30 days to see what uses could be found for them.

A "second generation" unit from Weber Costello has its scan bar on the outside, allowing it to scan an entire ca. 3' x 6' surface in one pass (the others do it sequentially, 1/4th at a time). It will copy anything placed on it with magnets and has two output sizes (8.5" x 16" and 8.5" x 11"). It also uses a white, enameled board guaranteed for life (the others use a semi-flexible plastic).

The Weber Costello unit looks almost identical with Quartet Manufacturing Company's products, and is priced about the same.

If you would like more information about the above products, contact one or all of the following: Okidata 1-800-OKIDATA

("Copyboard 100 and 200"); Xerox 1-800828-9090 (Xerox Conference Copier, \$3,295); Sharp 1-800-BE-SHARP (VB-500 "Electronic Whiteboard"); Weber Costello 1-800-238-6009 (Scan Copyboard, \$3,495). Other manufacturers marketing similar units -- not necessarily of their own manufacture include: Burroughs, Canon, Casio, Panasonic, Ricoh, Savin, and Sentinel, (but telephone numbers were unavailable at press time).

### Overhead Transparencies

American Coated Products has introduced a new (almost) universal overhead transparency material for use in plain paper copiers. It features a sensor frame on all sides, so copiers accept it in any direction, and it is coated both sides, so it is always right side up. The special coating is even claimed to hold toner more densely, without smudging, which should help when using it to make a "map sandwich" on the copier, as we did recently for a class that needed elements from several maps joined together into one. In this application, each transparency becomes the overlay for another map to be copied, and the sandwich of information coming out on each transparency has added one element.

Sensor Frame Transparencies are available in 8.5" x 11" and 11" x 11" sizes, packed 100 to a box. For more information and a sample, contact American Coated Products, Inc., 1603 West Algonquin Road, Mt. Prospect, IL 60056-5586 (1-800-323-8890 - in Illinois 1-800-942-8782). ACP is a subsidiary of the American Stencil Mfg. Co., Inc. (as they say it!), which markets an excellent looking portable, overhead projector, the "Astrolux" which will resolve from 6-8 l/mm. With carrying case, the unit weighs just under 22 pounds. For more info, use toll-free numbers above.

-----

### Screenless Printing of the U.S. Mexican Border Series 1:25,000

The USGS is currently working on a project to produce an index to the border map series it produces for U.S. Customs. These fascinating maps are perhaps the most information saturated lithographic products ever produced, registering more than 200 line pairs per inch (this contrasts with a newspaper's 60 lines per.) Two papers describing the USGS technique of "screenless lithography" were recently sent to the editor, both by E. Wayne Vickers: "Screenless Printing Procedures at the U.S. Geological Survey (the Journal of Photographic Science, 32(2) March/April 1984: 80-84) and "the Pros and Cons of Screenless Printing" in, Proceedings, Technical Association of Graphic Arts, May 6-9, 1984 (Boston: n.p., n.d.): 210-218.

Salient points made in the papers include: halftone lithography is normally 150 lines per inch, with a maximum of ca. 300; screenless is typically capable of 500-600 lines per inch. Screenless lithography is not subject to moire pattern effects which must be avoided in halftone printing. There is little loss

of detail in screenless lithography while halftone suffer significant loss. Screenless printing is effected directly on the diazo sensitized pressplate; halftone must go through the intermediate halftone film step, then to the litho plate. Screenless printing is about 24% more expensive than halftone, but supplies more than that in information gain for color image maps.

Both paper contain sufficient background history and citations to other papers to satisfy any questions associated with the printing of this map series.

-----

## SELF PRESERVATION

### Quick Display Protection for the Intrepid Map Librarian

Map displays are always subject to fingerprints, pencil marks, ink underlinings and felt-tip highlighting. While rare maps are likely to be well protected in such displays -- either under glass or mylar -- a quick, temporary alternative for less valuable maps might be shrink-wrapping. Shrink wrapping is used in most poster shops to protect stock from finger smudges as patrons browse through them. To keep the posters standing up, they are usually wrapped with a thin, stiff cardboard backing, perhaps a suitable way of storing those local topo quads which are always in such demand, or to display newly cataloged maps you would like patrons to amuse themselves with so you can take a coffee break.

Shrink wrapping has several advantages over Mylar encapsulation: it is more easily reversed, the materials are cheaper, it is more easily undone, and the process is both easier to apply and gives a less glimmering effect for reflected light.

Wrap for the process is "stretchable polyethylene plastic film," available in widths up to 18", which clings to itself for a temporary seal, or "P.V.C. shrink packaging film." The latter is sealed on the back using a hot iron (watch the butcher do it at any grocery store). The final "tight" effect is achieved by directing hot air at the assemblage. For this you can use a 1500-watt hair dryer (\$30), or an industrial grade "hot air heat gun" (ca \$80).\*

Dispensers for the roll film start at \$60 for simple, portable models (Bradley's) through \$35 for small table models suitable for all plastic rolls, up through complete semi-automatic self cutting dispenser systems for \$350 (Chandler).

Rolls of shrink wrap, commonly 1 mil (.001"), are always "center fold", so only one side of the assemblage needs to be hot iron sealed. Rolls vary in width, starting at 10" (20" unfolded) and ending at 32" (64" unfolded). Roll lengths vary with width (2000' for 10" roll / 525' for 32" rolls) so that the price per

roll is always between \$60 and \$80.

-----

\* Intrepid, fleet map librarians might consider using unattended blow torches, old woodburning kits, soldering irons, the chrome exhaust stacks on diesel trucks, jet blast from "frequent flyer" departures, almost any handy source of hot metal and hot air will do the trick; in all such cases, eyebrows will serve as a crude index of when the source is hot enough.

Most art magazines carry ads by the hundreds for shrink wrap art supply specialists; I used Decor which has a "bingo card" to get quotes easily from the 50 companies who advertise in it. Decor, "the Magazine of Fine and Decorative Arts" (ISSN 0011-7358) available at art supply stores, or from Commerce Publishing Co., 408 Olive St., St. Louis, MO 63102.

Bradley's Plastic Bag Co. (9130 Firestone Blvd., Downey, CA 90241) will probably not be advertising in Decor, but they have a fascinating catalog free for the asking. They sell all kinds of wrapping and bagging materials suitable for shrink wrapping, sealing map cartons against dust and dirt for shipping and storage, carton cutters for sizing cardboard boxes to flat map sizes (\$14.95), special brown spray for covering markings on boxes to make them look new (\$3.25 per can), warning labels, quick "press on" stencil stamp kits (for large map series?), packing list envelopes, the clear plastic kind which adhere to the outside of cartons (\$30. per 1,000), the simple tough kind of carton staple remover needed for depository shipments (\$1.75), rubber straps which will hold map drawers closed in an earthquake (\$80 for 200', available pre cut), cushioned mailers for floppy discs (will work for microfiche, cassettes); anti-static foam pouches, bubble and polyethelyne cushioning, warning tape to wrap around dangerous areas in an emergency, polyethelyne aprons, disposable dust masks, portable heat sealers (for shrink wrapping), plastic drop clothes, tarps, sheeting (for roof leaks -- cover an entire row of map cabinets in seconds), plastic bag tubing (would this protect circulating maps too long for a normal map tube?), page protectors, door knob bags (just right for circulating folded maps to keep them clean; if this is not enough, the catalog has a lot of funky illustrations. Perhaps we should launch a WAML contest to see just how many unique map applications we can devise for all of Bradley's products. If you can't wait for the mail, call them at (213) 923-5556 (in California but outside Los Angeles -- is there such a place? -- try 800-621-7864.)

-----

..... And for the Trepid Map Librarian

Light Impressions' 1986 archival supplies catalog has 65 pages of useful materials and books. They are particularly strong in outsize binders for storage of air photos, map folders,

mounting boards, photo sleeves and boxes, paper cleaners, ultraviolet light tube and display board filters, 1 mil. Mylar encapsulation materials, archival updating service, dry mounting supplies, mat and paper cutters over 40", adhesive transfer tape guns, flat files, photo/plastic marking pens, and information sheets describing archival techniques. Catalogs are free from Light Impressions, P.O. Box 940, Rochester, NY 14603.

-----

### Encapsulation Update

The National Preservation News (no. 4, April 1986) carried the results of an updated study [conducted by the Library of Congress Preservation Research and Testing Office] on the effects of encapsulation on paper documents. Since the four points it addresses are particularly important to map preservation programs, we reprint them here in full:

"1. Air holes in all four corners of the polyester envelope do not slow down the faster rate of degradation of encapsulated paper which is acidic or neutral. Deterioration of encapsulated paper is slower inside an envelope which is open along two edges, but it is still faster than that observed for the unencapsulated control. In the latter case, it is debatable if our laboratory study, in which half-sealed envelopes were suspended in an aging oven, is a realistic representation of practical situations in which encapsulated documents may be piled upon each other.

"2. The acceleration in the decline of physical properties of acidic and neutral paper samples upon encapsulation can be eliminated by enclosing another sheet of paper containing an alkaline reserve in the same envelope. While neutral paper encapsulated in this manner ages at the same rate as the unencapsulated control, acidic paper actually benefits by encapsulation with alkaline paper.

"3. The best solution by far remains the deacidification of paper before encapsulation, as was recommended in the 1980 LC pamphlet.

"4. The rates of aging of paper samples are identical inside polyester and polypropylene envelopes. Therefore, polypropylene film provides a viable and appreciably less expensive alternative to polyester film, especially for encapsulation of small items. In the encapsulation of book materials, its lower density may prove attractive. However, it lacks the rigidity of polyester, and therefore cannot provide adequate support for larger items.

"The results of this study should not be misconstrued as a recommendation against encapsulation without prior deacidification. Each item must be considered individually. Even if the decision is made not to deacidify, it may be preferable to encapsulate a given item in order to take advantage of the physical protection that encapsulation provides.

[Merrily A. Smith]



-----

USMARC

An ad hoc group is now at work developing MARC data elements to be used for preservation records of library materials. Initially, these include physical analysis of acidity, brittleness, condition of binding and any loss of material from the original as one division of the record. The record portion would deal with preservation actions taken, such as reformatting to microfilm, remedial treatment, deacidification, dating all actions taken and technical documentation of all intervention, item availability and copyright status.

The open period for comment on these suggestions ended September 26, 1986. Next, proposals based on them will be drawn up for inclusion in USMARC.

Contact for this project is Sally H. McCallum, Chief, Network Development and MARC Standards Office, Library of Congress, Washington, D.C. 20540.

-- from LC Information Bulletin 45(31): 275-276, August 4, 1986, and National Preservation News No. 5, July 1986, p. 7.

Related reading: Paper Conservation News (quarterly) and The Paper Conservator (annual). Both published by the Institute of Paper Conservation.

-----

National Endowment for the Humanities

The NEH Office of Preservation, Room 802, 1100 Pennsylvania Ave., N.W., Washington, D.C. 20506 (tel. 202/786-0570) issued its "Preservation Programs : Guidelines and Applications Instructions" in August. These will be valid until May 31, 1989.

-----

National Archives

If you had unlimited funds, how would you apply them to the preservation of priceless/irreplaceable documents. One such system is that used by the National Archives for the Declaration of Independence, the Bill of Rights, and the U.S. Constitution. The details were recently featured in an article by Alfred Meyer, "Daily Rise and Fall of the Nation's Revered Documents," Smithsonian 17(7): 135-143, October 1986. Employing helium atmosphere and a solid state camera for deterioration monitoring, the exhibit was tested by a hammer wielding vandal soon after this article's appearance.

---

### CARTOGRAPHY IN THE NEWSPAPER

"The Prince of Maps: A Fervent Stargazer," by Alan Citron, Los Angeles Times, September 1, 1983, "Westside" Section, pp. 1 & 11. Describes "Vincent (Prince of Maps) Cravero and his \$5 "Guide to Starland Estates and Mansions."

[cite courtesy Carlos Hagen, UCLA Map Library]

---

Charles T. Ward, a Navy Chief Petty Officer, was convicted of setting up a private photography business in the Defense Mapping Agency office at the Jacksonville Naval Air Station, where he was chief. He was reduced to Petty Officer 1st Class, fined \$1,000 and reprimanded for taking pin-up photos (Associated Press, Nov. 6, 1986.) No mention is made of camera, lens or film type.

---

### Map Notes from the Depository Council to the Public Printer

Maps were on the agenda at the Fall meeting of the Depository Library Council to the Public Printer held in Washington, D.C., October 15-17. Representatives of two mapping agencies gave brief presentations to the Council.

James Lusby, Defense Mapping Agency (DMA), stated that USGS will no longer be responsible for DMA map distribution. By January DMA will be distributing its own products. DMA believes that distribution will be faster and easier in the future. Distribution of 1:250,000-scale series (JOG) will be limited to U.S. government agencies. Libraries in need of these must obtain prior written approval from the government. In response to questions about DMA shipping lists, Kathleen Eisenbeis, Council Member, University of Texas at Austin, volunteered to work with Mr. Lusby to ensure that shipping list format is suitable for depositories needs.

Richard Kleckner, USGS, discussed the agency's digital cartography program. He stated that the goal of the program is to satisfy future product requirements for spatial data processing using computers and digital data. A national digital cartographic data base will be developed through digitizing data from current maps. Digital map revision provides the capability for more timely revisions and a more efficient processing. Five thousand (5000) quadrangles will be revised annually, which represents a 5-10 year revision cycle. Some printed maps will still be available. The digital program will enhance the availability of special order products from USGS.

Charles Bennett, USGS, noted that there are eleven categories of cartographic products available on the Government Printing Office annual survey. USGS is publishing three to four thousand new map titles annually. Shipping lists are prepared manually in Denver and USGS is working on debugging them.

Richard Kleckner, USGS, stated that discussions are being held concerning the availability of historic mapping data if all maps are digitized. He said that this is mostly a problem of storage. Mr. Kleckner announced that state indexes are being transferred to book catalogs. A single sheet, replacing flat sheets, will accompany the 7 1/2-minute blocks which list 1-degree blocks and the page number in the booklet.

[by courtesy of Joanne Donovan  
Documents Department, University of California, San Diego]

---

#### National Endowment for the Humanities: Cartographic Grants

Charles Backus, University Press of New England, Hanover, N.H. \$7,500. to publish a descriptive catalog of all known maps and landscape drawings of Shaker villages in New England, Ohio, and Kentucky. (Humanities 7(5): 43, October, 1986.)

Guy Louis Rocha, Nevada State Division of Archives and Records, Carson City. \$43,596. To arrange and describe official records documenting the history of territorial Nevada and Utah and the State of Nevada in the period 1855 to 1945. (Humanities 7(5): 45, October 1986.)

---

#### TRAVEL

For lowest fares on flights anywhere, contact Fare Finders, 800-525-4885; in California (213) 652-6305.

---

THEMATIC MAPS -- A Continuing Portfolio. No. 2.

"Children With Handicaps And Their Families."

HE 209102:C43

REPORT OF THE  
SURGEON GENERAL'S WORKSHOP ON  
CHILDREN WITH HANDICAPS AND  
THEIR FAMILIES



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service



ATLAS & BOOK REVIEWS

edited by

Peter L. Stark

Map Librarian  
University of Oregon  
Eugene, OR 97403

Fitzpatrick, Gary L. and Marilyn J. Modlin.  
**Direct-line Distances: International Edition.**  
Metuchen, N.J.: Scarecrow Press, 1986. xliii, 275 p. \$42.50.  
LC: 85-27748 ISBN: 0-8108-1872-8

**Direct-line Distances: United States Edition.**  
Metuchen, N.J.: Scarecrow Press, 1986. xliii, 275 p. \$42.50.  
LC: 85-27684 ISBN: 0-8108-1871-X  
(Set price for both volumes: \$72.50)

Library staff needing to provide "air distance" information now have two valuable new tools to work with. Each of the above volumes contains tables giving distances between 1,001 cities, towns, islands, and other places throughout the world. Included are the capital city for all countries, plus other important places, primarily cities, which provide balanced geographical coverage. The distances are given in kilometers in the International Edition, and in miles in the U.S. Edition. The distances provided are the "geodesic," defined as the shortest distance between two points on the spheroid; thus, taking into account the flattening of the earth at the poles. The introduction in each volume is nearly identical, and provides information on computing distances from geographic coordinates. Each volume also has a list of the 1,001 places and gives the latitude and longitude of each.

While most users will probably not be concerned with the different methods by which to compute or measure "air distance," those who are will need to be aware of differences between them, e.g., "geodesic" or "great circle." A volume providing tables of great circle distances (which does not take into account the flattening of the earth's poles in its computation) is the IATA/IAL [International Air Transport Association/Instrument

Approach and Landing-Chart] Air Distances Manual (13th ed., Montreal: International Air Transport Association, April 1986, \$50.00). Distances given are typically very similar: Abadan to Auckland is 15,069 km. in the IATA/IAL manual, and 15,072 km. in Direct-Line Distances. In part, differences may also be due to different measuring points: a city's airport (used in the IATA/IAL manual) may be located a considerable distance from the city center used in Direct-line Distances.

The IATA/IAL Air Distances Manual probably contains at least twice as many localities as the Direct-line Distances volumes together. Two or three airports may be given for a particular city in the IATA/IAL work, but still it includes many more places than the Direct-line Distances volumes. For example, IATA/IAL includes Aalborg, Aarhus, Abbotsford, Abilene, Abu Rudeis, and Adaba which are not included in Direct-line Distances. Conversely, Direct-line Distances has a relatively smaller number of places not in the IATA/IAL (Aguascalientes, for example). Another significant difference is that the Direct-line Distances volumes provide distances between all 1,001 places, while the IATA/IAL provides distances only when air routes link two places: it does not have distance from Abadan to Addis Ababa for example, which Direct-line Distances does.

A very useful feature of the two Direct-line Distances volumes is a section of ten pages of maps showing the places for which distances are provided. Thus, if a particular place wanted is not included, one nearby may be selected from the map section to provide at least a rough idea of the distance wanted; the difference between the city wanted and that provided in the volume can also be factored in.

The U.S. edition contains 312 places in the U.S. not given in the International, and the International edition has 312 more non-U.S. places than the U.S. edition. For example, 14 California cities are shown in the U.S. edition, but only 4 in the International. Conversely, 12 cities and towns are given for Alberta, British Columbia, and the Yukon in the U.S. Edition, but 19 are shown in the International; for Mexico the difference is 14 vs. 22, for Japan 11 vs. 12, China 25 vs. 41, England 8 vs. 16, and Nigeria 3 vs. 4.

Libraries which can afford it should have both Direct-line Distances volumes and the IATA/IAL Air Distances Manual. Those U.S. libraries which can select only one of the Direct-line Distances volumes should probably chose the United States Edition, because it includes more U.S. cities and because distances are given in miles. Libraries which can afford only one title should probably choose the IATA/IAL, because it contains more places, and gives distances both in miles and kilometers.

Philip Hoehn  
University of California  
Berkeley, CA 94720

Gerlach, Russel L. **Settlement Patterns in Missouri: A Study of Population Origins, with a Wall Map.** Columbia: University of Missouri Press, 1986. 92 p. \$22.00. LC: 84-23454. ISBN: 0-8262-0473-2

Due to its location where the Missouri and Ohio rivers join the Mississippi, the state of Missouri played a vital part in the history of westward expansion in the United States. Prior to the mid-nineteenth century, when rivers were the primary routes for exploration, commerce, and settlement, the majority of emigrants passed through Missouri, stopping just long enough to gather provisions. For many others, however, it was the final destination. The variety of natural resources available in the state attracted a variety of ethnic groups, each with a unique cultural perspective that influenced their choice of location in which to settle, and the cultural landscape which evolved. Due to the initial geographic separation of many of Missouri's early settlers, individual settlements often remained isolated for several generations and retained a cultural integrity that is still apparent today.

**Settlement patterns in Missouri** is the first published study which examines rural population origins for all European ethnic groups in the state from the earliest settlement to the present. Gerlach draws from the results of earlier studies which focused on a particular region and/or ethnic group, but he also presents much new information gleaned from a variety of primary sources, such as the manuscript federal census returns for Missouri in 1850-1900 and the ancestry responses for Missouri in the 1980 census.

Gerlach begins with a description of Missouri's geographic setting before the European settlers arrived, goes on to unravel the history of settlement up to the post-World War II period, then presents a general overview to relate what he's described to the context of national ethnic settlement patterns. Following this is a chapter analyzing the ancestry responses from the Missouri 1980 census data, one appendix of statistical information of the ethnic makeup for each Missouri county, two appendices of statistical ancestry data, and an extensive bibliography and index.

At the end of each chapter there is a section relating what's been described to what's shown on the map. These sections are quite helpful, as the information (or lack of it) on the map poses more questions than it answers. Gerlach claims in his introduction that the map is the "heart" of this study, and the text is intended to help interpret patterns and provide details. As hard as it is for a map librarian to find fault with such a statement, I have to say that the map supplements the text. Its scale is ca. 1:1,120,000, covering 45 x 53 cm. on a 83 x 54 cm. sheet, and is hardly a wall map in the classroom display tradition. This is not to say that it is not tastefully done, however. It shows the distribution of 24 ethnic groups from 5 European regions (5 Germanic, 7 East European, 4 British/Celtic, 5

Central and Northern European, and 3 Southern European), as well as old-stock Americans and Blacks (as slaves in 1860) in six subdued, yet distinctive colors. The margin is filled with illustrations of old settlers and their dwellings which are quite well done. If this map were a book, I would recommend it for your coffee table, and come to think of it, it would look rather nice framed on your wall (maybe that's why its called a wall map!). If it included the dates that each ethnic group's settlements were founded and/or the names of the towns or settlements each group established, the map would be of much greater informational value and the text would indeed supplement it.

Despite these minor criticisms on what supplements what, **Settlement patterns in Missouri** is a significant contribution to the study of population origins in the United States, and joins similar studies done on the states of Kansas, Wisconsin, Texas, North Dakota, Minnesota, Michigan, and Louisiana. Gerlach has been quite thorough and his prose is entertaining to read. He has done similar studies on specific ethnic groups and regions within Missouri, and the present study firmly establishes him as the authority on the subject. This book and map are not just for Missouri libraries. Its scope is wide enough to be of value to any library which supports a cultural geography or American history curriculum, or which services a significant number of geneologists.

**Jim Coombs**  
Map Librarian  
Southwest Missouri State University  
Springfield, Missouri

---

Guthorn, Peter J. **United States Coastal Charts 1783-1861.**  
Exton, Pennsylvania: Schiffer Publishing Limited, 1984.  
224 p. \$59.00 LC: 84-51187 ISBN: 0-88740-019-1

Maritime cartography is as old as mapping itself. From the earliest surviving portolan charts of the 13th-century through the first printed "island books" of the 15th-century to the present, the charting of our coastlines and seas has been an integral part of the mapping impulse. Oddly enough, maritime mapping and its cousin, the more familiar topographic mapping, have rarely been practiced by the same individuals. From the days when Abraham Ortelius was printing his great topographic atlases and Lucas Janszoon Waghenauer produced his collection of coastal charts, the two seemingly related professions have seldom crossed. Perhaps this was due to the fact that marine cartographers were often trained as pilots, while topographic mapmakers were publishers and geographers.

While we are well acquainted with the early American map publishers and cartographers Matthew Carey, John Melish, and several of their contemporaries, we know little of their peers in the field of maritime publishing. Into this void has come Peter



J. Guthorn's 1984 book, *United States Coastal Charts 1783-1861*. Over the past several years, Dr. Guthorn has fashioned himself into one of our few experts in the field of early American maritime mapping. He brings to the subject not only the enthusiasm of the collector, but also that of the amateur sailor, which helps immensely in understanding these often sophisticated charts. The author has contributed articles to *The Map Collector* dealing with early American maritime mapping, and has spoken widely on the subject. He has produced here the first book-length study to deal with indigenous American coastal mapping.

Guthorn's book concentrates on the period between the end of the American Revolution and the start of the Civil War, a period when much of American industry passed from infancy to adolescence. It presents a visual survey of coastal mapping, preceded by 24 pages of descriptive text. The text gives biographical information about the men who were responsible for the maps and surveys, with data on the actual methods of mapmaking. From the birth of the maritime mapping industry in Boston to the maturation of the United States Coast Survey prior to the Civil War, Guthorn charts the highly erratic progress of the mapping of the U.S. coasts. The author writes of several individuals who were instrumental to this progress. Early publishers, pilots, and entrepreneurs such as Matthew Clark, John and William Norman, Osgood Carleton, Thomas Coles, and Samuel Lambert come to our attention. We learn of Matthew Fontaine Maury, the marine geographer who, after defecting to the South during the Civil War, had his portrait hung upside down at the Boston Marine Society. We learn also of perhaps the most important name in early American coastal charting, Ferdinand Rudolph Hessler, an eccentric Swiss emigre who became the father of the U. S. Coast Survey.

Two important publishing firms, the Blunts of Newburyport, Massachusetts, and the Eldridge firm of Boston, are described. The Blunt establishment was particularly remarkable -- "they financed their own explorations and surveys, and produced a large number of charts of many parts of the world."

The survey of marine maps is presented geographically from Maine to Oregon. This presentation takes almost 200 pages of the book and is its main attraction. Guthorn selected his illustrations from several sources but mined primarily the collections of the Library of Congress, the G. W. Blunt White Library at the Mystic Seaport Museum, and a private collection. With each entry the author cites the full title, the type of projection employed, the map's scale, and the copy's location. He provides descriptive paragraphs with most examples telling us what we are looking at, giving notes on issues and editions, and sometimes adding brief biographical data. Throughout the presentation, we are given copious footnotes, several citing 19th-century sources.

Unfortunately, the book's value is overshadowed by several serious defects. First of all, this is a very hard book to read.

The employment of a good proofreader and competent production staff would have done wonders. One finds numerous typographical errors and even a few mislaid printer's marks.

The biographical text takes a large amount of its information from evidence on the maps themselves. Without a strong narrative voice behind it, this simple reciting of publishing data leaves one numb. The resulting entries are quite choppy and too short, leaving us hungry for more substantive information about the individuals and their methods. The selection of the maps seems at times to be arbitrary and one wonders what might have been left out in the process. There is but one citation of Wheat & Brun's important carto-bibliography **Maps & Charts Published In America Before 1800** (despite the fact that the book's scope includes the last 17 years of the 18th-century).

The reproduction of 19th-century cartography is a difficult and vexing task, but in this book it becomes a mess. The author and publisher employed photostats and contact photocopies for the illustrations, presumably to save on cost. This often leaves the reproductions blurred and unintelligible. The problem is compounded by a sloppy placement of the images on the page. Only rarely is the chart in question reproduced in its entirety from border to border. In almost all cases, the illustrations are allowed to bleed off the page, leaving the reader confused as to what might have been omitted. It is obvious that quite a bit of work was put into the research of the book but much is lost in the presentation and production.

A blurb on the inside dust-jacket refers to **United States Coastal Charts** as the first definitive study in the field. Alas, there is a long way to go before it could be called definitive. There is however, much that is positive about Dr. Guthorn's book and its subject. This is a field that needs further study and perhaps this book will provide impetus for progress in that direction.

**Gary Meagher**  
Gary Meagher Rare Books  
Milwaukee, Wisconsin

---

**Namibia. 1:1,000,000. 1 map on 2 sheets. New York: United Nations, November 1985. U.N. Map No. 3158. U.N. Sales No. E.85.I.9. U.S.\$10.00.**

This carefully assembled and attractively printed map is the official United Nations map of Namibia. The principal map includes a thorough notation of settlements and mines, roads and airfields, rivers, marshes and intermittent water features as well as general relief shown both by 500 meter contour lines and carefully selected tinted layers of browns and yellows. The addition of shaded relief, derived from satellite imagery, shows

strikingly detailed patterns of both the vast areas of sand dune accumulation and highland erosion.

Three smaller-scale (1:4,000,000) inset maps provide additional useful information on Namibian geology, potential land use, and minerals and fishing resources. The geology map is much more attractively presented than the comparable map in the 1983 **National Atlas of South West Africa** (Stellenbosch, South Africa: Institute for Cartographic Analysis, University of Stellenbosch, 1983).

A potential land use map combines data on 22 categories of land forms with 4 vegetation/climate types, ranking, on a scale of 1-4, the relative value of use as rainfed or irrigated agriculture or for rangeland of each of the 53 combinations that are actually found in Namibia. The resulting map, however complicated, is yet an excellent way to present clearly much information on one map.

The cartography, the printing, and the information mapped are all exceptionally good. My only objection is that Namibia is presented in isolation; all information ends at the territorial boundary.

As a general source for the location of settlements and major natural resources, this inexpensive U.N. map is impossible to beat.

Alvin Urquhart  
Department of Geography  
University of Oregon  
Eugene, Oregon

---

Rogerson, J.W. (John William). **Atlas of the Bible**. New York: Facts on File, 1985. 237 p. \$35.00. LC: 84-25980  
ISBN: 0-8160-1206-7.

Is this really an atlas? We are seeing more and more books calling themselves atlases in which maps appear to be secondary to text and photographs. I don't know whether publishers hope to increase sales to libraries by inserting the word "atlas" in the title, or if they feel that panoramic photos qualify as maps, or even if the meaning of the word "atlas" is changing. I do believe, however, that reference and map librarians must be discriminating in their selection of atlases, otherwise they may fill their shelves with books better shelved elsewhere.

The **Atlas of the Bible** is a case in point. In a total of 224 pages, not including lists and indexes, there are just forty pages filled or predominated by maps. I admit that many of the photos are superb and that the text, where it discusses geography, is appropriate and helpful, but I do not feel that this can properly be called an atlas. It is, in fact, a book about the Holy Land, offering photos, art reproductions, maps, and a text which deals

principally with the geography of the area. In fairness, let me add that most Bible "atlases" succumb to this sort of imbalance. An outstanding exception is *The MacMillan Bible Atlas* (New York: MacMillan Co., 1977).

Another critical observation: the jacket justifies the publication of another Bible atlas by noting that this one has a geographical rather than a historical orientation; its aim is "illumine the geographical setting of biblical narratives." It then devotes forty-three pages to non-geographical matter: the Bible and its literature, a history of writing, a summary of English and German Bible translation, and a survey of biblical history. There is even a fourteen-page section on "The Bible in Art."

The third and principal section finally pursues the stated purpose of the book. It begins with a general introduction to biblical geography. This is followed by a regional/landform treatment. Each region receives a descriptive review, then a geographical explication of relevant biblical events, battles, cities, persons, etc. For each region there is a full page map showing elevations by tints. Easily recognizable symbols indicate the ages of settled places. Modern place-names appear in italics under the classical names, and handy lists key each site to chapter and verse in the Bible. Excellent sketches illustrate harbors, fortifications, battles, and so on.

The Jerusalem Hills section offers an extended focus on the city of Jerusalem. Its development and importance in both Old and New Testament history are documented. Visitors to Israel should find it informative to read about "Jerusalem as Jesus Knew it," and "The Topography of the Passion." The uncertainty of fixing definite locations, e.g., the tomb of Christ, is amply explained. I wish, however, that the author had shown not only the map of the ancient city (reproduced four pages later) but had also printed a map of the modern city of Jerusalem and the conjectured boundaries of the old city within it.

Although I will continue to rely on Yohanan Aharoni's, *The MacMillan Bible Atlas* (New York: MacMillan Co., 1977), and Denis Baly's, *Atlas of the Biblical World* (New York: World Publishing Co., 1971), I recommend this atlas for most library general collections as a useful companion to Holy Land study. The maps are legible and useful and there is a bibliography as well as an index and a gazetteer. Problems in Hebrew and Arabic transliteration and in the use of old biblical place names are kept to a minimum.

The book is attractive and well bound. It is sewn through the fold and has a flexible spine with pages that open easily for double-page maps. One wishes it had been printed on acid-free paper. It is, nevertheless, a reasonably priced book which should prove durable in form and substance.

Prospective buyers should be aware that this atlas was also published in 1985 in England by Equinox (Oxford) under the title, **The New Atlas of the Bible**.

Herb Fox  
Henry Madden Library  
California State University  
Fresno, California

---

Waldman, Carl. **Atlas of the North American Indian.**

New York: Facts on File Publications, 1985. 276 p. (maps, illustrations, appendices, index). \$29.95. LC: 83-9020  
ISBN: 0-87196-850-9

Most non-Indian Americans are sadly ignorant about the first North Americans and about the vast, rich history of the continent before the very recent past, that of the past 250 years. As descendents of lands east of the Atlantic and as products of educational systems steeped in European thought, we were taught little of the exciting and often poignant Indian legacy; we have been short-changed and are the poorer for our ignorance. The past informs the present, therefore we are foolish not to learn more about it. In the present we are fellow travelers in the same land with a people we know only superficially or romantically, or both. Books such as **Atlas of the North American Indian** contribute greatly to a realistic understanding of North American Indians.

Waldman admits his American/European world view, but remains sensitive to what could be called the "Indian viewpoint". Although his perspective as an archivist and historian is pervasive, his organization of the massive amount of material contained here is logically and cohesively handled. The book expounds by subject, such as Ancient Civilizations, Indians Lifeways, Wars, Land Cessions, Contemporary Indians among others. It is heavily textual with strong map and illustration support. The maps are two-color, straight forward, and descriptive encompassing historical, military, cultural, contemporary and period themes. Pen and ink illustrations, done by the author's wife, Molly Braun, are charming and instructive; they liberally pepper the text. As one begins to read, the enormity of the author's task becomes clear: he must include not only the subjects, but also must insert the appropriate geography and/or tribe and/or era to make his points. The result is nearly comprehensive in general information and mind-boggling in coverage of the hundreds of groups of Indian people in the United States, Canada and Middle America from prehistoric times to the present. Nearly encyclopedic in scope, **Atlas of the North American Indian** does not read as an encyclopedia. It is a reference work to get lost in.

It is easy to tell by now that I am impressed with this atlas because of its depth and breadth of coverage of subject matter, but what makes this a truly excellent piece of reference material

is the organization of the book itself. The many appendices alone are almost worth the price of the volume. Their headings are worth mentioning:

1. Chronology of North American Indian History beginning at 50,000- 11,000 BC.
2. Tribes of the United States and Canada with historical and contemporary locations.
3. Federal and state reservations and native villages in the United States.
4. Canadian bands within tribes by province.
5. Place name meanings.
6. Museums, historical societies, reconstructed villages and archeological sites pertaining to Indians in the United States and Canada.

In addition to the superb appendices, there is an extensive bibliography and index of subject, proper and place names. Typical index entries are "agriculture", "bows and arrows", "Christianity", "Columbia Plateau", and "Indian Child Welfare Act".

Our library has three copies. I highly recommend it as a map collection's flagship reference source on the subject of North American Indians.

**Heather Rex**  
Map Specialist  
University of New Mexico  
Albuquerque, New Mexico

[Final Edition]

WESTERN ASSOCIATION OF MAP LIBRARIES  
FALL MEETING - 1986  
University of Oregon, Eugene

Thursday September 11

Morning:

Executive Board Meeting

Afternoon:

Welcome: **George Shipman**, University Librarian  
University of Oregon  
**Rosanna Miller**, WAML President

"Lane County, Oregon - An overview with slides"  
**Susan Trevitt-Clark**, Map Library  
University of Oregon, Eugene

"The Maps of Shakespeare Studies, or, Adrift off  
the Seacoast of Bohemia," **Harold Otness**,  
Library, Southern Oregon State College, Ashland

"Aerial Photography: The Contractor's View,"  
**Jody Bristow**, Western Aerial Contractors, Eugene

Map Library Tour, University Library, Condon Hall

Friday September 12

Morning:

Business Meeting

"Richard Edes Harrison's Fortune Maps of the War  
Years, 1941-1945"  
**Joanne Perry**, Map Librarian  
Oregon State University, Corvallis

"A map buying trip to Brazil" **Bill Hunt**  
Pacific Travellers Supply, Santa Barbara

"NCIC State Affiliate System: a report from the  
first national USGS/NCIC State Affiliate meeting"  
**Peter Stark**, Map Librarian, University of Oregon

Afternoon:

Sounding Board

"Valsetz, Oregon: The Rise and Fall of a Company  
Town," **Joe Searl**, Lane Community College

"Reconstructing Historical U.S. County Boundaries,"  
**William Dollarhide**, Publisher, Dollarhide Systems

For further information contact **Peter Stark**, Map Library, 165  
Condon Hall, University of Oregon, Eugene, OR 97403

WESTERN ASSOCIATION OF MAP LIBRARIES

Fall Meeting 1986

University of Oregon, Eugene

Sept. 11-12, 1986

ATTENDANCE

- Bob Bjoring, University of Washington, Seattle
- Jody Bristow, W.A.C. Corporation, Eugene
- Lynn Christopher, University of Oregon, Eugene
- Barbara Cox, University of Utah, Salt Lake City
- Brenda Crotts, Butte County Public Library, Oroville, Calif.
- Joe Crotts, Calif. State University, Chico
- Larry Cruse, University of California-San Diego, La Jolla
- Charlotte Derksen, Stanford University
- Herbert Fox, California State University, Fresno
- Judy Geitgey, University of Oregon, Eugene
- Julia Gelfand, University of California, Irvine
- Steven Z. Hiller, University of Washington, Seattle
- Laura Hunt, Pacific Travellers Supply, Santa Barbara, Calif.
- William Hunt, Pacific Travellers Supply, Santa Barbara, Calif.
- Glenn Ireland, U.S. Geological Survey, Portland
- John Kawula, University Library, University of Idaho, Moscow
- Chisu Kim, Calif. Polytechnic State Univ., San Luis Obispo
- Meryl A. Miasek, University of Oregon, Eugene
- Rosanna Miller, Arizona State University, Tempe
- James O. Minton, University of Arizona, Tucson
- Riley Moffat, Brigham Young University, Provo, Utah
- Dick Meyers, Oregon State Library, Portland
- Steven Mullin, Mexican Maps, Oakland, California
- Linda Newman, University of Nevada, Reno
- Richard H. Nicoles, California State Library, Sacramento
- Michael Noga, University of California, Los Angeles
- Harold Otness, Southern Oregon State College, Ashland
- Joanne M. Perry, Oregon State University, Corvallis
- Bill Schenck, University of Oregon, Eugene
- Vlad Shkurkin, Precise Maps of Old Western Towns, San Pablo, CA.
- Lowell Simmons, Full Court Press, Eugene
- Richard Soares, Stanford University, Stanford, Calif.
- Peter Stark, University of Oregon, Eugene
- Stanley Stevens, University of California-Santa Cruz, Santa Cruz
- Muriel Strickland, San Diego State University, San Diego, Calif.
- Edward Thatcher, University of Oregon, Eugene (Emeritus)
- Susan Trevitt-Clark, University of Oregon, Eugene
- Susanne Villar, Central Washington University, Ellensburg
- Ronald Whistance-Smith, University of Alberta, Edmonton
- Eleanor Wilkins, USGS Library, Menlo Park
- Elizabeth Winroth, Oregon Historical Society, Portland

\*\*\*\*\*



WESTERN ASSOCIATION OF MAP LIBRARIES

MEMBERSHIP & SUBSCRIPTIONS LIST as of 10-15-86

**Lifetime Members**

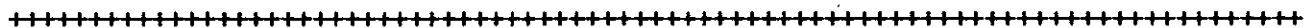
(Honorary)

**Roy V. Boswell**  
P.O. Box 2034  
Fullerton, CA 92633

**Dorothy McGarry**  
308 Westwood Plaza #117  
Los Angeles, CA 90024

(Honorary)

**Edward P. Thatcher**  
1812 Villard Street  
Eugene, OR 97403



**Principal Region Members**

**Sharon M. Anderson**  
Univ. Library C-075-P  
University of California  
La Jolla, CA 92093

**Mary Ansari**  
Mines Library  
University of Nevada  
Reno, NV 89557-0044

**Dennis W. Baird**  
P.O. Box 8787  
Moscow, ID 83843

**Barbara A. Barnard**  
3801 21st Street  
San Francisco, CA 94114

**Robert Batchelder**  
Map Librarian-Library  
University of Calgary  
Calgary, Canada T2N 1N4

**Robert D. Bjoring**  
2303 41st Ave. E  
Seattle, WA 98112

**Nancy L. Blair**  
675 Berry Ave.  
Los Altos, CA 94022

**Jim Bolt**  
Library-Genealogical Soc.  
50 E. North Temple  
Salt Lake City, UT 84150

**Eulalie Brown**  
1801 Girard N.E.  
Albuquerque, NM 87106

**Wesley A. Brown**  
1636 Hudson  
Denver, CO 80220

**Larry G. Carver**  
Map/Imagery Lab/Library  
University of California  
Santa Barbara, CA 93106

**Anna Chiong**  
608 16th Ave. E.  
Seattle, WA 98112

**John P. Coll**  
P.O. Box 5626  
Berkeley, CA 94705

**Carol A. Collier**  
Univ. of Wyoming Library  
Box 3334 Univ. Sta.  
Laramie, WY 82071

**Janet Collins**  
2623 Racine  
Bellingham, WA 98226

**Jack Corse**  
Maps/Soc. Sci. Library  
Simon Fraser University  
Burnaby, B.C. Can V5A 1S6

**Linda D. Cottrell**  
7140 No. Lemmon Rock Pl  
Tucson, AZ 85718

**Barbara Cox**  
Maps-Marriott Lib. 158  
University of Utah  
Salt Lake City, Ut 84102

**Joe Crotts**  
Univ Liby-Maps  
Calif. State Univ  
Chico, CA 95929

**June Crowe**  
1221 E. Seneca  
Tucson, AZ 85719

## Principal Region Members

Larry Cruse  
Maps-Univ. Lib. C-075-P  
University of California  
La Jolla, CA 92093

C.R.M. Derksen  
Branner Earth Sci Lib  
Stanford University  
Stanford, CA 94305

Gary L. Domitz  
Idaho State Univ  
ISU Box 8224  
Pocatello, ID 83209

Richard H. Engeman  
1010 - 15th Av E #3  
Seattle, WA 98112

Marvin W. Falk  
733 Darrell Drive  
Fairbanks, AK 99701

John Fetros  
San Francisco Pub Lib  
530 Kearny St.  
San Francisco, CA 94108

Jean Gillmer  
Tacoma Public Lib  
1102 Tacoma Ave.  
Tacoma, WA 98402

Don P. Haacke  
7367 Glenridge View  
Boise, ID 83709

Audrey Herman  
Docs Dept. Sonoma Pub Lib  
3rd & E Street  
Santa Rosa, CA 95404

Phil Hoehn  
Map Room - Gen Library  
Univ of California  
Berkeley, CA 94720

George R. Dalphin  
Technical Library 3144  
Sandia Laboratories  
Albuquerque, NM 87185

Susan Dixon  
S.B. Museum Natural Hist.  
2559 Puesta Del Sol Rd.  
Santa Barbara, CA 93105

Sheila Dowd  
General Library  
Univ of California  
Berkeley, CA 94720

Cindi Everitt  
609 7th Avenue  
Salt Lake City, UT 84103

Marianne L. Feldman  
6141 S.W. Seymour St.  
Portland, OR 97221

Herbert S. Fox  
63 Fairmont #102  
Clovis, CA 93612

Jodi Gouwens  
c/o NERCO Minerals Co.  
122 First Avenue  
Fairbanks, AK 99701

Ruth D. Hartman  
1213 Vuecrest Ave.  
Ellensburg, WA 98926

Nancy E. Herman  
2935 70th Ave. SW  
Olympia, WA 98502

Jerome A. De Graaff  
17505 ZZ N.W.  
Sauvie Island Road  
Portland, OR 97231

Stephany Eger  
5512 Grande Dr. NW  
Albuquerque, NM 87107

Karen W. Fachan  
1190-16 Niagara Drive  
Fort Collins, CO 80525

Julia Gelfand  
Univ Library UCI  
P.O. Box 19557  
Irvine, CA 92713

Gerald L. Greenberg  
USGS NCIC Bldg 3 MS 532  
345 Middlefield Rd  
Menlo Park, CA 94025

Marjorie R. Henry  
Public Library Hist Dept  
1000 4th Avenue  
Seattle, WA 98104

Steven Z. Hiller  
Map Librarian FM-25  
University of Washington  
Seattle, WA 98195

William S. Hunt  
Map Traders  
529 State St  
Santa Barbara, CA 93101

## Principal Region Members

Susan M. Isakson  
2216 1/2 Suzanne Ct  
Missoula, MT 59801

Barbara Jackson  
The Map Center  
2440 Bancroft Way  
Berkeley, CA 94704

Lavonne Jacobsen  
263 Sanchez St.  
San Francisco, CA 94114

Edward C. Jestes  
508 Reed Dr  
Davis, CA 95616

John Kawula  
479 Paradise Dr  
Moscow, ID 83843

Chi Su Kim  
3250 Flora St  
San Luis Obispo, CA 93401

Bernice Kimball  
Bur Engr City of L.A.  
200 No. Spring St. Rm 705  
Los Angeles, CA 90012

Harrison Kimball  
586 No. Windsor Blvd  
Los Angeles, CA 90004

Donna P. Koepp  
Govt Pubs Denver Pub Lib  
1357 Broadway  
Denver, CO 80203

Sandra J. Lamprecht  
2011 5th St. #2-C  
Davis, CA 95616

Mary L. Larsgaard  
Arthur Lakes Library  
Colorado Sch of Mines  
Golden, CO 80401

Robert E. Lee  
106 Massol Avenue  
Los Gatos, CA 95030

John Lixvar  
15638 SE 175th St.  
Renton, WA 98055

David A. Lundquist  
Maps-Govt Pubs Shields Lib  
University of Calif  
Davis, CA 95616

Charles D. Mastin  
5 Traxler Road  
San Anselmo, CA 94960

Joseph C. Mazzini  
Box 330  
Montgomery Creek, CA 96065

Eric McGuire  
25 Clorinda Avenue  
San Rafael, CA 94901

Alvin McLane  
P.O. Box 13798  
Reno, NV 89507

Dorothy R. Mewshaw  
Maps-Hist. L.A. Pub Lib  
630 West Fifth St  
Los Angeles, CA 90017

Rosanna Miller  
Map Service-Univ Lib  
Arizona State University  
Tempe, AZ 85287

Roy Minnick  
CA State Lands Com.  
1807 13th Street  
Sacramento, CA 95814

James O. Minton  
1221 E. Seneca Street  
Tucson, AZ 85719

Riley Moffat  
333 Oakwood Drive  
Orem, UT 84057

Dick Myers  
Oregon State Library  
Salem, OR 97310

Lee S. Motteler  
Bernice P. Bishop Museum  
P.O. Box 19000-A  
Honolulu, HI 96817

Stephen Mullin  
456 Alcatraz Ave  
Oakland, CA 94609

Linda P. Newman  
1620 Greenfield Dr.  
Reno, NV 89509  
Las Cruces, NM 88003

Richard H. Nicoles  
5772 Haskell Ave  
Carmichael, CA 95608

Carl N. Nielsen  
6304 232nd St. S.W.  
Mountlake Terrace, WA 98043

Michael M. Noga  
Geology-Geophysics Lib.  
4697 Geology Bldg UCLA  
Los Angeles, CA 90024

## Principal Region Members

Jim O'Donnell 170-25  
Div Geol & Planetary Sci  
Calif. Institu. Tech.  
Pasadena, CA 91125

Philip J. Panum  
3172 So. Gaylord St  
Englewood, CO 80110

Brian F. Phillips  
Reference Div. Library  
Simon Fraser University  
Burnaby, BC, Can V5A 1S6

Heather Rex  
Map Room Genl Lib  
Univ of New Mexico  
Albuquerque, NM 87131

David W. Schacht  
1145 N.W. 18th St  
Corvallis, OR 97330

Robert R. Snyder  
8080 La Mesa Blvd. #113  
La Mesa, CA 92041

Stanley D. Stevens  
University Library  
University of California  
Santa Cruz, CA 95064

Cheryl L. Sund  
14145 W. 54th Av  
Arvada, CO 80002

Douglas A. Olson  
E. WA. St. Hist. Soc.  
2316 W. First Av  
Spokane, WA 99204

Joanne M. Perry  
124 NW 7th #305  
Corvallis, OR 97330

Constance M. Piquette  
Mansfield Library Documents  
University of Montana  
Missoula, MT 59812

Julie F. Rinaldi  
1339 Thousand Oaks  
Albany, CA 94706

James Rothenberger  
Library/Govt Publ Dept  
University of California  
Riverside, CA 92507

Robert L. Sathrum  
3403 F St  
Eureka, CA 95501

Alice L. Sharp  
3229 Raleigh  
Denver, CO 80212

Mary Ellen Soper  
Sch Librarianship FM-30  
University of Washington  
Seattle, WA 98195

Peter L. Stark  
1215 Fir Lane  
Eugene, OR 97405

Jean S. Stratford  
800 Adams St. #34  
Davis, CA 95616

Allen J. Thompson  
Map Centre  
2611 University Dr  
San Diego, CA 92104

Harold M. Otness  
990 Mary Jane Av  
Ashland, OR 97520

Sharon Peters  
S.L.City Pub Lib  
209 East Fifth South  
Salt Lake City, UT 84111

Nancy J. Pruett  
1604 California N.E.  
Albuquerque, NM 87110

Janet Rudd  
2989 Glen Albyn  
Santa Barbara, CA 93105

Mimi Sayer  
#25 Cape Breton Court  
Pacifica, CA 94044

Vlad Shkurkin  
6025 Rose Arbor  
San Pablo, CA 94806

Richard E. Soares  
1666 Blue Jay  
Sunnyvale, CA 94087

Dale Steele  
2114 N. Richey  
Tucson, AZ 85716

Muriel Strickland  
Maps Section Univ Lib  
San Diego St Univ  
San Diego, CA 92182-0511

Karyl Tonge  
909 November Drive  
Cupertino, CA 95014

## Principal Region Members

Susan Trevitt-Clark  
Map Room 165 Condon Hall  
University of Oregon  
Eugene, OR 97403

Donald C. Tuttle  
Humboldt Co Pub Works  
1106 2nd St  
Eureka, CA 95501

Susanne Villar  
1602 Brooklane  
Ellensburg, WA 98926

Lily Wai  
Social Sci Library  
University of Idaho  
Moscow, ID 83843

Jim Walsh  
1521 E. Custer  
Laramie, WY 82070-4217

Howard O. Welty  
San Diego Hist Soc  
P.O. Box 81825  
San Diego, CA 92138

Jannette Sharp Wesley  
RAG Lib USGS Oil-Gas  
P.O. Box 25046 MS-971  
Denver, CO 80225

Ronald Whistance-Smith  
14520 84th Av  
Edmonton, Alberta  
Canada T5R 3X2

Eleanore E. Wilkins  
1347 American Way  
Menlo Park, CA 94025

Cheryl Wilson  
Univ Lib-New Mex. St Univ  
P.O. Box 3475  
Las Cruces, NM 88003

Maureen F. Wilson  
Map Div-Univ Library  
Univ of Brit Columbia  
Vancouver, BC, Can V6T 1Y3

Paul M. Wilson  
2956 Joaquin Miller Rd.  
Oakland, CA 94602

Joey Wong  
P.O. Box 214144  
Sacramento, CA 95821

Frances Woodward  
Univ Library 1956 Main Mall  
Univ of British Columbia  
Vancouver, BC, Can V6T 1Y3

Ruth R. Yeaman  
409 South 1300 East  
Salt Lake City, UT 87102

Thomas Yen-Ran Yeh  
2019 Mt. Daniels Dr.  
Ellensburg, WA 98926

Christine M. Ziegler  
3332 North Calle Largo  
Tucson, AZ 85715

+++++

## Associate Members

David Allen  
Map Collection  
SUNY Stony Brook  
Stony Brook, NY 11794

Brent Allison  
Map Div NY Pub Lib  
Fifth Ave & 42nd St  
New York, NY 10018

W. Graham Arader III  
1000 Boxwood Court  
King of Prussia, PA 19406

Greg Armento  
Love Library 217N  
Univ. of Nebraska  
Lincoln, NE 68588-0410

John V. Bergen  
Geog & Map Library  
Western Illinois Univ  
Macomb, IL 61455

Cynthia J. Brown  
15 W. Rose  
St. Louis, MO 63119

## Associate Members

Susan W. Brown  
The Library-Map Section  
University of Texas  
El Paso, TX 79968

Nancy J. Butkovich  
3700 Sutherland Ave. #A-15  
Knoxville, TN 37919

Lewis M. Buttery  
407 W. First St  
Lampasas, TX 76550

James B. Case  
1210 Colonial Road  
McLean, VA 22101

David A. Cobb  
Univ Lib Rm. 418  
University of Illinois  
Urbana, IL 61801

James A. Coombs  
Map Coll Bx 175 Meyer Lib  
Southwest Missouri State  
Springfield, MO 65804-0095

M. Courtman  
Geog/Geol Lib, Univ London  
Senate House, Malet St  
London, England WC1E 7HU

John D. Crissinger  
Ambassador College  
Library - Box 111  
Big Sandy, TX 75755

Edward H. Dahl  
National Map Collection  
Public Archives Canada  
Ottawa, Can K1A ON3

Lisa K. Dalton  
Documents - Joyner Library  
East Carolina University  
Greenville, NC 27834

Harry O. Davis  
1822 Bedford Street  
Cumberland, MD 21502

Patrick E. Dempsey  
P.O. Box 29122  
Washington, DC 20017

Dennis Dillon  
2203 Arpdale  
Austin, TX 78704

Allen Doiron  
New Brunswick Prov. Archives  
P.O. Box 6000 Fredericton  
New Brunswick, Canada E3B 5H1

Michael Dulka  
Map Collection L-282  
United Nations  
New York, NY 10017

Jean T. Eaglesfield  
19 Greene St  
Somerville, MA 02143

William W. Easton  
609 N. School St  
Normal, IL 61761

Gary L. Fitzpatrick  
6615 Oak Drive  
Alexandria, VA 22306

Mary Fortney  
1509 Hinman Ave  
Evanston, IL 60201

Mary Galneder  
Robinson Map Library  
310 Science Hall  
Univ of Wisconsin  
Madison, WI 53706

Susan Goodman  
25 Robin Road  
Warren, NJ 07060

Richard S. Green  
Map Coll-Univ Iowa Lib  
Iowa City, IA 52242

Edward J. Hall Jr.  
Map Library  
406 McGilvrey Hall  
Kent State Univ.  
Kent, OH 44242

F. Darline Hannabass  
3113 Key Blvd  
Arlington, VA 22201

Joanne J. Hansen  
3745 Green Briar 228-C  
Ann Arbor, MI 48105

Stephen Henson  
P.O. Box 1601  
Ruston, LA 71273-1601

Alfred A. Herman  
6307 Frontier Drive  
Springfield, VA 22150

## Associate Members

**Kathleen I. Hickey**  
9927 Edward Ave  
Bethesda, MD 20814

**Betty Kidd**  
National Map Coll  
395 Wellington St  
Ottawa, Can K1A ON3

**Donna P. Koepf**  
Map Library-Spencer Lib  
University of Kansas  
Lawrence, KS 66045

**David C. McQuillan**  
Map Library  
Univ South Carolina  
Columbia, SC 29208

**Anita K. Oser**  
Hunter Library  
Western Carolina Univ  
Cullowhee, NC 28723

**R. Bruce Robertson**  
Haverford College  
Library  
Haverford, PA 19041-1392

**Charles Seavey**  
4242 White Hall-U of Wisc  
Madison, WI 53706

**Linda C. Sharp**  
OCLC, Inc. MC138  
6565 Frantz Road  
Dublin, OH 43017-0702

**Richard W. Stephenson**  
9412 Wallingford Drive  
Burke, VA 22015

**L. S. Straight**  
803 27th St  
Union City, NJ 07087

**Mary E. Javorski**  
P.O. Box 273  
Clinton, NY 13323-0273

**Susan Klimley**  
423 W. 120th St  
Apt #67  
New York, NY 10027

**Ernest K. Lehmann**  
& Associates, Inc.  
1409 Willow St Suite 300  
Minneapolis, MN 55403

**Elaine Moore**  
Helm-Cravens Library  
Western Kentucky Univ  
Bowling Green, KY 42101

**Charles B. Peterson III**  
1030 31st St N.W.  
Washington, DC 20007

**Robert E. Schreiber**  
Map Cataloger - Northern  
Illinois Univ. Lib.  
De Kalb, IL 60115

**Daniel T. Seldin**  
954 F Maxwell Terrace  
Bloomington, IN 47401

**Barbara Shupe**  
61 New York Ave  
Massapequa, NY 11758

**Bill Stewart**  
Map Import Specialist  
119 Grandview  
Ann Arbor, MI 48103

**John Sutherland**  
P.O. Box 2517  
Georgia Univ Station  
Athens, GA 30612

**Dora Ann Jones**  
730 Jonas Blvd-Apt 14  
Spearfish, SD 57783

**Robert L. Knecht**  
1140 Southwest High St  
Topeka, KS 66604

**G. Robert McLean**  
2231 Middlesex Drive  
Toledo, OH 43606

**Mary Murphy**  
8102 Birnan Wood Dr  
McLean, VA 22102  
Tulsa, OK 74102

**Karl H. Proehl**  
Pattee Lib Maps Section  
Pennsylvania State Univ.  
University Park, PA 16802

**Rebecca Schwartzkopf**  
Map Lib. Memorial Lib.  
Mankato State Univ.  
Mankato, MN 56001

**Marsha L. Selmer**  
1415 W. Pratt Blvd #300  
Chicago, IL 60626

**Christina Sokol**  
Trinity Univ Library  
715 Stadium Dr  
San Antonio, TX 78284

**Paul W. Stout**  
3520 Brook Dr  
Muncie, IN 47304

**Val Telberg**  
Geological Map Service  
P.O. Box 920  
Sag Harbor, NY 11963

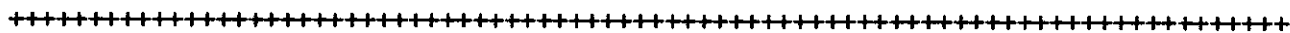
Nancy J. Vick  
Map & Geog Libr  
1408 W. Gregory Dr.  
Urbana, IL 61801

Larry Vos  
5411 Plaza Lane  
Wichita, KS 67208

Mary Anne Waltz  
Geo/Maps - Bird Library  
Syracuse University  
Syracuse, NY 13244-2010

Alex Wenner  
110 1/2 East 15th St  
Bloomington, IN 47401

Alberta Auringer Wood  
12 Ordnance St  
St. John's, Nwfld A1C 3K7



**Institutional Members**

Arizona State Univ  
Tempe, Arizona

Boise State Univ  
Boise, Idaho

Bo-K Explorations  
Carson City, Nevada

Calif State University  
Northridge, California

Univ California  
Santa Cruz, California

Univ of Calgary  
Calgary, Alberta

**Institutional Members**

Central Or. Com. Col.  
Bend, Oregon

Chevron Park E/P Library  
San Ramon, Calif.

Univ of Colorado  
Colorado Spring, Colorado

Prof. David J. Cullen  
National Heritage Map Co.  
Woodland Hills, Calif.

Richard Fitch  
Santa Fe, New Mexico

Glenbow-Alberta Inst  
Calgary, Alberta

Idaho State Hist Society  
Boise, Idaho

Univ of Kentucky  
Lexington, Kentucky

Lane County Museum  
Eugene, Oregon

Paul M. Leverenz  
La Jolla, California

Los Angeles Public Lib  
Los Angeles, Calif

Micro Aero Charts  
Colorado Springs, CO

Nevada Hist Society  
Reno, Nevada

Alex. Turnbull Library  
Wellington, New Zealand

Oregon Historical Soc  
Portland, Oregon

Univ of Oregon  
Eugene, Oregon

Portland State Univ  
Portland, Oregon

University of Queensland  
St. Lucia, Qld, Australia

University of Regina  
Regina, Saskatchewan

Sanborn Map Company  
Pelham, New York

Nat Lib Scotland  
Edinburgh, Scot.

Stanford Univ  
Stanford, Calif.

Sunnyvale Public Lib  
Sunnyvale, California

Biblio Centrum Uithof  
Utrecht, Netherlands

Western Wash Univ  
Bellingham, WA

Woods Hole Ocean Inst  
Woods Hole, Mass

Wright State Univ  
Dayton, Ohio

Yale University  
New Haven, Conn



+++++

Subscriptions to WAML Information Bulletin

Univ of Alabama University Library University, Alabama	Dept of Interior Alaska Resources Library Anchorage, Alaska	Univ Map Collection Dept of Geography Univ of Alberta Edmonton, Alberta
AMOCO Production Co Map Library Houston, Texas	Arizona St Lib Archives & Pub Rec Phoenix, Arizona	
Arizona Historical Society Tucson, Arizona	University Library University of Arizona Tucson, Arizona	Arkansas State Lib Little Rock, Arkansas
Asian Library Ramon Magsaysay Award Fdn Manila, Philippines	Ralph Brown Draughon Lib Auburn University Auburn, Alabama	Library Serials Univ of Auckland Auckland, New Zealand
National Library Australia Canberra, Australia	Dept Library Sci Ball State Univ Muncie, Indiana	Margery K. Barkdull Falls Church, Virginia

Subscriptions to WAML Information Bulletin

Bedford Inst Oceanography The Library Dartmouth, Nova Scotia	Staatsbibliothek Preussischer Kulturbesitz Berlin	
	Bodleian Library Dept Printed Books Oxford, England	Library Bowling Green State Univ Bowling Green, Ohio
Clark Library Brigham Young Univ Provo, Utah	Dept of Geography Univ of Bristol Bristol, England	University Lib. Univ of British Columbia Vancouver, Brit Columbia
British Geological Survey Keyworth Nottingham, Gt. Britain	British Library Map Library London, England	British Lib Boston Spa. Yorkshire, England
General Library British Museum Nat Hist London, England	Brock University Geography Dept St. Catharines, Ontario	Brooklyn Public Lib Brooklyn, New York
Broward County Lib Ft. Lauderdale, Florida	Brown University Sciences Library Providence, RI	History Dept Buff Erie Public Lib Buffalo, New York

University Library  
Cal Poly State Univ  
San Luis Obispo, Calif

California State Library  
Sacramento, California

Calif State Univ  
University Library  
Hayward, California

Calif State Univ  
University Library  
Fresno, California

Calif State Univ  
Univ Library  
Long Beach, California

Calif State Univ  
Dept of Geography  
Los Angeles, California

Calif State Univ  
Library  
Sacramento, Calif

Calif State College  
Univ Library  
San Bernardino, California

University Library  
San Diego State University  
San Diego, California

University Library  
San Jose State University  
San Jose, California

College Library  
Calif State College  
Turlock, California

University Library  
Univ of California  
Davis, California

General Library  
Univ of California  
Irvine, California

Geol/Geophysics Library  
Univ of California  
Los Angeles, Calif

UCLA Map Library  
Univ of California  
Los Angeles, Calif

University Library  
Univ of California  
Riverside, Calif

University Library  
Univ of California  
Santa Barbara, Calif

Library  
Surveys & Mapping Branch  
Ottawa, Ontario

University Library  
Cambridge, England

Geological Survey  
Ottawa, Ontario

National Map Collection  
Ottawa, Ontario

Map Library  
Carleton University  
Ottawa, Ontario

University Library  
Univ of Chicago  
Chicago, Illinois

Public Library  
Cincinnati & Hamilton Co  
Cincinnati, Ohio

#### Subscriptions to WAML Information Bulletin

School of Geography  
Clark University  
Worcester, Massachusetts

Public Library  
Cleveland, Ohio

Colorado State Univ  
Fort Collins, Colorado

Library Service Library  
Columbia University  
New York, New York

Neal Coulter  
Chattanooga, Tennessee

Dalhousie University  
Halifax, Nova Scotia

Dallas Public Library  
Dallas, Texas

Det Kongelige  
Kobenhavn, Danmark

Drexel University  
Philadelphia, Pennsylvania

Emporia State Univ  
Emporia, Kansas

Erasmus University  
Economisch Geogra. Inst.  
Rotterdam, Netherlands

Erasmus University  
Univ. Bibliotheek  
Rotterdam, Netherlands

Exmin Corporation  
Bloomington, Indiana

University Library  
Helsinki, Finland

Florida State University  
Tallahassee, Florida

University of Florida  
Gainesville, Florida

Free Lib Philadelphia  
Philadelphia, Pennsylvania

Frank A. Friedman  
Robesonia, Pennsylvania

Geo Center  
Stuttgart, Germany

Georgia State Univ  
Atlanta, Georgia

University of Georgia  
Athens, Georgia

University of Guelph  
Guelph, Ontario

University of Haifa  
Haifa, Israel

Univ. Hawaii  
Honolulu, Hawaii

Houston Public Library  
Houston, Texas

Howard Univ Library  
Washington, D.C.

Landmaelingar Islands  
Reykjavik, Iceland

Univ of Idaho  
Moscow, Idaho

Illinois State Library  
Springfield, Illinois

Illinois State Univ  
Normal, Illinois

University of Illinois  
Chicago, Illinois

University of Illinois  
Urbana, Illinois

Indiana State Univ  
Terre Haute, Indiana

Indiana University  
Bloomington, Indiana

Inst Sedimentary  
& Petroleum Geology  
Calgary, Alberta

State Historical Society  
Iowa City, Iowa

Iowa State Univ  
Ames, Iowa

University of Iowa  
Iowa City, Iowa

Johns Hopkins Univ  
Baltimore, Maryland

University of Kansas  
Lawrence, Kansas

#### Subscriptions to WAML Information Bulletin

Lakehead University  
Thunder Bay, Ontario

L'Universite Laval  
Quebec, Quebec

Lawrence University  
Appleton, Wisconsin

Birbeck College  
Univ of London  
London, England

King's College  
Univ of London  
London, England

Los Alamos National Lab  
Los Alamos, New Mexico

Maryland Hist Society  
Baltimore, Maryland

University of Maryland  
CLIS Library  
College Park, Maryland

Univ of Maryland  
McKeldin Library  
College Park, Maryland

McGill University  
Montreal, Quebec

Macquarie University  
North Ryde, NSW, Australia

University of Malawi  
Zomba, Malawi

Dir. Survey & Mapping Kuala Lumpur, Malaysia	University of Melbourne Parkville, Vic, Australia	
Michigan State Univer. East Lansing, Michigan	University of Michigan Ann Arbor, Michigan	Milwaukee Public Library Milwaukee, Wisconsin
Minnesota Historical Soc St. Paul, Minnesota	Univ of Minnesota Minneapolis, Minnesota	
Monash University Clayton, Vic, Australia	Montana Hist Society Helena, Montana	Universite Montreal Montreal, Quebec
Nebraska Lib Com Lincoln, Nebraska	Univ of Nebraska Lincoln, Nebraska	Nevada State Library Carson City, Nevada
Central Mapping Authority Bathurst, New South Wales, Australia		
Univ of New Mexico Albuquerque, New Mexico	New York Public Lib New York, New York	New York State Lib Albany, New York
University of New York Albany, New York	State University College Oneonta, New York	National Library Wellington, New Zealand
Lands and Survey Wellington, New Zealand	Newberry Library Chicago, Illinois	Memorial University St Johns, Newfoundland
North Carolina Central Univ School Lib & Info Sci Durham, North Carolina		
North Carolina State Raleigh, North Carolina	Univ of North Carolina Chapel Hill, North Carolina	Univ Northern Colorado Greeley, Colorado
Northern Illinois Univ DeKalb, Illinois	Univ Northern Iowa Cedar Falls, Iowa	Northwestern Univ Evanston, Illinois
Ohio State University Columbus, Ohio	Oklahoma State Univ Stillwater, Oklahoma	Univ of Oklahoma Norman, Oklahoma
Oregon State University Corvallis, Oregon	Univ of Ottawa Ottawa, Ontario	University of Oxford Oxford, England
State Library Pennsylvania Harrisburg, Pennsylvania	Penn State Univ University Park, PA	Publ Proc Ctr McLean, VA

#### Subscriptions to WAML Information Bulletin

Princeton University Princeton, New Jersey	Rand McNally & Co. Chicago, Illinois	Univ of Reading Reading, England
---	---	-------------------------------------

University of Redlands Redlands, California	James Cook Univ of North Queensland Queensland, Australia	Queensland Inst Tech Brisbane, Queensland Australia
State Lib Queensland Brisbane, Qld, Australia	Univ of Rhode Island Kingston, Rhode Island	Univ of Rochester Rochester, New York
Rosary College River Forest, Illinois	Royal Geographical Soc London, England	Univ of Santa Clara Santa Clara, California
Standard Oil Production Co Houston, Texas	National Library Singapore, Singapore	Director General Surveys Mowbray, South Africa
South African Library Cape Town, South Africa	The State Library Pretoria, South Africa	Univ South Carolina Columbia, South Carolina
Univ of So Mississippi Hattiesburg, Mississippi	Univ of So California Los Angeles, California	Southern Illinois Univ Carbondale, Illinois
Southern Oregon State Col Ashland, Oregon	Superior Oil Co. Houston, Texas	Syracuse University Syracuse, New York
Iain C. Taylor North By West Edmonton, Alberta, Canada		
Univ of Tennessee Knoxville, Tennessee	Texas A&M University College Station, Texas	Texas Tech University Lubbock, Texas
University of Texas Arlington, Texas	University of Texas Austin, Texas	Inst Geophysics University of Texas Austin, Texas
University of Texas El Paso, Texas	Metro Toronto Library Toronto, Ontario	Univ of Toronto Fac. of Library Science Toronto, Ontario
University of Toronto Toronto, Ontario	Trent University Peterborough, Ontario	
U.S. Central Int Agency Washington, D.C.	U.S. Geol Survey Flagstaff, Arizona	
U.S. Geological Survey Reston, Virginia	U.S. Lib of Congress Washington, D.C.	
Univ of the South Sewanee, Tennessee	Vancouver Public Lib Vancouver, British Columbia	
State Library Victoria Melbourne, Vic, Australia	Villanova University Villanova, Pennsylvania	VA Polytechnic Inst & SU Blacksburg, Virginia

Subscriptions to WAML Information Bulletin

University of Virginia  
Charlottesville, Virginia

Univ of Waikato  
Hamilton, New Zealand

Col Librarianship Wales  
Dyfed, Wales, UK

University of Washington  
Seattle, Washington

University of Waterloo  
Waterloo, Ontario

West Chester Univ  
West Chester, Pennsylvania

Western Illinois Univ  
Macomb, Illinois

Western Michigan Univ  
Kalamazoo, Michigan

Univ Western Ontario  
London, Ontario

Wichita State Univ Lib  
Wichita, Kansas

University of Windsor  
Windsor, Ontario, Canada

State Historical Society  
Madison, Wisconsin

Univ of Wisconsin - AGS  
Milwaukee, Wisconsin

Univ of Wisconsin  
Madison, Wisconsin

Library School Lib  
Univ of Wisconsin  
Madison, Wisconsin

Univ of Witwatersrand  
Johannesburg  
Union of South Africa

College of Wooster  
Wooster, Ohio

Univ of Wyoming  
Laramie, Wyoming

York University  
Downsview, Ontario



**WAML PUBLICATION ANNOUNCEMENT**

The WAML Executive Committee takes pleasure in announcing the publication of WAML's newest Occasional Paper:

**Occasional Paper No. 10**

Map Index to topographic quadrangles of the United States,  
1882-1940 / by Riley Moore Moffat.

-----  
Library of Congress Cataloging in Publication Data

Moffat, Riley Moore, 1947-

Map index to topographic quadrangles of the United States,  
1882-1940.

(Occasional paper / Western Association of Map Libraries; no. 10)

1. United States--Maps, Topographic--Indexes. I. Title. II. Series  
: Occasional paper (Western Association of Map Libraries); no. 10.

GA405.M64 1985 016.912'73 84-21984 ISBN 0-939112-12-4  
-----

Date of Publication: September 5, 1986.

List Price: \$ 32.50	plus postage	\$ 32.50	plus postage
Postage: .74	within U.S.A.	1.76	outside U.S.A.
-----		-----	
\$ 33.24		\$ 34.26	

California residents must add \$2.11 for Calif. & Local Taxes.

Make check payable to **WAML** or **Western Assn Map Libraries**.

Order from:

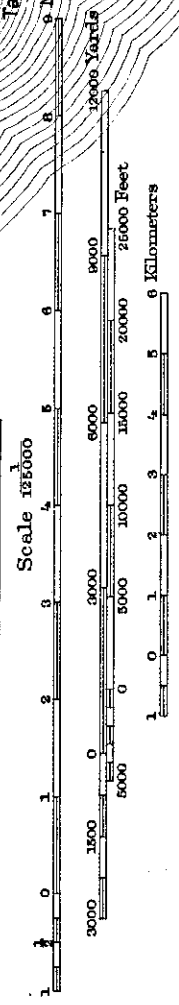
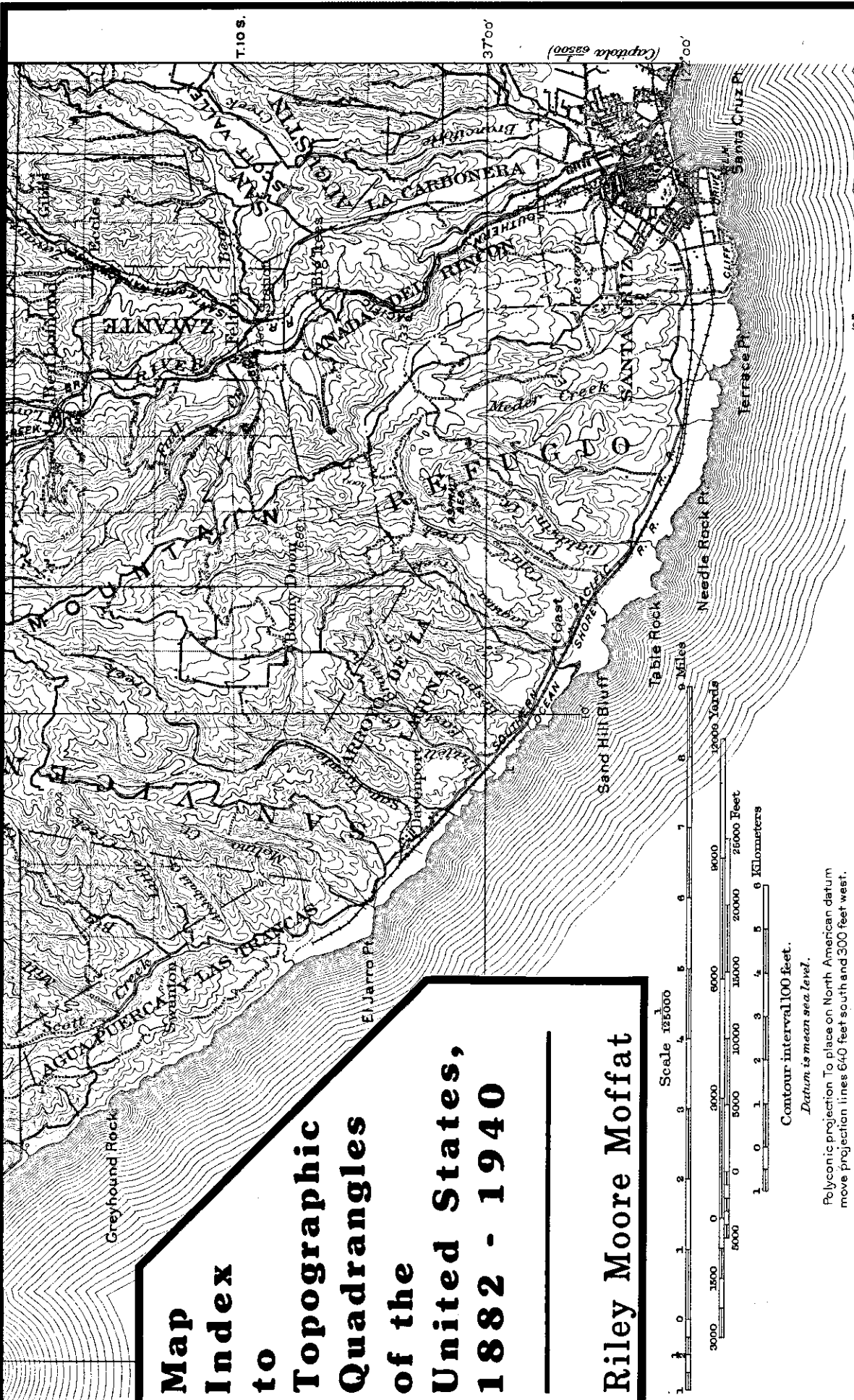
**WESTERN ASSOCIATION OF MAP LIBRARIES**  
c/o Stanley D. Stevens, Treasurer  
University Library  
University of California  
Santa Cruz, CA 95064

(408) 429-2364

**Map  
Index  
to  
Topographic  
Quadrangles  
of the  
United States,  
1882 - 1940**

---

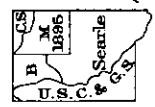
**Riley Moore Moffat**



*Datum is mean sea level.*  
 Polyconic projection To place on North American datum  
 move projection lines 640 feet south and 300 feet west.

Map of the Palo Alto quadrangle, scale 1:62,500  
 contour interval 25 feet, from a more detailed  
 survey of the northeast quarter of this quad-  
 rangle, is available.

R. U. Goode, Geographer in charge.  
 Triangulation by U.S. Coast and Geodetic Survey.  
 Topography by E. C. Barnard, R. B. Marshall,  
 A. B. Searle, and U.S. Coast and Geodetic Survey.  
 Surveyed in 1895 and 1899.



TRUE NORTH  
 MAGNETIC NORTH  
 APPROXIMATE MEAN  
 DECLINATION 1800

SANTA CRUZ, CALIF.  
 Edition of 1902  
 reprinted 1948  
 N3657-W12200/33 X 30