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Views expressed in the Bulletin are those of the contributors and do not necessarily reflect the views of the Association.

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MESSAGE FROM THE PRESIDENT

Thanks to Richard Pinnell and Colleen Beard for their diligent efforts in revising the ACMLA Objectives. The new objectives appeared in Bulletin #91 on page 23. The Board has now revised the text of the membership brochure to include these, and also the new category of Student membership which was recommended at the Annual General Meeting this year. With the assistance of Colleen Beard and Cheryl Woods, the new brochure should be ready for distribution to prospective members early in the new year.

The ACMLA Board of Directors met on October 21st in Ottawa. A funding request for a special Native Maps Exhibit at the upcoming 1995 Conference in Vancouver was approved. A fee for student membership was set at $20. Revision of the By-laws to incorporate this category of membership will be necessary, but it was decided to proceed before the formal procedures were completed in order to include any interested students in the '95 Conference. Funding for revision of the facsimile maps catalogue was approved, as was an increase in the price of the facsimiles themselves. Starting in January, they will cost $5 each. The Board also worked on the ACMLA Rules of Procedure, which is undergoing a major revision to aid future officers and committee chairs.

The Board briefly discussed further ACMLA involvement in the proposal (by John Miron and other researchers) to develop a Networked Geographic Analysis Machine. We were glad that we had not invested more time on this issue, because it did not receive funding to proceed, but at the same time were sorry that something of potential benefit to all Canadian map collections died on the vine.

I am now working on the resolution proposed by Barbara Farrell at the Annual General Meeting this year. For those who were not in attendance, the following resolution was passed:

Whereas ACMLA:
- has a mandate to facilitate access to cartographic information within the academic community in Canada
- and responds directly to library users engaged in the education and training of Canadian youth, and in academic research, in those disciplines which use, analyse and interpret geographically referenced data

Be it resolved that the ACMLA will convey to the relevant government ministries its members' serious concerns for the long-term impact on Canadian development of punitive government copyright, licensing and cost-recovery policies which:
- limit the access of Canadian students and researchers to Canadian data
- result in Canadian university students being taught using United States examples and data which are more easily and cheaply available
- lead to the potential creation of an information elite and an information disenfranchised population

The Association believes that an urgent and immediate review of policies regarding the following should be undertaken:
- licensing of digital products to the academic community of Canada
- pricing structures for digital products
- cost-recovery based pricing structures for paper products
- depository arrangements, for both paper and digital products

The Board is now reviewing a cover letter to accompany this resolution. We will send it to any and every appropriate Canadian federal and provincial government agency. Who do you think should receive a copy? Please send me names and addresses of worthy recipients, and we'll spread the message!

Cathy Moulder
ACMLA President

From the Editor...

HAPPY NEW YEAR TO ALL!

Since the Prez hasn't left me much space... just two things I'd like to mention:

A fond farewell to Flora Francis—a long time member of ACMLA. We wish her all the best in her retirement.

Also, I would like to thank Beverley Chen for her time and hard work she has committed to the Bulletin as Regional News Editor. I wish her luck with her new position as Associate Head of the Canadian Geoscience Information Centre, Geological Survey of Canada. At the same time, I would like to welcome Melissa Leitch, from the University of Western Ontario, who has assumed the responsibilities of Regional News Editor beginning with the May '95 issue. I have assured Melissa the membership will continue to cooperate by sending her news as it unfolds. Her e-mail address is leitch@sscl.uwo.ca

Colleen
A. INTRODUCTION

The Internet is a complex of interconnecting networks, based on a common set of communications standards known as TCP/IP, that serves as the medium for such activities as corresponding with other persons by electronic mail, participating in group discussions, accessing information, logging on to remote computers, and moving files from one computer to another. The Internet spans the globe, and it enables one to interact as easily with a person (or computer) on the other side of the world as someone in the next room. The Internet is an extremely rich resource, and this paper will cover its main features with special reference to applications in mapping and related fields.

The Internet makes extensive use of the client/server computing model, in which a client program running on one computer requests a service provided by a server program running on another computer. Sometimes the computers themselves are referred to as client and server, though the general term for a computer on the Internet is host. There are various ways of accessing the Internet, depending on the computers available and the service required. To make this paper as generic as possible I shall assume the common situation where the user is employing a Macintosh or PC microcomputer as a terminal to access a UNIX-based host on which the client software resides. The stress therefore will be on UNIX software, but client programs that run on microcomputers will be mentioned also. Numerous micro-based programs are now available, some of them dedicated to a specific task and some of more general application, and many of them are available free of charge through the Internet itself. Most provide a graphical user interface that is more user-friendly than the command line interface of the basic UNIX environment.

The emphasis in the workshop on which this paper is based was on hands-on activities, and where appropriate these are included in the paper, especially if they involve the less familiar aspects of the Internet. The more familiar aspects, such as email and mailing lists, are dealt with relatively briefly.

The following typographic conventions are used in the paper:

(a) text on screen: Compose, GENERAL, binary
(b) text to be typed: unsubscribe, get README, telnet
(c) keys: ENTER, L, I
(d) Internet and other programs: PINE, TIN, PKUNZIP
(e) files, directories, addresses, mailing lists, newsgroups: fire2.gif, /pub, maps-I

It is assumed also that the UNIX prompt, at which commands are typed on the screen, is %, though this may vary from site to site.
B. ELECTRONIC MAIL

Electronic mail, or email, is the original and probably still the most important use of the Internet. Numerous email programs exist, including UNIX-based programs like PINE and ELM and Mac- and PC-based programs like EUDORA and NUPOP. While many prefer the greater functionality of the latter, a program like PINE offers more than enough features for the average user and is very easy to use. To run PINE, type `pine` at the UNIX prompt and hit ENTER (or RETURN). The following menu is displayed:

```
PINE 3.89  MAIN MENU
?
C
I
L
A
S
Q
HELP
COMPOSE MESSAGE
FOLDER INDEX
FOLDER LIST
ADDRESS BOOK
SETUP
QUIT

Folder: INBOX  0 Messages

Get help using Pine
Compose and send a message
View messages in current folder
Select a folder to view
Update address book
Configure or update Pine
Exit the Pine program

Copyright 1989-1993. PINE is a trademark of the University of Washington.

[Folder "INBOX" opened with 0 messages]

? Help
O OTHER CMDS
P PrevCmd
R ReNotes
L [ListFldrs]
N NextCmd
K KBLock

To select a menu item hit the key indicated. Hitting C for COMPOSE MESSAGE brings up the following screen:

```
PINE 3.89  COMPOSE MESSAGE

To :
Cc :
Attachments:
Subject :

----- Message Text -----
```

The first line is for the recipient's email address. This consists of two parts: a login name or userid, identifying the individual, and a domain, identifying the host on which he or she has an account. These are separated by an @, as in `ahughes@spartan.ac.brocku.ca`. The second line is for the addresses of persons to receive copies of the message, the third is for the names of files to be attached to the message, and the fourth is for a subject heading. Though all three are optional, a subject should be provided as a matter of course.

The message itself is entered after Message Text. Since PINE provides full word wraparound, there is no need to hit ENTER at the ends of lines and you can use the ARROW keys to move through your document and make corrections as necessary. To send a message hit CONTROL-X (i.e. the CONTROL and X keys simultaneously) and Y.

The best way to learn PINE is to experiment with the commands. Help text is available at all times by hitting ?, and you can always write to yourself if you don't want to clutter up somebody else's computer with test messages. The following commands are particularly useful: A to create aliases or nicknames for people or groups of people you write to often, D to delete a message, E to export a message to your UNIX directory, F to forward a message to someone else, L to access folders (three folders—INBOX, sent-mail and saved-messages—are created automatically), Q to exit PINE, R to reply to a message, CONTROL-R to incorporate a text file from your UNIX directory into a message, and Y to print a message (and if desired the help text).

C. MAILING LISTS

Mailing lists (also known as discussion lists, distribution lists and listservs) are email-based forums for the discussion of topics of interest. There are hundreds of mailing lists in existence, covering topics as diverse as geographical information systems, the Welsh language and the rock group KISS.
To participate in a list you need to subscribe, which involves sending an email request to the host on which the list is maintained. For example, if you are John Smith and you wish to subscribe to maps-l, one of two North American lists for discussing maps and map librarianship, you send the message subscribe maps-l john smith to listserv@uga.cc.uga.edu. You will receive a response confirming your subscription and explaining how to perform various list-related operations.

To post a message to a list, you email the list address (in the case of maps-l this is maps-l@uga.cc.uga.edu), whereupon it is forwarded to every other subscriber. By the same token, you receive all the messages that other subscribers post to the list (unless the list is a moderated one, which means that messages are vetted by the listowner prior to distribution).

Mapping-related lists and the addresses to send subscriptions to are as follows:

- canspace (listserv@unb.ca): space geodesy
- carta (mailserv@sask.usask.ca): maps and map librarianship
- geocal (mailbox@mailbase.ac.uk): computer-assisted learning in geography
- geograph (listserv@searn.bitnet): general geography
- gis-l (listserv@ubvm.bitnet): geographical information systems
- idrisi-l (mailserv@toe.towson.edu): the IDRISI geographical information system
- imgrs-l (listserv@csearn.bitnet): remote sensing and digital image processing
- ingraf (listserv@psuvm.bitnet): information graphics
- maphist (listserv@harvarda.harvard.edu): history of cartography and antique maps
- mapinfo-l (majordomo@cson.org): the MapInfo geographical information system
- maps-l (listserv@uga.cc.uga.edu): maps and map librarianship

These lists vary greatly in level of activity. The most active is gis-l, which generates so many messages that most prefer to receive its ‘alter ego,’ the newsgroup comp.infosystems.gis (see next section). It is not unusual for some other lists to go several days without any messages being posted to them.

To unsubscribe from a list, send an unsubscribe message to the same address you used to subscribe (not to the list address, or you will embarass yourself before hundreds, if not thousands, of people worldwide).

**D. NEWSGROUPS**

Newsgroups, like mailing lists, are forums for discussion, but they differ in two basic ways. Firstly, whereas mailing lists are read only by persons who formally subscribe, newsgroups can be read by anyone who has an Internet account; and secondly, whereas subscribers to mailing lists send and receive messages by email, readers of newsgroups make use of special software.

Newsgroups are organized hierarchically, and the first element in the group name identifies the ‘parent’ category to which the group belongs. Thus comp.infosystems.gis (the newsgroup corresponding to the mailing list gis-l), falls in the comp category, consisting of newsgroups concerned with computer science and related topics, and in the infosystems (for information systems) subcategory of this. Other important parent categories are rec (hobbies, recreational activities, the arts), sci (science and engineering—excluding computer science, but including some social sciences) and soc (society and social issues). These are the mainstream Usenet newsgroups, but there are other categories also (e.g. the alt category, for discussion of ‘alternative’ topics).

To access newsgroups you use a program called a newsreader. Several newsreaders exist, including SNEWS for microcomputers and NN, RN and TIN on UNIX platforms. One of the most widely used is TIN, which will be considered here.

To run TIN type 기n and hit ENTER at the % prompt. You are taken to the Group Selection Page, which lists those newsgroups which you have elected to receive. At first you may find it empty, or it may display a selection of groups provided by default. Two methods are available to add newsgroups to this page.

The first involves the use of the / key to conduct a forward search of keywords in newsgroup names. First hit Y to yank in a complete list of newsgroups. Then hit / and type a keyword, e.g. gis. You are taken to the comp.infosystems.gis newsgroup. If you then hit S the newsgroup will automatically appear on the Group
Selection Page whenever you access TIN. Note that if there is more than one newsgroup with the same keyword you can locate others by hitting / and ENTER again.

The second method does not involve yanking but requires that you know the full name of the newsgroup. Hit G (for g)oto and type soc.culture.canada. Respond with a suitable number when asked where you wish to position the newsgroup in your list.

If you have done both of the above your screen should now include the following:

Group Selection (1)  h=help
1 22730 comp.infosystems.gis All aspects of Geographic Information Sys
2 38505 soc.culture.canada Discussions of Canada and its people.

<n>=set current to n, TAB=next unread, /=search pattern, c)atchup,
g)oto, j=line down, k=line up, h)elp, m)ove, q)uit, r=toggle all/unread,
s)ubscribe, S)ub pattern, u)nscribe, Unsub pattern, y)an in/out

*** End of Groups ***

The Group Selection Page is the highest of four newsreading levels provided by TIN; the others are the Group Index Page, the Thread Listing Page and the Article Viewer. Select comp.infosystems.gis and hit ENTER to move down to the Group Index Page. The following is typical of what you see:

comp.infosystems.gis (10T 19A 0K 0H R)  h=help
1 + recent discussion on GeoVision wanted Matthew Hannigan
2 + 3 Scanners CWLCH%2489@DOCVAX
3 + Autocad Shape files (.shp) & Idri
4 + TIFF FORMAT SPECIFICATIONS Geoff Glasson (MDL
5 + ARCINFO TIFF FILE PRINTING Armando H. Scalise
6 + 2 GIS and 911 GTRA1803@URIACC.UR
7 + 4 Relationship of Lat/Long Co-ordinates and Dis Michelle Simms
8 + 4 Tiger files Nitin Vaidya
9 + Arc/View as a slave (DDE) ? Brian Robinson
10 + Recalled TIGER92 for Texas Andrew Schonberger
11 + sunny

Each of the entries on the Group Index Page is a thread, i.e. a set of articles on a specific topic. Sometimes a thread consists of just one article, and sometimes it consists of an original article plus several responses. A + sign alongside a thread indicates that it contains unread articles, and if there is more than one a number tells you how many. At the top of the screen is the total number of threads and the total number of unread articles. If the number of threads is too great to fit on the screen you can access additional pages by hitting the SPACEBAR (B will take you back).

Select a thread containing several articles, and obtain a listing of these by hitting L. You are now on the Thread Listing Page. The following was obtained by selecting thread 2 above:

Thread (Scanners)  h-help
0 CWLCH%2489@DOCVAX.BITNET
1 Darius Bartlett (STGG8004@IRUCCVAX.BITNET)
2 Peter Halls (FJH1@VAX.YORK.AC.UK)
3 Darius Bartlett (STGG8004@IRUCCVAX.BITNET)
4 Peter Halls (FJH1@VAX.YORK.AC.UK)
5 + donhemenway@delphi.com
6 + Captain Kirk (cjp@geovax.ed.ac.uk)
7 + gie@charon.er.usgs.gov

You can read any article by selecting it and hitting ENTER. As before, a + sign denotes articles that have not yet been read.
When you read an article you are at the fourth and lowest level, the Article Viewer. If the article is too long for the screen, hitting SPACEBAR will take you through it page by page. If you hit SPACEBAR again when you reach the end, you will be taken to the next article (while TAB will take you to the next unread article, and ENTER will take you to the next thread).

To exit the Article Viewer and return to the Thread Listing Page, hit Q. Hit Q again to return to Group Index Page. Note that you can if you wish read articles directly from this page by selecting a thread and using your choice of ENTER (for the first article) and TAB (for the first unread one). Try this, then hit Q to return to the Group Selection Page.

The commands for posting articles to a group are W (to start a new thread) and F (to continue discussion of an existing thread). You can practise these things by sending messages to a list called alt. test, a list intended specifically for test messages. Hit G to add alt. test to the Group Selection Page, hit C to mark all the messages as read, and then hit W. You are prompted for a title (be sure to include the word ignore, e.g. My test - ignore, or you will be deluged by automatic follow-up messages from servers around the world). Compose and send your message, and then check it on alt. test.

Help is available at all four levels by hitting H. By accessing help you can figure out how to do a number of useful things, such as removing newsgroups from the Group Selection Page, changing the Group Index Page so that it shows threads containing unread articles only, saving and printing articles, and so on.

E. GOPHER & VERONICA

GOPHER is a lookup tool that enables you to browse through the Internet and access information via a hierarchical menu system. VERONICA is an associated search tool.

To start GOPHER, type gopher at the % prompt. You will see a menu similar to the following, which is the main menu for Brock University's GOPHER server.

```
Root gopher server: spartan.ac.BrockU.CA
-->
1. About this Gopher [10Dec94, 1kb]
2. About Brock University /
3. Faculty of Maths & Sciences /
4. Faculty of Social Sciences /
5. University Services and Facilities /
6. Registrar's Office /
7. Student Affairs & Services /
8. Library /
9. Information from Around the Internet /
10. Miscellaneous Information /

Press ? for Help, q to Quit
Page: 1/1
```

An item that does not end in a slash is a document. To read a document, select it and hit ENTER. You can save any GOPHER document in your UNIX directory by hitting S, print it on your host's default printer by hitting P, and mail it to someone else by hitting M.

An item ending in a slash is a directory. If you select a directory you are presented with a new menu and a further set of choices. Navigating through GOPHER directories is a wholly intuitive process, and by selecting item 9 from the Brock menu (or the equivalent at your site) you can access GOPHER servers throughout the world, each with its own unique set of resources.

As an illustration of what is possible, use GOPHER to access the online library catalog at The Ohio State University and check how many copies of Ed Krol's book, The Whole Internet are in the collection. When you arrive at the OSU GOPHER main menu, select Library and Archive Services, and OSU Library Catalog (LCS) <TEL>. This will take you out of GOPHER and into the Library Control System (LCS). Hit ENTER at the Device Type prompt, and type help to see a list of LCS commands. To carry out an author search in LCS type
followed by the author's last and first names separated by spaces. To return to the OSU Gopher use the keyboard combination CONTROL-1, and type quit followed by ENTER at the telnet> prompt.

To reach the OSU Library you have to navigate through numerous subdirectories, and it would clearly be very inconvenient if you had to do this on a regular basis. Fortunately you can greatly speed up the process by creating a Bookmark. To do this select OSU Library Catalog (LCS) <TEL> from the OSU Library and Archive Services menu, and hit A followed by ENTER. If you then hit V when you enter Gopher and select OSU Library Catalog (LCS) <TEL> from the Bookmark list you are taken directly to the LCS.

Another timesaver is the use of the / key to conduct searches through directories that contain large numbers of entries. If, for example, on your way to Ohio State you had typed / followed by ohio when in the USA/ directory you would have been taken directly to ohio/ without having to page through several screens to find it.

A third timesaver is to use a microcomputer-based client program such as TURBOGopher which provides direct access to Gopher resources without having to log on to your UNIX host.

Now let us look at VERONICA, which performs keyword searches of Gopher menu items. VERONICA is accessed by selecting the relevant Gopher option. What this is called and where you find it depends on your site. At Acadia it is called Veronica search options and access/ and is located in the main menu, while at Trent it is called Veronica - Search GopherSpace by keyword/ and located under Internet Resources/. A menu similar to the following is displayed:

Search GopherSpace using Veronica

--> 1. veronica FAQ (from Nevada)
2. How to compose veronica queries (from Nevada)
3. veronica server at UNINETT/U. of Bergen ?>
4. veronica server at U.Texas, Dallas ?>
5. veronica server at University of Koenig ?>
6. veronica server at U. of Manitoba ?>
7. veronica server at PSINet ?>
8. veronica server at NYSERNET ?>
9. veronica server at SUNET ?>
10. Search Gopher Directory Titles at UNINETT/U. of Bergen ?>
11. Search Gopher Directory Titles at U.Texas, Dallas ?>
12. Search Gopher Directory Titles at University of Koenig ?>
13. Search Gopher Directory Titles at U. of Manitoba ?>
14. Search Gopher Directory Titles at PSINet ?>
15. Search Gopher Directory Titles at SUNET ?>

The first two items provide detailed information about VERONICA. The remainder provide access to a selection of VERONICA servers. Note that some items perform keyword searches of directory names only, while others search both directory and document names. To perform a search select a server and type in your keywords—try map library (since VERONICA is not case-sensitive Map Library will do just as well). Following a search, you are presented with a list of directory and/or document names in the form of a Gopher menu, which you can access in the usual way. Note that some servers can only handle a certain number of users, so if you receive a too many connections message simply try another server.

VERONICA has many more capabilities. To learn about them check the first two items in the VERONICA menu. Note in particular that you can use the logical operators AND, OR and NOT to refine your search. Thus map library (the default when you type map library) locates entries containing both 'map' and 'library,' map or library locates entries containing 'map' or 'library' or both, and so on.

F. TELNET

TELNET is a tool for making a connection with another computer on the Internet. TELNET is used for accessing public resources of various kinds, including library catalogs and other kinds of databases. It also allows you to log on to your home host from another site.
The reference to library catalogs is deliberate, for if you did the exercise in the previous section you have already used TELNET for that very purpose, though probably without realising it. The last step in accessing the Library Control System at the Ohio State University was to select OSU Library Catalog (LCS) <TEL> from the Library & Archive Services menu on the Ohio State University Gopher. The <TEL> denotes a TELNET connection. When you pressed ENTER the screen responded as follows, indicating that the connection was being made.

Trying 128.146.15.141...
Connected to lcs.us ohio-state.edu.
Escape character is 'CONTROL'.

You also used TELNET, though again probably without realising it, when you logged on to your UNIX host from your microcomputer. In both these cases the TELNET link was supplied automatically, but it is also possible to use TELNET independently. To do this, type telnet at the % prompt, followed by the address of the host you wish to access, followed if necessary by the number of the port to be used.

Connect with the Geographic Name Server (GNS) at the University of Michigan by typing telnet martini.eecs.umich.edu 3000, where 3000 is the port number. Then perform some simple queries. First type Atlanta, GA and note the response, which is interpreted as follows:

```
0 <city name>
1 <county FIPS code>
    <county name>
2 <state/province abbreviation>
    <state/province name>
3 <country abbreviation>
    <country name>
A <telephone area code>
```

Then type the zip code 12345 and note the city where this is found and its latitude and longitude.

Data on the GNS comes mainly from the US Geological Survey and the US Postal Service. Coverage includes all US cities, counties and states, as well as some mountains, lakes, national parks, etc. A few foreign cities are also included. To obtain further information about the GNS type help and info. When you have finished exit the server by typing exit or by hitting CONTROL-1 and typing quit.

You can start composing queries on the GNS as soon as the connection is established. Other servers will likely require you to provide a login, and possibly a password or other information, before you can do anything. Indeed this is what happens when you first log on to your UNIX host, and the same would be true if you used TELNET to access your host from another site.

When you connect to your host you supply a personal login which has been supplied by your system administrator, but when you connect to open-access servers like the GNS you either need no login at all or you supply a generic one. An example is the Canada Centre for Remote Sensing's GCNet, for which the address is gcnet.ccrs.emr.ca and the login is gcnet. GCNet provides a number of services, including an extensive search facility for remote sensing imagery and access to the International Directory Network, which supplies information on datasets available worldwide for research and other purposes.

Other sources you may wish to investigate are as follows. The first is located in Canada and the remainder are in the United States.

- `geoinfo.gsc.emr.ca` (login opac, terminal emulation VT100) – Canadian Geoscience Information Centre
- `delocn.udel.edu` (login info) – Ocean Network Information Center
- `glis.cr.usgs.gov` – Global Land Information System
- `hermes.merit.edu` (host type um-weather) – Weather Underground
- `ned.ipac.caltech.edu` (login ned) – NASA/IPAC Extragalactic Database
- `nssdca.gsfc.nasa.gov` (login nodis) – National Space Science Data Center
G. FTP (TEXT) & ARCHIE

The acronym FTP stands for File Transfer Protocol, which is the tool for transferring files from one host to another. In order to use FTP it is necessary to log on to the server on which the files reside. This can be done either by having an account on the server or by making use of ANONYMOUS FTP, which is a special feature that provides access to public databases without needing an account. ARCHIE is a search tool for locating files on ANONYMOUS FTP servers.

We will use ANONYMOUS FTP to access the GIS FAQ List that accompanies the gis-l mailing list and the equivalent newsgroup comp.infosystems.gis. A FAQ List is a list of 'frequently asked questions' intended to provide newcomers with basic information about the topic so that they won't waste bandwidth posting questions that have been dealt with many times already. The GIS FAQ List is posted periodically to gis-l and comp.infosystems.gis, and is also available by FTP. It is contained in a file called gis-faq.txt in the /pub/geo subdirectory on the ftp.census.gov server maintained by the US Census Bureau.

To access the server, type ftp ftp.census.gov at the % prompt. When asked for a login name type anonymous, and give your complete email address as a password. Then type ls at the ftp> prompt to view the contents of the directory you are in. The following listing appears:

dr-xrwxr-x 9 ftp admin 512 Oct 23 19:27 .
dr-xrwxr-x 9 ftp admin 512 Oct 23 19:27..
-r-xr-xr-x 1 ftp admin 754 Apr 15 1994 EST5EDT
drwxrwxr-x 2 root admin 512 Aug 13 22:51 bin
drwxrwxr-x 2 root admin 512 Feb 10 1994 dev
drwxrwxr-x 2 root admin 512 Apr 15 1994 etc
drwxrwxr-x 49 root admin 1024 Dec 17 06:15 pub
drwxrwxr-x 4 root admin 512 Nov 28 19:33 src
drwxrwxr-x 4 root admin 3500 1024 Jan 19 02:45 tmp
drwxrwxr-x 4 root admin 512 Apr 15 1994 usr

The last column lists the names of the subdirectories (marked d in the first column) and files in the directory. The GIS FAQ List is in the /pub/geo subdirectory, and you can move down to it by typing cd pub/geo. Type pwd to confirm that you are in the correct directory and ls to view its contents:

drwxrwxr-x 4 root 4009 512 Jan 18 18:22 .
drwxrwxr-x 49 root admin 1024 Dec 17 06:15 ..
-rw-r- -r-- 1 1401 4904 113068 Jan 18 18:22 gis-faq.txt
-rw-r- -r-- 1 1401 4904 16038 Dec 17 06:15 gis-sites.txt
drwxrwxrw x 2 1478 4909 512 Aug 30 15:04 intergraph
drwxrwxrwx 1 1378 4909 11519932 Nov 8 14:33 kent.e00
drwxrwxrwx 1 1499 4903 512 Jan 18 18:38 leaf
-rw-r- -r-- 1 root 4009 44944 Sep 10 17:50 missouri.dat
-rw-r- -r-- 1 1485 4911 232538 Jan 6 20:54 sdts2500.zip
-rw-r- -r-- 1 1485 4911 1551921 Jan 6 20:54 sdts4116.zip

There are two transfer modes available in FTP—binary for files in which data are represented in true binary form, and ASCII for files that employ the ASCII binary-based code. It is vital that you specify the correct mode or the file may not transfer correctly. For example, binary mode is required for graphics files, executable program files and compressed files, while ASCII mode is required for text files, program source code and email messages.

The gis-faq.txt file is a text file, so type ascii to make sure you are in the correct mode. To transfer it to your host, type get gis-faq.txt, and when the transfer is complete type quit at the ftp> prompt.

The file is now sitting in your personal UNIX directory. Confirm this by typing ls at the % prompt. To read the GIS FAQ List type more gis-faq.txt and hit SPACEBAR to view successive pages. If you do not wish to read to the end type q to return to the % prompt. To delete the file type rm gis-faq.txt.

Before deleting the file you may wish to download it to your microcomputer for editing, printing or saving. How you do this depends on your situation. If you are connected to your UNIX host by modem you will use your
communications software (e.g. PROCOM, VERSATERM) to transfer files. If you have a direct link you will use a micro-based FTP program such as FETCH or WINQVT. Note, however, that if you have a micro-based program you have the option of bypassing your UNIX host altogether, for they have the capability of transferring files directly from the FTP server to your microcomputer.

Another document you might wish to access—a very useful one—lists numerous Internet sites containing GIS- or map-related information. The relevant file is called gisites.txt, and you can find it on gis.queensu.ca in the subdirectory called /pub/gis/docs. Note that all the addresses in this document are in the form of URLs—for an explanation of what this means see the section on the World Wide Web below.

We now come to ARCHIE, a service that enables you to locate files stored on ANONYMOUS FTP servers. Suppose you know that a file called Toronto contains useful information about the city and you wish to FTP it to your machine, but you don't know where to locate it. Type archie Toronto (note that ARCHIE is case-sensitive) at the % prompt to find out.

Sometimes the same file (especially if it is a program) resides on many different servers, and the listing produced by ARCHIE is very long. Such would be the case if you typed archie archie (yes, the ARCHIE client program is itself available by ANONYMOUS FTP, as are many other useful Internet programs, like MOSAIC and EUDORA). You can make it more manageable by specifying a maximum number of 'hits,' as follows: archie -m5 mosaic, where 5 is the maximum (for a list of other options like -m simply type archie). Something else you may wish to do is save the response directly in a UNIX file, which you can do by typing archie eudora > eudserv, where eudserv is the filename.

What happens when you type archie is that you are connected to an ARCHIE server, a program that is set up to perform searches of the Internet Archives Database, a regularly-updated list of public files available at FTP sites. To obtain a list of servers and to discover the default at your site, type archie -L.

H. FTP (GRAPHICS & SOFTWARE)

Graphics files, including digital maps and remote sensing images, are available from a number of ANONYMOUS FTP servers. One of these is run by the National Operational Hydrologic Remote Sensing Center of the National Weather Service in Minneapolis. To access it, type ftp snow.nohrsc.nws.gov and log on as explained in the previous section. Move to the /pub/Natural.Disasters/fire directory by typing cd /pub/Natural.Disasters/fire and obtain a directory listing by typing ls. This is part of what you see:

```
-rw-rw-r- 1 root sys 161 Jan 21 15:10 README.fire
-rw-r----- 1 root sys 124539 Dec 3 17:18 fire.jpg
-rw-r----- 1 root sys 295969 Dec 3 17:18 fire2.gif
-rw-r----- 1 root sys 97309 Dec 3 17:18 fire2.jpg
```

The .gif extension denotes a file in GIF format, while .jpg stands for JPEG format. These are special formats for graphics images. The three fire images all show the California fires of 1993.

Type binary to ensure that you are in binary transfer mode, and issue the command get fire2.gif. The transfer takes a while to complete, since the file is almost 300 000 bytes. Note that if you had wanted to FTP the fire.jpg file also you could have typed mget fire2.gif fire.jpg to transfer both files in one operation. Return to your host by typing quit at the ftp> prompt, and type ls to check that fire2.gif is in your directory.

To view the image you need to do two things: first, download the file to your local microcomputer, and second, display it using appropriate software. You download the file using one of the programs mentioned in the previous section (though again if you are using a program like FETCH or WINQVT the file will likely be sitting on your micro already and further downloading will be unnecessary). You display the image using a program called a graphics viewer. Examples are JPEGVIEW, GIFCONVERTER and GRAPHICS WORKSHOP, which are themselves available through the Internet by ANONYMOUS FTP. The PC-based GRAPHICS WORKSHOP, for example, can be found in a file called grfwk70b.zip in the /pub/demo directory on spartan.ac.brocku.ca.
Note that programs acquired through the Internet are commonly packed and/or compressed to facilitate data transfer. Packing bundles several files together into what is called an archive, while compression reduces the amount of space that files take up. These operations must be reversed before the programs can be run. The grfwk70b.zip file containing GRAPHICS WORKSHOP is a compressed archive, and it must be unpacked and uncompressed using another program called PKUNZIP. This program is contained in a file called pkz204g.exe in the same directory as grfwk70b.zip. Once both programs are on your PC you can unzip grfwk70b.zip by typing pkunzip grfwk70b.zip, and then run GRAPHICS WORKSHOP by typing gws.

You might wish to return to the National Weather Service server and transfer additional graphics files—you will find some interesting ones in the /pub/Natural.Disasters/flood and /pub/Natural.Disasters/blizzard subdirectories. Alternatively, you may prefer to explore other ANONYMOUS FTP sites. You will find spectacular hill-shaded images in the /pub/ermapper/ERM_gif directory on earth.eps.pitt.edu, and space images in the /pub/GIF directory on ames.arc.nasa.gov. For other possibilities check the list in the following article: Thoen, Bill, 'Access the Electronic Highway for a World of Data,' GIS World, 7 (2), February 1994, 46-49.

Graphics files that you can download to your computer are also available on certain newsgroups. They can be accessed through TIN, and your local advisor can tell you how to download them to your UNIX host.

1. THE WORLD WIDE WEB

The World Wide Web, variously known as WWW, W3 or just the WEB, is in one sense an information access tool like Gopher, but to describe it as such leaves a great deal unsaid. For WWW is a resource that far outstrips Gopher in what it has to offer and how easy it is to use. One key difference is that it is hypertext-based instead of menu-based, which means that the user can access information directly without having to navigate through a rigid hierarchy of directories. Another is that it can handle a variety of information media, including graphics, video and sound as well as text.

To access WWW you require a client program known as a browser. A widely available UNIX browser is LYNX. If you just type lynx at the % prompt you will in general be taken to what is known as the home page on your host. Alternatively, if you type lynx http://ellesmere.ccm.emr.ca you will be taken to the National Atlas Information Service home page at Natural Resources Canada. This is part of what you see:

```plaintext
 WELCOME / BONJOUR

The National Atlas Information Service (NAIS) is responsible for the development and maintenance of an authoritative synthesis of the geography of Canada. Products, in both digital and conventional form, include base maps, geographical names and thematic maps that reflect the social, economic, environmental and cultural fabric of Canada.

Le Service d'information de l'Atlas national (SIAN) est responsable du développement et de la tenue à jour d'une synthèse de la géographie canadienne faisant autorité. Ses produits, sous forme numérique et sur papier comprennent des fonds de carte, des noms géographiques et des cartes thématiques traitant des aspects sociaux, économiques, environnementaux et culturels du Canada.


Did you know? [IMAGE]  Saviez-vous?

Visionnez une carte  Trouvez un toponyme  Réalisez votre propre carte  Cartes à vendre  Mesurez vos connaissances  Qu'est-ce que l'Atlas national?
```
The entries in bold type are links, and by selecting these with the ARROW keys you can immediately access other documents, which may be on the same server or (just as likely) on a server on the other side of the world. Note that in LYNX the ↓ and ↑ arrows are for navigating up and down a document, the → arrow (or the ENTER key) is for selecting a link, and the ← arrow returns you to the previous page. To print the contents of a document, to mail it to yourself or to save it in your UNIX directory, hit P and make a selection from the list of options provided.

The address you supplied in order to access the National Atlas Information Service is known as a Uniform Resource Locator or URL. What you typed was an abbreviated version of the complete URL for the NAIS home page, which is: http://ellesmere.ccm.emr.ca/wwwnais/wwwmisc/english/html/base.html. This URL has three main components:

1. protocol: http:
2. host: (a) host indicator: // (b) host: ellesmere.ccm.emr.ca
3. path: (a) directories: /wwwnais/wwwmisc/english/html/ (b) file: base.html

The protocol (HyperText Transfer Protocol) is the protocol for WWW. The second component, the host, is self-explanatory and corresponds to the domain part of an email address. The third component identifies the file containing the document in question and describes its location on the host. Note that the file itself has a .html extension. This stands for the HyperText Markup Language used to create WWW documents.

You can directly access any document anywhere on WWW by typing its URL after lynx, but given the length of some URLs this is not always convenient. However, if there are documents you wish to access on a regular basis you can reach them very quickly by creating a Bookmark. The process is similar to that for creating a Bookmark on Gopher—you locate the page in question, then hit A followed by D. No matter where you happen to be on WWW, you can view your Bookmark list by hitting V and then select an entry in the usual fashion.

Another simple way to navigate through WWW is to use the links provided by the servers themselves. If, for example, you access the Natural Resources Canada home page at http://www.emr.ca you are presented with links to numerous other servers. As can be seen from the partial list below, one of these links is to the National Atlas Information Service.

Geological Survey of Canada

New! GSC Forum '95 Conference Registration
New! GSC WWW home page
New! Atlantic Geoscience Centre Web server
New! Continental Geoscience Division Home Page
GSC main gopher menu
Library Catalog (login with username opac)

Geomatics Canada (formerly Surveys, Mapping, and Remote Sensing Sector)

New! GCNET (Canada Centre for Remote Sensing) - Information Services for Earth Observation data
Geomatics Canada Library (login with username opac)
Geomatics Canada main gopher menu
Canada Centre for Mapping
Canadian Geographical Names
National Atlas Information Service
NAISMap - the first WWW-based GIS! by Glen Newton
New! Our Home, The Atlas of Canadian Communities
Geodetic Survey

LYNX provides access not only to WWW but also to other Internet resources such as GOPHER, TELNET, FTP and WAIS (Wide Area Information Servers—a search and retrieval tool similar to VERONICA, though more powerful). This is achieved by specifying a different protocol in the URL. Thus typing lynx gopher://spartan.ac.brocku.ca takes you to Brock University's main GOPHER, lynx telnet://martini.eecs.umich.edu:3000 takes you to the...
Geographic Name Server at the University of Michigan, and lynx ftp://ftp.census.gov takes you to the ANONYMOUS FTP server at the US Census Bureau that contains the GIS FAQ list. In the case of FTP, LYNX has two advantages over the basic UNIX program: first, a simpler interface, and second, the ability to read text files without having to transfer them to your local host.

LYNX is evidently a versatile program, and you can learn its full capabilities by hitting H to access its help files, and if desired obtain copies by hitting P. However, LYNX also has its limitations, one of which is evident from the printout of the NAIS home page earlier in this section. Each reference to [IMAGE] denotes a graphic of some sort, which LYNX is unable to display. In this case the images in question are simply icons accompanying the links, and their lack is not crucial if you are just interested in textual material. But if you wish to view the icons, and more significantly view the maps and other images available on NAIS and other WWW sites, you require a microcomputer-based graphics browser such as MOSAIC or NETSCAPE.

Graphics browsers represent the ultimate in Internet use. They do everything LYNX can do and more, they do it more easily, and they do it in style. As their name implies, they are heavily graphics orientated. They provide a graphical user interface, with almost every operation reduced to a click on a mouse button, and they provide complete access to all the graphical resources (including maps and remote sensing images) to be found on WWW. Sometimes the graphics is truly dazzling. This comes at a cost, however, for pictures—even small icons—take time to download, and if your interest lies strictly in textual information you might consider disabling the graphics function or even using a program like LYNX (you may have no choice anyway if you are accessing WWW by modem).

If you have MOSAIC or NETSCAPE, however, just start using it, and you will quickly learn the joys of soaring through cyberspace in search of information. The following sites are especially worth checking, both for their own sake and for the links they provide to other sites:

http://www.emr.ca (Natural Resources Canada)
http://ellesmere.ca (National Atlas Information Service)
http://www.ns.doe.ca/inform/ECsites.html (Environment Canada)
http://eol.ists.ca/Welcome.html (Earth Observations Laboratory)
http://www.census.gov (United States Bureau of the Census)
http://edcwww.cr.usgs.gov/eros-home.html (EROS Data Center)
http://www.ncdc.noaa.gov (National Climatic Data Center)
http://rowan.lib.utexas.edu/Libs/PCL/Map_collection (University of Texas Map Library)
http://www-erl.mit.edu (MIT Earth Resources Laboratory)
http://www.zilker.net/~hal/geoscience (GIS/Remote Sensing/GPS/Geoscience at Texas A&M)
http://kaos.erin.gov.au/other_servers/other_servers.html (Environmental Information Servers)
http://white.nosc.mil/info.html (Planet Earth)
http://info.cern.ch/hypertext/DataSources/bySubject/Overview.html (WWW Virtual Library)
http://www.le.ac.uk/cti/cticgi1.html (CTI Centre for Geography, Geology, Meteorology and Planning)
http://pubweb.parc.xerox.com/map (Xerox PARC Map Viewer)
http://wings.buffalo.edu/world/vt2 (Virtual Tourist II)

Note that the host portion of an URL is case-insensitive (i.e. it does not matter whether you type upper case or lower case letters) while the path portion is case-sensitive (i.e. It must be typed exactly as written or you will not make a connection).

J. READINGS

For anyone seriously interested in using the Internet a book is an essential investment. The following were referred to in preparing this paper:

LASER VIDEODISC TECHNOLOGY: A TOOL FOR COLLECTIONS MANAGEMENT AT THE McMICHAEL CANADIAN ART COLLECTION

by
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Specifically, this paper will deal with the use of our VideoDisc system with a discussion of the collection and some of its influences on the choice of system, the methodology of use and possible future uses.

Cape Dorset is a community on Baffin Island in Canada’s Northwest Territories. An art co-operative, the West Baffin Eskimo Co-operative (W.B.E.C.), was formed there in 1959 to encourage the production of drawings, prints, sculpture, and other handicrafts. The Co-operative purchases hundreds of drawings from artists annually and selects and translates some of these into prints for its yearly collection release.

The McMichael Canadian Art Collection is a gallery in Kleinburg, just north of Toronto, dedicated to exhibiting, collecting and caring for 20th century Canadian Art including First Nations and Inuit Art. In 1987, the W.B.E.C. approached the McMichael to assist with the preservation and care of their collection. The Co-operative’s archival collection itself consists of approximately 100,000 drawings, 3,000 prints, and 100 works of sculpture. All have been created by artists in Cape Dorset within the period between 1957-1989. As an archive of an artistic community the collection is considered to hold both national and international significance.

A long-term loan agreement of 15 years was written and signed by the McMichael Canadian Art Collection and the W.B.E.C. in November of 1990 and the collection was moved from Dorset to the McMichael the following year. The primary objectives of the move were to protect, document and preserve the collection and make it more accessible. The agreement and the goodwill associated have been termed a "Cultural Initiative" and is one of only a handful of such projects in Canada. Funding for the agreement, move, and facilities came from various agencies of the Government of Canada, the Province of Ontario, the Government of the Northwest Territories, and the Municipality of Vaughan.

Up to the point of the move documentation of the collection was a low priority. A ledger based accession numbering process on the drawings was completed by the W.B.E.C. in Dorset in the early 1980s but the records had not been maintained since that time. The numbering process was organized by giving each artist a distinct number, then consecutively numbering the works of each artist. The co-operative housed the collection as best they could but conditions were poor. Fire had destroyed two other archives in the north and this was (and remains) a threat to buildings there. The co-operative also had no conservation or exhibition facilities, and realized the need for both as the collection grew. The issues of conservation were most important—a portion of the drawings collection (about 10% of the total works) were created in the 1960s using porous felt-tip pens. Porous pens were used by the artists for their exuberant colours, quick coverage and easy handling. However, since the use of these pens (in the mid 1960's), two characteristics of this medium have emerged as problematic: the first being its tendency to transfer from one support material to another; and the second being its extreme sensitivity to light. The deterioration of these drawings and their effect on drawings stored above or below acted as a catalyst to the loan and to the planned use of a technology which could quickly capture the state of these drawings before more fading occurred.

Following its arrival at the McMichael, management of the collection became a high priority. Four staff were hired to curate, document, and administer the Dorset
works. The process of documentation has been split into 3 components: rehousing the works, creating data records, and video imaging to develop a visual database. The processes have varying completion dates with the database being the fastest to complete. The textual database has been the priority for the department, thus far, as the management of any collection is made less difficult with the availability of even limited computerized records. We have completed the creation of these records for approximately half of the drawings and expect that in the next year we will have a clearer picture of the exact number of drawings in the collection. It is estimated that the process of rehousing will be ongoing for another 6-8 years. I will discuss the video imaging process after a summation of how and why our Laser VideoDisc system was chosen.

The development of a collections management plan began months before the collection arrived and integral to the plan was research into an appropriate form of technology to visually document it. Research began by investigating all analog and digital systems commonly available in 1990-91. Advantages and disadvantages of analog, WORM (write once, read many) optical discs, erasable optical discs, CD-I and CD-ROM systems were examined. An important point in the decision process was the determination of the end use of the system and any special requirements that use would impose on the selection of technology. Cost, quality and versatility were also factors examined, along with the realization that the decision would need to accommodate future possibilities in technology growth. Each system was analyzed for the following factors: cost; storage capability (volume, full views and details); durability and longevity of the medium; ease of use; the quality of the stored image; the ability to produce an economical hard copy; the quality of the printed image; image retrieval capability; database interface capabilities; long term potential for gallery/outreach uses; and future release possibilities.

In our case the end use of the system was determined to be firstly as a collections management tool and possibly as a gallery aid. This decision meant image storage and retrieval were the prime functions of the system (we did not require a system where images could be manipulated or enhanced). Also, because the Dorset system was initially intended for staff and researchers and not for use by general public, we purchased only a single research station at the time. Plans for multi-user stations would be part of a larger gallery initiative and not part of this project.

Analog systems were examined more closely than their digital counterparts as their easy usage and cost effective nature met more closely the needs of this collection. Two manufacturers were investigated as their products were already distributed in Canada. They were Panasonic Canada and Sony Canada. Both companies manufactured products similar in scope, quality and cost, however Sony had the extra attraction of supporting a software program that could be adapted to fit our needs and this was the manufacturer finally chosen. Through previous research it was concluded that buying compatible hardware and software and buying it from only one Toronto-based company was advantageous in the long term. Also, this fell within the McMichael’s policy to “buy Canadian”. In 1991 dollars the Laser VideoDisc recorder station, researcher/player station, printer, other computers for office use and software cost approximately 90,000 Canadian dollars. Funding for the purchase of the Sony equipment was made possible through a grant from the Government of Canada’s Cultural Initiatives Program and the Ministry of Communications and Culture. A listing of individual Sony products and prices is available if anyone is interested.

The decision in favour of the analog Sony Laser VideoDisc technology was based on the following eight points:

1. High storage capability - our discs hold 43,500 images per side or 87,000 on each 12” disc. Six videodiscs were purchased, providing capacity for 522,000 images, sufficient for imaging this entire collection. It was an important decision to purchase enough videodiscs to ensure that every work in the collection would be imaged.

2. User friendly technology (for staff and researchers), understandable methodology of equipment. Images are taken through a video camera—a familiar and non-threatening piece of equipment these days. Also, for researchers, computer literacy is not a pre-requisite to use the researcher station.

3. Long life span of equipment - no deterioration of recorded information from constant use, handling or mishandling. Upon completion of the imaging project the videodiscs will be reformatted onto glass master discs as they are a stable medium unlike magnetic media (we have been told by Sony officials that glass master discs should remain in an unchanged state for about 100 years).

4. Ability to accommodate motion and still shots together on the same media. An important consideration for unknown future uses.
5. On-line response time - response time to precise or random searches is approximately 1/2 of a second.

6. A single, integrated system of text and visual data (which I will discuss in more detail later) will help to further reduce the frequency of use of the collection itself. Researchers benefit from the flexible searching ability, fast precise data retrieval, or random access to any item or group of items all within an extremely short period of time.

7. Analog systems are more cost effective for large collections such as this one. Our computers did not need increased memory, and only one video card was purchased to allow the computer link.

8. The use of this technology goes beyond the needs of collection management into more public functions such as improved interpretive and educational programming.

Another plus to the use of any new technology lies in its revenue generating possibilities. Access to collections such as the Cape Dorset collection was previously limited to those who knew of them and could afford the costly trip north. With the ability to reproduce discs with images at costs much lower than traditional printed means, the question of availability in both the north and south should be resolved. Revenue potential from this source is an additional benefit.

The use of our video disc system in conjunction with other collections management functions is as follows. The technician uses the video camera which is mounted vertically on a copy stand to record prints and drawings. The image is displayed on a high resolution Analog RGB Sony Trinitron Color Video Monitor and instantly recorded onto the videodisc using the Laser VideoDisc Recorder and a remote control. The researcher station uses a VideoDisc Player and a smaller version of the same Analog RGB Color Video Monitor. These in turn are connected via cabling to a DOS platform 386 Samsung computer. Images from the screen can be printed off in two minutes using the Sony Color Video Printer, Mavigraph. As the technology is analog, small horizontal lines appear on the prints themselves. Our printer uses 720 x 468 PELS or picture elements. The resulting prints are good colour images, but are not a fixed medium, and unlike prints from a digital printer, are not of reproduction quality thereby diminishing some copyright concerns. The use of the printer has lead to a reduction of the costs associated with conventional photography.

Six discs were purchased in order to allow up to five images of each artwork to be taken. These images could include: a complete recto shot; details regarding content or medium; a verso shot of the accession information; and verso shots for those drawings with images on both sides. In practice we have found that some drawings and prints use all five or possibly more shots while some only necessitate the use of two. We have organized our imaging process to shoot the drawings which exhibit colour transfer first. The reason for this is twofold: firstly to obtain an image at a point in time for reference purposes for our conservation department and their ongoing experiments, and secondly to obtain a permanent record of each artwork before any further damage occurs. Work will then progress by artist according to exhibition or research needs.

The final project will be to record the sculpture collection. The sculpture may be shot in still format as the two-dimensional artworks have been, or in three dimensions by mounting the video camera on a dolly and using live action video to film all angles of each object.

The imaging process is being handled in two stages, as necessary. The first stage documents a full view and a recording of the accession information in order that at least one permanent visual record exists. Unless specific research requires them, detail shots are not taken at this point. It was determined that an initial overview of the collection would be completed followed by an analysis of additional needs. The second stage would then be to return to the works and record details or comparison shots. It is expected that the lengthy initial process will take another six years to complete (imaging has been ongoing for two years).

Due to the fact that several staff use the equipment concurrently, the imaging process for each artist will not necessarily be consecutive. Therefore, the link between the computer and VideoDisc player becomes pivotal to the searching ability and success of the system as a whole. Without computer-driven searching abilities, more organization would have been necessary in the planning stages to determine beginning and end points on the videodiscs for each artist. This would be the only method whereby images of each artist’s work would remain consecutive. The computer link provides much more flexibility in the recording process.

As works are video imaged, other information is gathered. The disc number and measurements, as well as condition, location or print status, are recorded by hand and entered onto the database at a later date. It may be determined that entry of this secondary information directly onto a computer designated for use at the video
imaging station using word processing software is a more appropriate solution, with subsequent downloading to the database.

The database software that was purchased was in the end not successful in meeting our needs. In order for it to be tailored to our needs, some complicated programming was necessary and for cost reasons the software was abandoned. It also became apparent in experimenting with the software that it was more applicable to exhibitions or research than to managing a collection. The Canadian Heritage Information Network (CHIN) sponsors a national database for art, archeological and scientific collections and we put our first records onto the system in January of 1993. Since CHIN is a standard format for museums and galleries, and as McMichael staff were already familiar with it, it was chosen as the alternative to the customized software. The CHIN system allows for flexible searching on numerous fields, and requires no software customization. Discussion is ongoing as the McMichael is being used as a test 'Pilot Project' for the linking of CHIN textual data and Sony Laser VideoDisc images. At this time there are no plans for the linking of text and video on workstations off-site (for example, other galleries or in Cape Dorset). Category 5, 4 conductor Communication cabling has been put into place at the McMichael. This 'state of the art' cabling will allow both visual and textual data to be accessed from any computer in the building.

The linking of the text and image is made possible via one CHIN field called the OTHER MEDIA field. The disc captures an image and associates it with a disc address, which in turn becomes part of the work's database record. Although not necessarily consecutive, each artist's work is contained on a single disc and each disc holds up to 47,500 per side, again based on artist number. The main difficulty arises from the fact that the system is limited to viewing from one disc at a time. Therefore, if a set of information from CHIN is created which includes several artists' work, viewing these images involves considerable switching of discs and interruption of flow. We did not purchase a 'jukebox'—a device which allows access to more than one disc at a time—which could have alleviated this problem. However, when examining one artist's work it is an extremely quick and versatile medium. As the process of imaging is non-sequential on the disc, the computer link is imperative.

We have one technician on staff who is primarily responsible for the rehousing and video imaging components. He does the majority of the imaging however, all staff in the Dorset project have been trained to use the equipment. It is important to note that due to the user friendly nature of our equipment we were not required to hire a trained photographer. Instead, our priority for hiring could remain on art handling experience and a concern for the artworks involved. Specific training for the equipment occurred on the job.

Another consideration in the use of any technology as a research tool is the amount of staff time spent guiding researchers and other staff in the use of our research station. The simpler the methodology and the more generic and understandable the research station is, the less time spent by staff in maintenance and training. We haven't had a lot of experience yet but expect that staff time will be minimal once an instruction sheet is finalized.

There are a few ways in which technology may prove advantageous in public programming. Public access to stored collections can bear witness to the depth of an artist's work or, in the case of Cape Dorset, a community's work. The inclusion of technologies such as this can also add context to an exhibition, giving it a human element and encouraging visitors to interact with additional, related works not necessarily in the exhibition. However, the investigations into using technology in exhibition or outreach capacities has not yet been dealt with by the gallery as a whole.

Upon completion of the project, it is planned that discs will be made available to other cultural institutions. It cannot be foreseen at this point if the medium of information will be identical to that now being used. Perhaps the information on these discs will be digitized into other formats or transmitted via phone lines, just as the CHIN textual data is, thereby possibly making the need to copy discs an obsolete procedure of the late 1980's, early 1990's.

The use of any new technology can greatly increase the awareness and enjoyment of collections which are otherwise inaccessible or in danger from excessive handling. Primary considerations for use as a collections management tool must be determined by the end use, size of the collection in question, funding availability, and future considerations. Extensive forethought went into this project and particularly into the use of technology. The success of the system lies in the quality of the background organization and the adaptability of staff and equipment in this constantly changing environment.

Acknowledgments:
Staff of the McMichael Canadian Art Collection
Staff of the West Baffin Eskimo Co-operative and Dorset Fine Arts
SUMMARY REPORT

of the
Symposium on Cartographic Design and Research
and
Canadian Cartographic Association/
North American Cartographic Information Society
Joint Conference
Ottawa, Ontario, August 7 - 12, 1994

Prepared by
Alberta Auringer Wood
Map Librarian, Memorial University of Newfoundland

The Symposium was a full and intense two days and evenings of cartography and cartographers. Attendees came from England, Scotland, Wales, Brazil, Austria, Finland, Japan, eight provinces of Canada and at least 23 states of the USA. The symposium on cartographic and design and research was preceded by one in 1971 organized by Henry Castner and Gerald McGrath and held in Kingston, Ont. This one was organized under the auspices of the Canadian Institute of Geomatics (CIG). The second event was a unique cooperative joint annual meeting of two of the cartographic groups in North America. Not everyone was able to attend both events, but registration for the first was 84, while it was over 130 for the second.

The sessions commenced on Sunday morning with introductory remarks by the Symposium Co-Organizers, Clifford H. Wood (Memorial University of Newfoundland and Immediate Past President of the CIG) and C. Peter Keller (University of Victoria). They introduced D. R. Fraser Taylor (Carleton University, also President of the International Cartographic Association) who gave the opening “keynote” address. He feels that great changes are underway and that cartographers will influence their own fate with proactive and offensive responses to grow and advance. Cartographers and cartographic design must broaden their horizons. He had an optimistic view that at the core is creativity, imagination, and enthusiasm.

Fraser was followed by the first session on “Schools of Thought” which was moderated by Carolyn C. Weiss (Statistics Canada). The first speaker was John B. Krygier (Pennsylvania State University) who spoke on “Geography and Cartographic Design” that was a case study of a remote landscape in Pennsylvania whose design was shaped by geographic context. He used maps and documents with hypertext linkages and highlighted words. Nikolas H. Huffman (also Pennsylvania State University) followed to tell us “Can’t Get Here from There: Reconstructing the Relevancy of Design in Postmodernism.” He felt that culture shapes design objects, that design is a form of rhetoric, and used Richard Edes Harrison as an example. Political interpretations must be considered and postmodernists have done important critiques. After a short break, Mark Monmonier (Syracuse University) discussed “Cartographic Complementarity: Objectives, Strategies, and Examples.” He advocated that maps would benefit from standard design and similarities to aid users. Coherence and flow are needed as in expository writing. Matthew Edney (SUNY Binghamton) was the discussant for this session. He summarized, compared and critiqued the papers and noted that all of them re-evaluate means to handle map design. He recommended proceeding along lines proposed in design theory and paying more attention to aesthetics.

After lunch was the session on “For Whom By Whom” moderated by Michael R. C. Coulson (University of Calgary). The lead paper was “What does that Little Black Rectangle Mean? Designing Maps for the Young Elementary School Child” by Jacqueline M. Anderson (Concordia University). Using a video tape and slides, she described her Quebec case study of children’s understanding of components of the graphic language. Mark Kumler (University of Colorado) followed to speak on “Gender Differences in Map Reading Abilities: What
do We Know? What Can We Do?" His co-author, Barbara Buttenfield (SUNY Buffalo) was unable to be present. He indicated that his study had found possible differences in preferences in how landmarks are symbolized and for map orientation, but that these may be attributable to experience. Regina Vasconcellos (University of São Paulo, Brazil) informed us about her studies of "Tactile Map Design and the Visually Impaired User" through the use of graphic card pairs. Henry Castner (Pittsboro, N.C., formerly of Queen's University) was the discussant for this section. He noted that the research does not seem to be useful for getting down to design, and that we should change from identifying symbols to the process of symbolization. There was considerable further discussion among the speakers and the audience.

Reconvening after a short break, Michel Rheaull (University of Sherbrooke) chaired the session on "Complexity Through Added Dimensions." Irina Vasiliev (SUNY Geneseo) explained "Design Issues to Be Considered When Mapping Time." She found five types by looking at a variety of maps (date, duration, standard time, time as distance, and space as a clock). She hoped that we will be better able to understand when to use which symbol. Roger Wheate (University of Northern British Columbia) suggested "Re-examining the Cartographic Depiction of the Third Dimension" with a lively and interesting presentation very appropriate for late afternoon. He found that in the representation of topography that shaded relief seems to work better and more efficiently, especially in recreational maps. Christopher Board (London School of Economics) as discussant noted a common thread to carefully determine what users require. Additional questions and answers followed.

Another short break for dinner was succeeded by "Rules and Expert Systems" moderated by C. Grant Head (Wilfred Laurier University). William Mackaness (NCGIA, University of Maine-Orono) addressed "Automated Cartography and the Human Paradigm." In an effort to get away from the usual way of doing research in automated design using cognitive artifacts he used a constraint based paradigm or a "honing" model. Michael Wood (University of Aberdeen, Scotland) followed with "The Practitioner's View? A Pilot Study into Empirical Knowledge About Cartographic Design." He is surveying 130 members of the Society of Cartographers to investigate their views on design through an open ended questionnaire. He quoted an interesting definition of map as "a symbolized image representing selected features or characteristics of geographic reality resulting from the creative choices of its authors and designed for use when spatial relationships are of primary importance. He also passed on the suggested term "cartomediographers" in dealing with the multimedia environments. Robert McMaster (University of Minnesota) summarized the thoughts in each paper. He felt that there is a resurgence in interest in design in the GIS area. He did not agree with the paradigm presented.

The symposium reconvened at 9:45 a.m. with a session on "Automation Challenges" chaired by Brian Klinkenberg (University of British Columbia). In beginning the session, he referred to the July-August issue of Business Geographics (vol. 2, no. 4) that has an article on good and bad maps. Jan Mersey (University of Guelph) was the first speaker. She discussed "Cartographic Symbolization Requirements for Microcomputer-Based Geographical Information Systems." She reviewed types of maps in eight recent atlases, including that of Newfoundland, to determine what to tell vendors of mapping software regarding needs. Proportional point symbols were used most with choropleth maps close behind. She also reviewed current capabilities of PC based mapping programs. Following this up was Matthew McGranaghan (University of Hawaii, Honolulu) in describing "An Experiment With Choropleth Maps on Monochrome LCD Panels." He found that background is significant, symbol ordering is not, and placement of legend labels is not. He recommended using light background and darker symbols for greater magnitude. The discussant, Judy M. Olson (Michigan State University), posed questions for the speakers as well as summarizing their findings.

I chaired the last session on "Research/Experimentation" that was held after lunch. PhD candidate Elizabeth Nelson (University of South Carolina) presented on "An Evaluation of Multivariate, Quantitative Point Symbols for Maps." She succeeded in making a very mathematical topic understandable. She measured the communication effectiveness of four different types of multivariate symbols. She concluded that boxed letters were better than Chernoff faces as cartographic symbols. Her co-author, Patricia Gilmartin (University of South Carolina), was unable to be present. Robert Lloyd (University of South Carolina) presented the paper on "Feature Matching and the Similarity of Maps" co-authored with Elzbieta Covington and Theodore Steinke (both of University of South Carolina). They asked what can we do to understand how readers get information from maps. They concluded that those with more common symbols are viewed as more similar, while those that have distinctive symbols were viewed as less similar. The University of South Carolina trio concluded with David Patton, also a PhD candidate, who described "An Examination of the Effects of Task Type and Map Complexity on Sequenced and Static Choropleth Maps" co-authored with fellow PhD candidate, Rex Cammack, who was not
The official conference opening was on Wednesday, August 10. The first session on “Newfoundland” began with a paper presented by Peter Keller (University of Victoria, co-authored by Lesley Grant) on “A Comparison of Canada’s Official Tourist Maps and the User’s Perspective.” They found that there was no consistent look or character among them. Michael Wood (University of Aberdeen) followed with “Panoramas and Digital Terrain Models for Tourist Use: A Case Study with Classified Landsat Data Cover.” This project investigated the map versus three dimensional views for mountaineering and walking.

The break was followed by two concurrent sessions. One was on “Cartographic Animation and Innovation” while the other covered “Education and Research.” The first session presented by Keith Rice (University of Wisconsin-Stevens Point and co-authored by Aaron Wolf) was on “Fly-By Animated Terrain Maps: A Retention and Design Experiment.” Its focus was the Los Angeles basin and required at least a Pentium computer to execute. While they found that recall from ordinary maps was superior overall, they also found that the recall of the highest terrain was superior with the three dimensional views. I also heard the paper by Majella-J. Gauthier (Université du Québec à Chicoutime) about the “Electronic Atlas of the Evolution of Agriculture in Quebec, 1981-1991.” It has also been published on diskette. Dot maps are used to show density and change.

After lunch there were another two concurrent sessions. One was on “Cartographic Theory” while the other presented views on “Public Sector Mapping.” I attended the session where the first paper was cancelled, but two presenters were there. Daniel Strebe (VirtualWare Inc., Japan) spoke on “Why We Need Better World Maps, and Where to Start” and Hansgeorg Schlichtmann (University of Regina) discussed “Writing and Typography in Maps—The View From Semiotics.” The former was primarily on map projection theory, including one of his own.

There was an afternoon break followed by three concurrent sessions. The first one was a “Round Table Discussion” chaired by Joe Stoll (University of Akron) on “Keeping Your Cartography Lab Current and Busy.” with a panel of lab directors including Memorial’s Cliff Wood. The second one was on “Mapping for the Blind and Partially Sighted” with three papers. The third one was two demonstrations. The first was of “ArcView as a Tool for the Visualization of Temporal Change” by David Broscoe (Algonquin College). He noted that it is pretty easy to learn, and that it is virtually impossible to corrupt the original data set. The second was of the prototype CD-ROM product on the “Territorial Evolution of Canada” as part of the development of multimedia products by the Canada Centre for Mapping, Lise-Aurore LalPôme-Roy.
came to the talk and Eve Siekierska was her co-author. Another potential product on endangered species was displayed, as well.

After dinner there was the opening of the poster session. There were about thirty displays. Some were from government agencies, such as the Geological Survey of Canada, and some from commercial firms, such as Intergraph Corporation (Huntsville, Ala.) and H.M. Gousha (Comfort, Tx.). Several were of projects done by cartography classes, such as University of Calgary and University of Helsinki. Quite a number were of recent products of cartographic laboratories, such as the about from Florida State University, University of Wisconsin-La Crosse, University of Florida, Mansfield University, Georgia State University, University of Oregon, University of Toronto, University of Kentucky, University of Wisconsin-Milwaukee, Ball State University, University of Akron, and Michigan State University. Another interesting poster was by Christopher Board (London School of Economics) on “Unfolding the Map - Some Neglected Aspects of Map Design” while Majella Gauthier (Université de Québec à Chicoutimi) displayed information on the “Electronic Atlas of the Evolution of Agriculture in Quebec, 1981-1991.”

The next morning offered choices of tours at Natural Resources Canada. Options included the Digital Cartography Systems of Topography Surveys, National Atlas Information Service’s thematic cartography and geographical names, Aeronautical Charts System, Digital Systems and Products Development, Canada Centre for Remote Sensing, Digital Marine Charts, Geoscience Information and Communications Division, and the Map Library of the Geological Survey. Along with several others, I visited the Map Library first. Their more than 250,000 maps are kept in a compact space. They have several electronic atlases available for use. At 10:00 a.m. the chosen tour was of the area of the National Atlas Information Service. After an introduction by Iain Taylor of NAIS, we visited their offices. Iain noted that the final map for the fifth edition of the National Atlas of Canada is in process. A special sheet has been done on wildlife. He expects that NAIS will be on Internet by September 15. Use of this via Mosaic software was demonstrated. The maps included have areas highlighted that can be downloaded. It will also include geographical names, a sales list, a quiz section, information on the national atlas, a list of Canadian map producing agencies, and an index of map related "web" sites. Helen Kerfoot of the Secretariat of the Canadian Permanent Committee on Geographical Names described their work, noting that the provinces and territories have the authority to make names and to change them. The CPCGN publishes gazetteers and are working on a national one. They maintain the digital files for all the names and their detailed history. This has much more information and more names than will be available via the Internet. We also heard that NAIS does joint ventures with other groups, such as a new wetlands poster with Ducks Unlimited and several forthcoming posters with Canadian Geographic. They are also working on a prototype electronic school atlas at a scale of 1:30,000,000.

After lunch there was a session on “Cartographic Animation Review” conducted by Michael Peterson (University of Nebraska at Omaha). He described two possible approaches as being frame based and cast based. He would like to encourage distribution of animation files, especially by Internet using FTP. He displayed several.

The NRC tours were repeated in the afternoon, as well. The map display was available for viewing until late afternoon. Both of the societies held their annual meetings in late afternoon or early evening. After these events the evening was open or attendees were offered the option of a dinner and cruise of the Rideau River on the "By-Towne Pumper."

The poster sessions continued through Friday, August 12. In the morning there were three concurrent sessions. One was on “Orienting Ourselves in Space: Implications for the School Curriculum” chaired by Henry Castner (formerly of Queen’s University) and including a paper by Scott Freundschuh (formerly of Memorial University now with the University of Duluth). The second was on “Analytical Cartography in the GIS Era” chaired by Alun Hughes (Brock University). The third was a demonstration by Philip Dodds (Intergraph) of “Map finishing with Intergraph on Microsoft Windows.” After a break there were three more concurrent sessions. One was a continuation of “Orienting Ourselves in Space” with two papers and then discussion. Another was on “Applications with GIS” chaired by Ron Bolton (U.S. National Ocean Service). This included another demonstration of “NAIS on the ‘Net”. The final one was a demonstration of the “Electronic Atlas of the Evolution of Agriculture in Quebec, 1981-1991” that has been mentioned previously. Though it primarily used dot density maps, some choropleth maps were included. The base map information was from MapInfo.

Lunch included a meeting of the Canadian National Committee for the International Cartographic Association. Among the major topics of conversation were plans for the bid for the 1999 ICA meeting. Efforts for this are
being carried out by Geomatics Canada. Nominations are being sought for a potential Congress Director.

Another set of three concurrent sessions completed the afternoon. There was continued discussion on orientation and the curriculum. Three papers were presented on “Perceptual Research” chaired by David Tilton (University of Wisconsin-Milwaukee). One of them gave additional information on the multimedia aspirations of the Canada Centre for Mapping. Another session on “Cartographic Education” included Paul Anderson (Illinois State University) speaking on “Transforming Cartographic Education with Microcomputers.”

The banquet was held in the evening at the Canadian Museum of Nature. There was opportunity to see some of the exhibits before dinner. After dinner there were awards presentations and a banquet speaker. The conference organizers (Betty Kidd, Heather Stevens, and David Douglas) were given citations by each society. The Canadian Cartographic Association presented three awards for meritorious contributions to the field. These consisted of framed, decorative certificates designed by Gary McManus (Memorial University of Newfoundland). The honorees were Lou Skoda for contributions to commercial cartography, members of the Historical Atlas of Canada project for completion of that very significant atlas, and Fraser Taylor for his many contributions over the years to the CCA. The banquet speaker was Iain Taylor, Chief Geographer of Canada, who gave an illustrated lecture on “Official Mapping and the Creation of ‘Canada’”.

On Saturday there was a “MicroCAM Workshop” conducted by Paul Anderson (Illinois State University) to introduce attendees to the use of this free software. There were also two organized field trips. One was a mini-van tour arranged by Henry Castner and narrated by Brian Osborne (Queen’s University Professor Emeritus) of the Rideau Waterway. The other was a ride on the steam train to Wakefield. Conference goers were also encouraged to explore Ottawa on their own, and there was a Caribbean Festival Parade. Both of the societies had board or executive meetings to finish off the hectic week.

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ACMLA PAPER AWARD

The Awards Committee invites nominations for the ACMLA PAPER AWARD. To be nominated for the Paper Award, which carries a $200.00 monetary prize, a feature article by one or more authors consisting of at least three pages in length, must have appeared in an issue of the ACMLA Bulletin since June 1994. We are looking for articles that make a solid contribution to map librarianship, including cartobibliographies. Originality, uniqueness of subject matter and depth of research will be taken into consideration.

Nominations close on March 1, 1995. Please send your nominations to: Alberta Wood, Chairperson, Awards Committee, ACMLA, Queen Elizabeth II Library, Memorial University, St. John’s, Newfoundland A1B 3Y1

PRIX DU MEILLEUR ESSAI

Le comité des prix et mérites invite également les membres de l’ACACC à soumettre la candidature du membre qui, à leur avis, est admissible au prix du meilleur essai. Selon les règles du concours, l’heureux(se) élue(s) aura publié un article d’au moins trois pages au sein d’une édition du Bulletin de nouvelles de l’ACACC, émise à la suite du dernier congrès. Le comité recherche principalement des articles, dont les carto-bibliographies, qui alimentent et soutiennent le développement de la discipline. Les articles seront jugés selon les critères d’originalité du thème choisi et du niveau de recherche.

Date d’échéance du concours: 1er mars 1995. Veuillez faire parvenir vos suggestions de candidats à Alberta Wood, Présidente, Comité des prix et mérites, ACACC, Bibliothèque Elizabeth II, Université Memorial, St-John’s, Terre-Neuve A1B 3Y1
CANADIAN MAPS & ATLASES
SELECTED FOR THE
INTERNATIONAL CARTOGRAPHIC ASSOCIATION, BARCELONA, 1995

compiled by
Claire Gosson, Diane Lacasse, and Heather Stevens

Editor's note: The following is a list of entries selected from the Canadian Cartographic Exhibit for the upcoming ICA and IGU conferences in Barcelona and The Hague. For a complete list of entries see the side panel on page 26.

A. Satellite Maps - Cartes images satellites

Image Map of Canada / Carte Image du Canada
1993, 1:5 000 000
Products & Services Division
Geomatics Canada, Natural Resources Canada
615 Booth St., Ottawa, Ontario K1A OE9

Bonaparte Lake - Satellite Image Map
1993, 1:250 000
Author/Auteur: Surveys & Resources Mapping Branch
B.C. Ministry of Environment Lands & Parks
Publisher/Éditeur: Advance Satellite Production Inc.
170-10651 Shellbridge Way, Richmond, British Columbia
V6X 2W8

Quesnel Lake - Satellite Image Map
1993, 1:250 000
Author/Auteur: Surveys & Resources Mapping Branch
B.C. Ministry of Environment Lands & Parks
Publisher/Éditeur: Advance Satellite Production Inc.
170-10651 Shellbridge Way, Richmond, British Columbia
V6X 2W8

PROTEUS
1994, 1:5 000 000
P.J. Stooke, Department of Geography, University of Western Ontario
London, Ontario N6A 5C2

Coastal Mapping of Qatar
1993, 1:20 000
Canada Centre for Remote Sensing & Canada Centre for Training in Geomatics
Products & Services Division
Natural Resources Canada

Ottawa
1990, 1:50 000
Cartographic Information & Distribution Centre & Scitext America Corporation
Natural Resources Canada
615 Booth St., Ottawa, Ontario K1A 0E9

B. Topographical Maps, Bathymetric and Aeronautical Charts/Cartes topographiques, Cartes bathymétriques et Aéronautiques

South River - 31E-14 National Topographical System /Système National de Référence Cartographique
1994, 1:50 000
Author/Auteur: Topographical Mapping Division
Canada Centre for Mapping
Publisher/Éditeur: Canada Centre for Mapping
Geomatics Canada

Chart 5640 - Churchill Harbour
1994, 1:12 000
Canadian Hydrographic Service
Fisheries & Oceans Canada
615 Booth St., Ottawa, Ontario K1A OE6

Bathymetry of the Queen Charlotte Basin Region, British Columbia
1992, 1:250 000
Author/Auteur: B. Sawyer
Pacific Geoscience Centre, Geological Survey of Canada
601 Booth St., Ottawa, Ontario K1A OE8

Yukon Territory - Territoire du Yukon
1993, 1:2 000 000
Author/Auteur: National Atlas Information Service
Canada Centre for Mapping
Natural Resources Canada

Mount Logan Map Folio
1993, 1:75 000 & 1:100 000
Author/Auteur: G. Holdsworth & B. Sawyer
Publisher/Éditeur: The Arctic Institute of North America
The University of Calgary, Calgary, Alberta T2N 1N4

C. Geology / Géologie

Geology, Melville Island and Adjacent Smaller Islands, Canadian Arctic Archipelago
1994, 1:250 000
Author/Auteur: J.C. Harrison
Institute of Sedimentary & Petroleum Geology
Publisher/Éditeur: Canada Communication Group
ACMLA Bulletin Number 92

E. Thematic Maps / Cartes thématiques

Carte No 56 - Ontario suggested features of political and physical geography
1990, 1:2 000 000
Author/Auteur: Les Editions Jules Châtelain
Publisher/Editeur: Les éditions Brault & Bouthillier
4223, rue Sherbrooke Ouest, bureau 115
Westmount, Québec H3Z 1G7

Protecting Motorists from Avalanches
1994, 1: 937 500
Author/Auteur: E. Kramers & S. Fick, Canadian Geographic Magazine
Publisher/Editeur: Canadian Geographic Magazine
49 McArthur Ave., Vanier, Ontario K1L 8L7

Sacred Circles
1994, 1: 6 250 000
Author/Auteur: S. Fick
Canadian Geographic Magazine
Publisher/Editeur: Canadian Geographic Magazine

Wetlands
1994, 1: 10 000 000
Author/Auteur: C. Gosson, National Atlas Information Service
& C. Rubec, Canadian Wildlife Service
Publisher/Editeur: National Atlas Information Service
Canada—Results of the 35th Federal Election
October 25, 1993
1993, 1: 7 500 000
National Atlas Information Service

Stress environnementaux - Zone d'intervention prioritaire Valleyfield-Bouiharnois-Châteauguay
1991, 1: 60 000
Author/Auteur: Michel Fournier
Cartologique
Publisher/Éditeur: SVP Société pour Vaincre la Pollution
445, rue Saint-François- Xavier, 2e étage
Montreal, Quebec H2Y 2T1

Yukon Native People and Languages
Scale not given
Author/Auteur: Yukon Native Language Centre
Council for Yukon Indians
Publisher/Éditeur: Yukon College
Box 2799, Whitehorse, Yukon Territory Y1A 5K4

F. Urban Maps / Cartes urbaines

Tokyo, Citymap and Guide
1993, 1:15 000
Author/Auteur: Weller Cartographic Services Ltd.
Surrey, British Columbia.
Publisher/Éditeur: ITM Publishing/World Wide Books & Maps
736A Granville St., Vancouver, British Columbia V6Z 1G3
& Weller Cartographic Services Ltd.
6268 129th St., Surrey, British Columbia V3X 1S6

Downtown Property Map Vancouver, British Columbia
1993, 1:6 000
Author/Auteur: Weller Cartographic Services Ltd
Surrey, British Columbia.
Publisher/Éditeur: CB Commercial
Real Estate Group, Canada Inc
1030 West Georgia St., Suite 400
Vancouver, British Columbia V6E 2Y3

Cartes routière de la MRC de l'Assomption
1991, 1:30 000, 1:275 000, 1:10 000, 1:15 000
Author/Auteur: Michel Fournier
Cartologique
Publisher/Éditeur: MCR de l'Assomption
300-A, rue Dorval, l'Assomption J0K 1G0

Ville de Hull
1991, 1:12 500, 1:6 000
Author/Auteur: Cartographie A.L. Enr.
Publisher/Éditeur: Service de communications Ville de Hull, 25 Laurier, Hull, Québec J8X 4C3

Control Index
1994, 1:500 metres
The Municipality of Metropolitan Toronto
Geographic Systems Division
703 Don Mills Rd., North York, Ontario M3C 3N3
Stein Valley: Heritage Guide and Map East
Stein Valley: Heritage Guide and Map West
1991, 1:87 000
Author/Auteur: Weller Cartographic Services Ltd
Surrey, British Columbia.
Publisher/Éditeur: Voices for the Wilderness

H. Electronic Atlases / Atlas électroniques

1994
Author/Auteur: M.-J. Gauthier
Université du Québec Chicoutimi
Département des Sciences humaines, 555 boul. de l'Université
Chicoutimi, Québec G7H 2B1

Atlas of Newfoundland and Labrador
1991
Author/Auteur: Clyde Rose
Breakwater Books Ltd.
P.O. Box 2188 - 100 Water St.
St. John's, Newfoundland A1C 6E6

Charting a New World: Maps of Discovery (CD-i)
1994
On/Q Corporation
395 Dowd, Montréal, Québec H2Z 1B6

I. General Maps / Cartes générales

North America
1994
Peter Heiler Ltd.
72 Bloor St. East, Oshawa, Ontario L1H 3M2

J. Gazetteers / Répertoires géographiques

Gazetteer of Canada-Manitoba/Répertoire Géographique du Canada-Manitoba
1994
Author/Auteur: Canadian Permanent Committee on Geographical Names
Publisher/Éditeur: Canada Centre for Mapping Geomatics Canada

Exhibit catalogue available!

For a comprehensive list of all titles that were submitted to the Canadian Cartographic Exhibit, request the following catalogue from:

Diane Lacasse
at Natural Resources Canada
(613) 992-4335

Canadian Cartographic Exhibit
L'Exposition Cartographique Canadienne 1990-1994

Submissions for the conferences of
Soumissions pour les congrès de

The International Cartographic Association
l'Association cartographique internationale 1995
&
The International Geographical Union
l'Union géographique internationale 1996

The catalogue is considered to be the first all inclusive database of Canadian map makers and their products.
1. The 29th Annual Business Meeting of the Association of Canadian Map Libraries and Archives was held at the University of Guelph on June 10, 1994. The meeting was called to order at 9:10 a.m.

2. It was established that there was a quorum and that the meeting could proceed.

3. Approval of Minutes of previous meeting, July 28, 1993 (printed in ACMLA Bulletin #89, December 1993). Correction to page 30, item 8(f)-Grace Welch did not agree to chair committee. There was a motion to approve the minutes as printed with the correction noted. (Carol Marley, Velma Parker) CARRIED

4. Approval of Agenda and New Business - under agenda item no. 12 - Other Business - add a) resolution from Barbara Farrell. It was moved to approve the agenda as amended. (Lorraine Dubreuil, Sandy Campbell) CARRIED.

5. President’s Report
Cathy reported on the highlights of the past year. She thanked Don Lemon for his tenure as Bulletin editor which has now been assumed by Colleen Beard. The Board of Directors struck a new committee, tentatively called the Federal Cartographic Liaison Committee to act as an advocacy and information group with federal map producing agencies. She described the mandate of the committee and that the reporting structure and mechanisms could be determined by the committee members. Redistribution was not held at this conference because material to be redistributed was mainly Canadian topographic and hydrographic. The polled opinion was that the majority of members had mostly a full set of this kind of material and would just be filling gaps. It was thought that it was better to have a desiderata list, rather than pay to have material shipped to Guelph. We will try to accomplish redistribution for this type of material in a different manner and this will be addressed by the Liaison Committee. She thanked Betty Kidd for her willingness to commit resources at the Cartographic and Audio-Visual Archives, National Archives of Canada, and for her willingness to work together with the Association to resolve the issue of redistribution.

Re liaison with other groups - Grace Welch and Cathy drafted a letter asking for information on the task force set up by the Canadian Council on Archives to investigate the feasibility of a multi-media union catalogue of Canadian materials. There was an acknowledgement of the letter. The Association has accepted an invitation to join the Association of Canadian Archives advocacy network. Robert Grandmaitre attended the first meeting on behalf of the Association. A letter was sent to Dave Carney, Inter-Agency Committee on Geomatics inquiring about an Access and Marketing Working Group set up by that Committee. No reply has been received. In conjunction with the 1995 International Cartographic Association (ICA) meeting, there will be a special issue of Geomatica for which a quadrennial report of the Association activities will be prepared. The Association is looking forward to Conference 1995 which will be a joint conference with the Western Association of Map Libraries.

6. Treasurer’s Report
Robert Grandmaitre presented the report for the Treasurer. The Association remains in good financial position. A GIC will be purchased with money from the main account in order to generate higher interest. The Board has asked for additional lines in reporting travel, namely SSHRC grant for members’ travel, supplementary funds for members’ travel, executive travel to Board meetings and executive travel to the annual general meeting. There is a change of numbers on the page titled “Interim Budget” to read as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of all accounts as of January 1, 1994</td>
<td>$13,198.65</td>
</tr>
<tr>
<td>Total receipts January 1 - May 20, 1994</td>
<td>15,611.43</td>
</tr>
<tr>
<td>Total disbursements January 1 - May 20, 1994</td>
<td>7,104.99</td>
</tr>
<tr>
<td>Balance of all accounts as of May 20, 1994</td>
<td>21,705.09</td>
</tr>
</tbody>
</table>
The proposed budget was discussed under agenda item no. 13. A statement of assets and liabilities was prepared in response to the request by the auditor at the 1993 business meeting. It was moved that the Treasurer’s report be approved as submitted. (Robert Grandmaître, Lorraine Dubreuil). CARRIED.

It was moved to appoint Lou Sebert as auditor for 1995. (Robert Grandmaître, Cheryl Woods) CARRIED.

SOCIAL SCIENCE AND HUMANITIES RESEARCH COUNCIL (SSHRC) COMMITTEE

Tom Nagy reported in the absence of a written report. Ten applicants requested monetary assistance for travel to the 1993 conference. Two subsequently withdrew. Those at a distance were funded to 50 - 60 percent of their request, those closer requested less and were given a higher percentage of their request. This year seven applications for travel funding were received. This means that the Committee will be able to give a higher proportion so applicants will receive close to 100 percent funding. This year a notice was received that the SSHRC application need only be done next February. There will be the same level of funding for next year. SSHRC has given an extension to all applicants since they are in the process of revising the procedures. Next year the major application has to be completed. It will have to be shown that we are in need of funding especially if we have a large balance. We do publish and provide funding for people from coast to coast. SSHRC is concerned that the Association is an academic organization. The question was raised if our meetings should be held in conjunction with other scholarly meetings. Barbara Znamirowski responded that the number of private members is looked at and she thinks numbers of members would help us more than meeting with other organizations. Although there are drawbacks to meeting with the Learned Societies in terms of the numbers involved, libraries which provide funding may be influenced by our occasionally meeting before or after the Learned Societies. Tom and Barbara will watch closely to see what direction SSHRC is taking and will report to the executive. Cheryl Woods was thanked for arranging the inventory of the facsimile maps.

7. First Vice-Presidents’ Report
ARCHIVES - No report or archivist, Brian Hallett is looking into the agreement with the Archives and will report to the Board. There was a question as to physically where the archives of the Association are and if committee chairs get guidelines as to what should go into the archives. There is work to be done on terms of reference of all committees.

AWARDS COMMITTEE - Report included in the conference material.

BIBLIOGRAPHIC CONTROL COMMITTEE - which is the revised name for the Canadian Cartographic Bibliographic Control Committee. The terms of reference will be looked at in next year. Joan Winearls reviewed the report. The Committee would like agreement in principle to put all records in Carto-Canadiana. They have been talking to UTLAS and CD-ROM producers with regard to costs. A survey was done of seven libraries of which there are five libraries whose records are uploadable.

CONFERENCE 1993 - The final financial statement shows a revenue of nearly $1600. Alberta Auringer Wood was thanked.

CONFERENCE 1995 - Tim Ross, Chair, reported. Suggestions were given to the conference planners.

CONFERENCE 1996 - no location as yet but central Canada is preferred.

COPYRIGHT COMMITTEE - Carol Marley asked for another volunteer to serve on the Committee.

LIAISON COMMITTEE - There is a printed report. Cathy reported on the meetings held this week. The Liaison Committee met with representatives from the Cartographic and Audio-Visual Archives to establish a list of concerns and decide which are accomplishable in preparation for a meeting at the National Archives in the fall. The Liaison Committee is concerned about reorganization at the National Archives, particularly with regard to the reference service.

MAP USERS’ ADVISORY COMMITTEE - Robert Grandmaître reported on creation of a new committee, the Federal Cartographic Liasion Committee. He described the mandate of the Committee and the steps which have been taken to find a chair. An individual was approached, there was an appeal in the Bulletin and at the OCUL Map Group meeting but no chair has come forward, although some members have expressed interest. It is an important time for this Committee to be functioning and this is reflected in the objectives put forward by the Task Force. Barbara Farrell agreed to look at how the Committee might function and Barbara Znamirowski, Carol Marley, Sandy Campbell and Colleen Beard are willing to be involved.

MEMBERSHIP COMMITTEE - The report shows fifty-nine full members with fourteen outstanding. (Appendix I). The numbers were higher in 1991 perhaps because the conference was in Ottawa and there was local interest. There was an expression of concern about membership numbers. The Association needs people with new ideas and persons to work on committees. Membership for students was discussed as means of boosting numbers. It was resolved that we create a category of membership
for students. (Sandy Campbell, Richard Pinnell). CARRIED.

Members are asked to encourage others to join. There are members willing to telephone people who have not renewed. Ideas put forth to encourage membership included sending a complementary copy of the Bulletin to prospective members, placing an ad in library journals, hand-outs to library school students, asking vendors, librarians, archivists, student assistants and school librarians to join, looking at the timing of renewal notices and the membership pricing structure. New members should be welcomed. New and prospective members could be made aware of the Association's publications by listing them on the cover of the Bulletin. It was suggested that promotion start at the local level and that promotional responsibilities be given to the Membership Committee. The promotional flyer will be reprinted.

8. Second Vice-President's Report
The Second Vice-President is responsible for committees dealing with publications. A concern was finding someone to take over the printing and distribution of Bulletin. This will be assumed by Shirley Harmer.

FACSIMILES - Next year the focus will be on selling maps already printed. Five new facsimiles have been printed. Yves Tessier and Colleen Beard were thanked for their special efforts in selling copies. There is a large stock of facsimiles to sell which are potential income and members are encouraged to assist in marketing them.

PUBLICATIONS OFFICER - Question of what to do with camera ready copy of the Bulletin. The camera ready copy can be destroyed once an issue has been printed. Older editions of Bulletin can be disposed of. One idea was to sell copies at related conferences, eg. NACIS. A list of ACMLA publications should appear in issues of the Bulletin.

PUBLICATIONS COMMITTEE - Francis Woodward at University of British Columbia has done an online index to the Bulletin. It was thought that a printed version was also desirable.

BULLETIN EDITOR - It was moved that the frequency of the Bulletin be reduced from four to three issues a year so that quality can be maintained. (Colleen Beard, Carol Marley).

Since there was a concern about the possible effect on membership, the word consolidate was suggested in place of reduce. CARRIED. Notification of a change in the publishing schedule would have to appear in an issue prior to the change. The laser printer will be used by the Secretary. The editor will request a budget line for printing of the Bulletin.

9. Task Force on ACMLA Objectives
Richard Pinnell reviewed the procedure which led to the Objectives as now drafted and presented to the members. There is a priority order to the list. Some members felt that there was not sufficient content about map curatorship and management of cartographic resources. These ideas were incorporated into objective no. 1 and the wording of the remaining ones was reworked. It was moved that the Objectives be accepted as revised. (Colleen Beard, Richard Pinnell) CARRIED.

The Objectives of the Association are:
1. Standards: to promote high standards in the preservation and management of, and access to cartographic collections in Canada.
2. Education: to engage in activities which further the Canadian research community's and public's awareness, use and understanding of cartographic materials.
3. Advocacy: to represent and promote the collective interests of Canadian cartographic users by establishing contacts with government agencies and by striving to influence policy decisions.
4. Communication: to create and maintain an active communication network for the exchange of information among members and the cartographic community.
5. Research and Professional Development: to support the research and professional development activities of members through publications, conferences and seminars.

10. Congress of Cartographic Information Specialists (Associations CCISA)
Alberta Auringer Wood provided a handout on an atlas classification proposal from the Library of Congress which the Bibliographic Control Committee is examining. The letter and attachment “State of Map Libraries and Archives” was, in some instances, sent on to map libraries rather than given attention by the chief librarians to whom it was addressed.

11. ACA Advocacy Network
Robert Grandmaitre reported on the first meeting which was attended by representatives from the Canadian Library Association, the Oral History Society, the National Archives of Canada and the Association of Canadian Map Libraries and Archives. Robert attended on behalf of the Association. The initial meeting was an exchange of information. The participants will put together a list of issues so that common concerns can be ascertained.

12. Other Business:
a) Barbara Farrell presented the text of a resolution which reads as follows:
Whereas ACMLA -has a mandate to facilitate access to cartographic information within the academic community in Canada
- responds to the needs of library users engaged in the training of Canadian youth in those disciplines which use, analyse and interpret geographically referenced data
- responds to the needs of library clients engaged in academic research
Be it resolved that the ACMLA convey to the relevant government ministries its members' serious concerns for the long term impact on Canadian development of punitive government copyright, licensing and cost recovery policies which:
- limit the access of Canadian students and researchers to Canadian data
- result in Canadian university students being taught using US examples and data
- lead to the potential creation of an information elite and an information disenfranchised population.
The Association believes that an urgent and immediate review of policies regarding the following should be undertaken:
- licensing of digital products to the academic community of Canada
- pricing structures for digital products
- cost recovery based pricing structures for paper products
- depository arrangements
The suggestion was that the Association enlist the support of other associations.

It was moved to accept the resolution in principle. (Barbara Farrell, Lorraine Dubreuil) CARRIED.
The Board will work on the final wording in conjunction with the membership.

b) Pierre LePine has done a catalogue of old maps, original and facsimile, in the collection of the Bibliotheque National du Quebec.

Under Liabilities, add 1995 conference travel supplement $1500, membership flyer $200, changing total to $27,762.00 and amending the assets - liabilities figure to $16,050.00.
It was moved to pass the proposed budget as revised. (Grace Welch, Lorraine Dubreuil) CARRIED.

14. Presentation of the 1994-95 Board which remains unchanged from last year.
President - Cathy Moulder
Past President - Richard Pinnell
First Vice-President - Robert Grandmaitre
Second Vice-President - Alberta Auringer Wood
Treasurer - Patrick McIntyre
Secretary - Shirley Harmer

15. Adjournment at 12.50 p.m.

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TRAVEL FUNDING FROM SSHRC GRANT COMMITTEE

It is the intention of this committee to ensure that all ACMLA members have equal opportunity to the funding available through this committee.

In order to do this all eligible members MUST submit a request for funding ninety days prior to the date of the annual conference.

The committee will consider all requests for funding and will indicate to the applicants the amount available per individual sixty days prior to the annual conference. PLEASE NOTE that the committee will not advance funding. The intention is to permit members to take into account SSHRC funding when submitting applications for travel authorization from their respective institutions.

All other sections of the ACMLA Policy on Travel Funding relating to SSHRC funding will remain in effect and will be used by the committee to determine the amount of the grant.

All receipts must be submitted no later than forty five days after the annual conference. Disbursements will be made shortly thereafter.

Requests received for SSHRC funding after the annual conference may be considered if all available funding has not been disbursed.
ENVIRONNEMENT

Liste d'atlases mondiaux et régionaux disponibles à la cartothèque de l'Université Laval

compilé par Rémi Larochelle

Editor's Note: It is not the intent for the following list to be comprehensive but to provide readers with a decent checklist of environmental atlases. Thanks to Yves Tessier.

MONDE


AMERIQUE DU NORD


Atlas environnemental du Saint-Laurent: [Planches Séparées]/ Centre Saint-Laurent

Physical Environment of Saskatoon, Canada/ Editor: E.A. Christiansen, 1970

Distribution of Surface Waters Sensitive to Acidic Precipitation: a State-level Atlas/ National Atmospheric Deposition Program..., 1982


Environmental Atlas of the Potomac Estuary/ Alice J. Lippsen... [et al.], 1979


Cape Cod Environmental Atlas/ Arthur H. Brownlow, editor, 1979
ACMLA Bulletin Number 92

Oregon Environmental Atlas/ Carolyn Young, 1988

EUROPE
Europe, le grand atlas, 1992 ISBN 2-7312-1285-3

AFRIQUE

NOUVELLE-ZELANDE

ACMLA HONOURS AWARD

The Awards Committee invites nominations for the ACMLA Honours Award. According to the guidelines for the award, the nominee should be a person who has made an outstanding contribution in the field of map librarianship. The contribution may either be for a specific activity or for general services and contributions such as continued membership in the Association with active participation either as an executive officer, committee chairperson, or committee member. Normally membership in ACMLA is a prerequisite, however that does not preclude considering outstanding non-members.

Nominations close on March 1, 1995. Please send your nominations to: Alberta Wood, Chairperson, Awards Committee, ACMLA, Queen Elizabeth II Library, Memorial University, St. John’s, Newfoundland A1B 3Y1

COMITE DES PRIX ET MERITES

Le comité des prix et mérites invite les membres de l’ACACC à soumettre la candidature du membre qui, à leur avis, est admissible au Prix d’excellence. Selon les règles du concours, l’heureux(se) élue(e) sera toute personne dont le nom a été retenu en vertu de sa participation considérable au développement de la profession qu’est celle du cartothécaire. Sa contribution peut se quantifier de différentes façons: activités particulières ou générales, participation soutenue au sein de l’Association en tant que membre du comité d’administration, président ou membre d’autres comités. Bien que ce concours s’adresse surtout et avant tout aux adhérents de l’Association, les non-membres dont le dossier s’apparente à celui des membres réguliers de l’ACACC auront droit à une nomination analogue.

Date d’écoulement du concours: 1er mars 1995. Veuillez faire parvenir vos suggestions de candidats à Alberta Wood, Présidente, Comité des prix et mérites, ACACC, Bibliothèque Elizabeth II, Université Memorial, St-John’s, Terre-Neuve A1B 3Y1
NEW BOOKS & ATLASSES

Bruce Robin


NEW MAPS

Amy Chan

Afrika, Misereor-Landkarte. Redaktion, Siegfried Baumgartner. Scale 1:8,000,000. Obertshausen bei Frankfurt am Main, Germany: Kartographischer Verlag Reinhard Ryborsch, [1994].


Réseaux électriques à haute tension, Belgique = Belgïe, elektrische hoogspanningsnetten. Institut geographique national. Scale 1:300,000. [Brussels?]: C.P.T.E., [1994]


John D. Lines describes his book as “an attempt to relate... the significant events that have shaped the mapping of Australia over the last 200 years.” With 36 years spent in Australian mapping, the author is well qualified to review the history of his country’s cartographic development from Captain Cook’s explorations in 1770 to modern satellite imagery.

This book should be of interest to Canadian cartographers because of the similarities in the development of our two countries: the parallel patterns of settlement, the often harsh (albeit markedly different) climates, the vast hinterlands left unsettled and poorly mapped for over a century, and the sharing of mapping responsibilities between the federal governments, the provincial/state governments and the military. There is, however, a major difference.

In Canada, the federal government has maintained a dominant position in mapping, with generally good cooperation from the provinces and the military. Australian mapping, on the other hand, has been plagued by internal conflicts. The author traces these disputes to the founding of the Australian Commonwealth in 1901 when the states retained their full mapping powers and the federal government was given only the responsibility for mapping to meet its own requirements. The author makes an interesting comparison of the practical results of the two systems. He cites a 1931 Australian report which estimated that, with approximately double the budget, the RCAF was then completing annually from 10 to 20 times more aerial photography than the RAAF. World War II brought cooperation between the Australian governments, but after 1945 the resurrection of state’s rights again created problems, and now in the 1990s, Mr. Lines suggests with respect to Australian mapping, “there is an urgent need for [a] national assessment of what is now realistic and affordable.”

In addition to inter-governmental problems, which take up about a quarter of the book, the author also provides much information about the Australian experience in surveying and mapping this incredible country. For the non-Australian, this is the most valuable portion of the book. But it must be noted that this is not a “people” book, like Don W. Thomson’s Men and Meridians, and while it is closer to N.L. Nicholson and L.M. Sebert’s The Maps of Canada in a general way, it is not nearly so well written.

Indeed, Mr. Lines’ book needs a good copy-editor, because he is his own publisher. There are far too many grammatical errors and awkward sentences in the text, and for an Australian, the worst error of all is that in one reference Mr. Lines mispells the surname of Australia’s most beloved poet, A.B. “Banjo” Paterson. It does make you wonder.

The book is well produced in hard cover on high quality paper. But its attractive appearance is offset by organizational problems. The index is far too limited in scope, mostly individuals, but even at that, there are many people referred to in the text who do not appear in the index. Most of the illustrations need a fully descriptive cut-line so that they may be referred to independently of the text. And in a book in which acronyms abound, a glossary is needed for the reader’s benefit.

Despite these negative comments, I would still recommend this book for acquisition. It provides a comprehensive survey of Australian mapping that is unlikely to be found in any other single volume. And anyone involved in Canadian mapping would find much of interest in the Australian experience as outlined in this book.

William C. Mills
Department of History
University of Alberta

Richard Appleton is known for his reference books including his editorial work on recent editions of The Australian Encyclopedia. In this Cambridge Dictionary of Australian Places, Richard and Barbara Appleton have produced another useful Australian reference book. The work is first and foremost a ready reference guide for geographically locating place names in Australia.

The dictionary covers all Australian states and territories listing the names of population centres from major cities to small townships; incorporating thousands of towns, suburbs and local government areas. Important geographic features, national parks, dams and regions are also listed. Entries vary in length from two lines to half a page depending on the significance of the place. All entries give the geographic location of the place either by latitude and longitude or by proximity to other places and every name listed has a reference to the series of maps found at the end of the book. These maps are a particularly useful feature of the book. For the larger population centres, entries include a general description (covering climate, economic activity, etc.) and a paragraph on history. Population figures taken from the 1986 Australian Census of Population and Housing are provided for urban centres and rural localities.

Origins of most place names are discussed and where necessary, an acceptable pronunciation is provided. Almost a third of the place names listed derive from Aboriginal words and the authors have sought advice on meanings from linguists specialising in the local Aboriginal languages. In many cases, long accepted meanings are shown to be incorrect in the light of recent linguistic research.

A book of this kind can never be exhaustive for a country which has an estimated four million place names spread across the vast Australian continent and associated islands. Not surprisingly, therefore, careful selectivity has been necessary. The preface describes the rationale for choosing the names which are listed individually. Many more place names which do not have separate entries, appear under the heading of a larger centre.

The text is factual and clearly written and the entries are well laid out. However, the brevity of the entries, perhaps characteristic of a reference book such as this, means that much information is left out. Although the authors indicate the sources of information used in compiling the book, a bibliography of further readings would be a useful enhancement to provide a starting point for the reader who seeks more detailed information.

Some minor editorial lapses detract slightly from the otherwise excellent quality of the work. In a small number of cases, the secondary listing for a place name is misspelt or incorrectly listed (e.g., under Brisbane, Woolwin for Wooloowin; under Logan, Merah and Tarah listed separately for Tanah Merah). In all these cases, the main entry is correctly listed. These errors were no doubt introduced in the final processes of automatic typesetting and I am sure will be rectified by the authors in future editions.

Despite these criticisms, The Cambridge Dictionary of Australian Places is a valuable ready reference source. It draws together information on more than 4,700 place names in a convenient and accessible format. In terms of the breadth and scope of information presented, the work fills a niche not covered by any other Australian reference book. Recommended for map libraries and other libraries with any interests in Australia.

Wendy Abbott
Environmental Sciences Faculty Librarian
Griffith University
Nathan, Queensland, 4111, Australia


John P. Snyder is an expert in the field of map projections. He has considerable experience with U.S. Geological Survey and has taught university level courses in map projection.

Flattening the Earth is a benchmark work which will become a classic in the field. It is a scholarly book - heavily researched and well - documented. At 365 pages, this book is much more comprehensive than any other single work on the subject. The bibliography is extensive and the book is well-indexed, making it a useful reference tool.

Snyder breaks the history of map projection into four periods: Classical through Renaissance, 1670-1799 (Age of Mathematical Enlightenment), Nineteenth Century and Twentieth Century. Within each time period, he describes the classes or types of projections which developed.
At the end of each time period, Snyder supplies a handy table of the projections which developed during that period. The content of the text is encyclopaedic in nature, but much of it is presented in an historical narrative format, which keeps it readable.

For each projection, Snyder has provided a detailed description, a diagram and often the formula, for those who wish to plot it themselves. While a few of the diagrams depicting the projections are reproductions of the original maps, most are computer generated diagrams. Some users, particularly historians who need to work with the original image, may find this a shortcoming. However, for the pure study of projection, it actually increases the ease of use. The uncluttered presentation and uniformity of style makes comparison easy.

In addition to the technical detail, Snyder has included some of the history surrounding the projections' development and applications. There are numerous photographs of cartographers and the historical detail often includes personal background information as well as that of the cartography of the day.

Whether one wants to identify a particular projection, find sample projections, study the influence of projections or study any period of cartographic history, this volume will serve as a good starting place. It is a "must buy" for any library which supports research or course work in either cartography or history.

Sandy Campbell
Science and Technology Library
University of Alberta
Edmonton, Alberta


The atlas under review is the second and final volume of the 3-volume Historical Atlas of Canada. Volume I: From the Beginning to 1800, was published by the University of Toronto Press in 1987 and volume III: Addressing the Twentieth Century, 1891-1961 appeared in 1990. Volume II: The Land Transformed, 1800-1891 was published three years later in 1993 thus completing the set.

This volume was delayed largely because of funding problems. Work fell behind schedule as a result of difficulties finding accurate 19th-century data; worse still, the editor, Louis Gentilcore, became ill. Then in 1990 the atlas project's Executive Committee decided to hasten the production process through computerization; ESRI (California), the developers of Arc/Info GIS software, provided the technical means by which the atlas could be completed with existing funds. According to Geoffrey Matthews, the project cartographer/designer, only eight of the 58 plates were produced partially by manual cartography; all the others were done entirely by computer. It is ironic that volume III, which deals with the 20th century, was done by hand whereas volume II, the 19th century, was created by computer.

The first six plates, comprising the Introduction, are small scale maps of Canada which provide an overview of the period. One plate illustrates population distribution in 1800 and another, in 1891; a third plate shows the extent of exploration in Canada to 1851 and yet another, to 1891. The remaining 52 plates, which constitute the bulk of the atlas, are divided into two sections. The first of these is entitled Extending the Frontier: Settlement to Mid-Century (plates 7 to 20) and the second is Building a Nation: Canada to the End of the Century (plates 21 to 58).

The Frontier section includes three plates which describe the immigrant population and ten which deal with Canada's expanding economies (for example, timber production, agriculture, and the fur trade). The second and much larger section of the atlas covers a great many topics including: the invasion of 1812-1814, growth of Canadian railways, dispersal of the Metis, agricultural change in Ontario, social change in Montreal (1842-1901), and religious denominations (in 1891), to name but a very few.

The two-page plates in this atlas typically consist of an amalgam of text, maps, charts, graphs, tables, photographs, and drawings. Plate 51, "The Printed Word," illustrates this point and provides an example dear to a librarian's heart. There are five maps, five bar charts, three pie charts, two graphs, one table, and more than 50 lines of text designed to describe or indicate the locations of public libraries and newspapers in 1891, the growth of mechanics' institutes from 1828 to 1852, the date of the first newspapers in each province, the growth of mechanics' institutes from 1885-1893), and so on. Some of the plates in the atlas provide a broad overview of a complex subject by means of a time series of small scale maps of Canada or its major regions. An example of this is provided by plate 37, "Canadian Fisheries, 1850-1900."

At the other extreme are plates which are more focused in terms of geography and/or time period; this is illustrated
by plate 50, "Commerce in the Toronto Core in 1881."

The material for each of the plates in this atlas was researched and authored by scholarly specialists. This work was then passed to the cartographic staff who designed and created the graphics. Overseeing this complex working relationship were the production editors who constituted a core working group. The end result is a magnificent atlas with plates that are informative, colourful, and attractive. On the other hand, it is worth noting that the plates can be overwhelming for those not prepared to take the time to absorb the large amount of textual and graphical detail.

The concluding section contains notes and bibliographies that pertain to each of the plates in the atlas. Unfortunately there is not also an index for the volume. This is an omission that is common to all three volumes in the set. The reader will find it a time-consuming task to determine whether the atlas contains information about, for example, the Fenian raids in the 1860s or canal building prior to the emergence of the railways.

Priced at $95, this sturdily bound volume of the Historical Atlas of Canada represents excellent value. No Canadian academic, high school, or public library should be without this atlas nor in fact the complete set of three volumes.

Richard Pinnell
University Map and Design Library
University of Waterloo
Waterloo, Ontario


"His account is an informative and accessible introduction to this revolutionary period in the history of cartography", is how the publishers describe Harvey's book, which as a brief descriptive appetiser to Maps in Tudor England is in danger of rendering the reviewer's role obsolete. The book is lavishly illustrated, beautifully incorporating eighty-one high quality colour and black and white photographs of maps selected in the main from the British Library and Public Record Office collections. Harvey lucidly describes the stages of cartographic evolution occurring in sixteenth century England, a period witnessing a significant increase in general familiarity with maps, especially focusing on mapping's political and social impact. The subject is examined in seven chapters of variable length, ranging from eight to twenty-four pages. A precise indication of the book's content can be gleaned from the chapter headings: A cartographic revolution; Maps and fortifications; Maps and government; Maps and towns; Maps and landed estates; Maps and buildings; and Maps and the Law. As a more specific guide to content, the twenty-four page chapter on "Maps and government" comprises roughly fourteen pages of illustrations, just eight pages of text, the remainder consisting of captions for the photographs (each caption accompanied by the map's shelf mark at the source library). Space in the generous margins is often occupied by references to illustrations located elsewhere in the book, permitting a quick turn of page to identify a particular cartographic specimen. The balance of text and map is satisfactory, resulting in an uncluttered, easy-on-the-eye format.

Maps in Tudor England is not aimed directly at the academic community. There are no footnotes, and technically no bibliography. Occasionally maps are referred to in the text, for example a 1540s map of York described on pages 68-69, or the Agas map of Oxford (1578) on page 75, but no indication is given as to where copies of these maps might be located - they certainly do not appear within the pages of the book. A "Further reading" section of two pages recommends additional, primarily recent titles, supplemented by a bibliographic citation and description of the work in question, usually occupying no more than a single sentence. Those works cited however represent an impressive core of cartographic literature, including English map-making 1500-1650 edited by Sarah Tyacke, Peter Barber's contributions to Monarchs, ministers and maps, and a number of journal articles.

Overall, the book performs something of a dual role: stimulating interest in mapping of that period of English history for those readers who may only have a passing fascination with cartography; whilst also proving a valuable addition to any map library's collection on the strength of its illustrations, ably demonstrating cartographic styles of Tudor mapping, from the large scale cadastral plan to maps of the whole of Great Britain. Priced at only $29.95 / £17.95, the book should be well within the financial means of any map collection and is to be wholeheartedly recommended.

Nick Millea
Bodleian Library
Oxford
Simple Computer Imaging and Mapping is presented in three parts: Part 1 is devoted to data input, with emphasis placed on digital scanning. Part 2 introduces image processing methods, image correction and mosaicking procedures, and discusses the limitations of map measurements based on the final products. Part 3 discusses output formats and a practical way of generating maps at different scales (sizes).

This publication would be of great interest to professionals, whose occupation requires modern mapping information, but who are not familiar with the computer-based tools that one normally requires some expertise with in order to use a GIS or manipulate digital Earth images (as supplied by remote sensing instruments). Simple techniques and methodologies for manipulating non-rectified products (aerial photographs) to create an integral map, are described in detail. For the geographer who has this background, the guide provides a very applied perspective that is often given a secondary importance to technical excellence required for Geographic Information Systems.

I would recommend this as a very useful guide for those required to execute practical mapping projects in regions where data resources and hardware resources are limited - generally the majority of projects in developing countries. Maps and other spatial information normally available in such regions of the world are often out of date. This work describes the steps involved in obtaining a current map product with limited resources. The GIS literature (both as books and publications in learned journals) have put much emphasis on spatial integrity, whereas for most applied work, moderate spatial accuracy is usually sufficient and it is the temporal accuracy that is of greater importance: how to achieve the latter is clearly set out by the authors.

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Simple Computer Imaging and Mapping is a well-written, step-by-step handbook, that is designed to provide the user with quick and uncomplicated techniques for generating computer maps, that are equally applicable in the laboratory as well as in the field. The entire methodology is presented without reference to specific types of hardware or software, given the subtle differences that are present among many of the programmes that are currently available. With the emphasis on inexpensive, yet practical techniques, the procedures outlined in this guide are not geared towards the production or analysis of accurate, georegistered maps and images, that can be produced with existing Geographic Information Systems (GIS) and image processing software. However, due to the interconnected nature of the GIS, image processing and computer mapping fields, there is always some overlap among the concepts and even techniques that are used. Although disclaiming to be a review of GIS and image processing, Simple Computer Imaging and Mapping manages to integrate GIS-based concepts such as raster vs vector representations, the problems presented by partial cells in the measurement of features on maps, as well as image enhancement techniques, at the right level of discussion for introductory, and intermediate users, without too much theoretical detail as to cause confusion.

In keeping with its general purpose, the text is organized into three main sections: Input, Processing, and Output. In each section, a chapter on the theory involved in a particular application (be it creating a digital mosaic or generating hard copy output), precedes the actual discussion of the technique itself. The scanning of aerial photos and maps is the only type of data entry that is covered in the Input chapters, although reference is made in passing to digital satellite imagery as a potential source.
of data, in Appendix C. Once the data have been scanned, they are then enhanced to increase/make clearer the spatial relationships between the observed features. Although this chapter presented a clear introduction to the concepts of brightness and contrast and the use of linear contrast stretching, reference to other enhancement techniques could have been included, so that users who were thus inclined, or whose real world situations warranted the use of other enhancement techniques, would have had a starting point for further research.

The theoretical chapter on "Digital Mosaics" tended to be somewhat weaker than other theoretical chapters, although the discussion of the technique itself was well presented via the effective use of worked examples. Once the necessary digital patching of the scanned photos and map(s) was complete, computer maps were then created in raster (pixel-based) or vector (line segment-based) formats depending on the type of software used. Here, techniques like on-screen digitizing will be familiar to GIS users, who may find the use of the term 'open polygon' to represent linear features such as rivers and roads (which are usually treated as lines in vector-based GISs) somewhat confusing. "Making Maps" tended to be more of a practical application chapter than a theoretical one, although the "Measuring Maps" discussion presented invaluable ways around some of the common pitfalls associated with linear measurements across pixels.

The final section was devoted to the generation of hard copy output, its presentation and inclusion in reports. Topics ranged from the essentials of every good final map product, to the pros and cons of lamination.

The three major sections were then summarized graphically in the afterword, and supplemental details on the concepts introduced, the maintenance of a digital database, satellite data, the actual software and hardware used in the Guide itself and selected readings were presented in the final five appendices.

Simple Computer Imaging and Mapping can be recommended as an introductory-intermediate tool for practical-based image manipulation, as well as a stepping stone to more rigorous GIS concepts and techniques. It was first published in 1993 by The World Bank and GIS World Inc. The current 1994 edition is a publication of ThinkSpace Inc.

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The Conservation Atlas of Tropical Forests, Africa is the second in a series, following the Atlas covering Asia and the Pacific (1991). The series was produced under the Forest Conservation Programme of IUCN (International Union for Conservation at Nature and Natural Resources), The World Conservation Union and the World Conservation Monitoring Centre (Cambridge, U.K). This series is clearly most timely, because of the confusion that reigns regarding the area of remaining tropical rain forest, the annual rate of depletion, the ecological and administrative condition of the remaining rain forest, and national and international policies regarding the future.

Part 1 of the Atlas describes the issues, the history of forests and climate, biological diversity, conservation of large mammals, and the peoples of the forests. There are also discussions of the links between population, environment and agriculture, the timber trade, the system of protected areas and the future for Africa's forests. Part 1 is supported by excellent diagrams, statistical tables, photos and references. The statistical compilation for Table 6.1 on food consumption, agriculture, population and the environment is especially valuable.

Part 11 of the Atlas is a country by country survey of the forests of Africa: Each survey contains an inset with data, ranging from land area and population to forest area and processed wood exports (13 items), followed by an introduction, then sections on, the forests, mangroves, forest resources and management, deforestation, biodiversity, conservation areas, initiatives for conservation, references, authorship and as well by excellent, 9" x 12", four-color maps. Some countries have more than one map dedicated to them. In the case of Zaire, there are three, due to the fact that Zaire contains over half of the continent's tropical moist forest. The maps have been compiled from satellite and radar imagery, aerial photographs and from the most recent information provided by forestry departments and development agencies. Both maps and text were prepared by a broad spectrum of specialists (approximately 120). There are also very useful black and white maps, diagrams and tables, as well as excellent color photographs. Two pages of acronyms and a glossary are included.

This volume has much of interest for anyone concerned in environmental issues, the history, geography, forestry, botany, development, and economics of tropical Africa. For the specialist there is a great deal of detail pertaining
to the forestry industry, and to the sources of all the information used, especially of the map data.

The exciting jacket design by Robert Updegraft contains a front cover Meteosat satellite image of the earth showing Africa. The back cover provides bibliographic data for the first atlas in this series, that on Asia and the Pacific.

To conclude I wish to raise the question of what does it take for a volume of this size and scope to be considered primarily as an atlas, rather than a book. There are 288 pages and within them in Part 11, there are 22 colored country maps and 11 small black and white country maps, while Part 1 contains 11 small black and white maps and 2 colored maps. Presumably the primary purpose is to present the colored country maps, but is that justification for the use of ‘Atlas’ in the title?

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Department of Geography
McGill University


The Nystrom Desk Atlas is published by the Chicago firm founded in 1903 and a division of Herff Jones, Inc. which specializes in maps and globes as well as atlases, science charts and Eye Gate Media filmstrips. It is a compact, softcover desk atlas with much visual appeal. To this untrained eye, the world physical and political maps appear to be in the Robinson projection and theme world maps in the Eckert IV projection, judging by the helpful “Map Projections” explanatory section at the back of the book.

The atlas is divided by region, from “World” through North America, Canada, United States, Middle and South America, Africa, Mediterranean Basin and Persian Gulf, Asia, Australia, Pacific Rim, Arctic, and Antarctica. Each of these sections contains a physical and political map, thematic maps, and occasional graphs. A few historical theme maps of Europe and the Middle East seem to have been added as an afterthought. Small colour photos to “portray the characteristics of a place like nothing else can” (Introduction, p. [6]) appear in conjunction with some maps and graphs. In fact, the atlas is alive with colour and appealing to the eye. Sadly, in light of recent events, one of the three pictures chosen to portray Canada is of a coastal fishing village with the legend that “fishing has been an important industry in Canada’s Maritime Provinces since the late 1400s.” The empty look of the political maps having been “carefully edited to keep them uncluttered” (Introduction, p. [6]) and the presence of the pictures suggests a juvenile audience, and Nystrom is in the business of publishing for that level. Regrettably the binding may not stand up to eager, young hands: it is glued, not sewn, and the cost of rebinding in hard-cover should be costed into the price by any high school librarian who chooses to purchase it.

The United States is accorded 29 pages, Canada 11, and Asia 12. Size comparison maps of various countries and regions from Canada to the Sahara are all superimposed on a map of the U.S. The only thematic map on immigration is “Worldwide Immigration to the United States” with a graph showing “Percentage of all immigrants to the U.S.” Many other comparative theme maps almost invariably refer to the U.S.

The atlas is fairly up-to-date: the great changes in recent years of the political boundaries in eastern Europe and the former Soviet Union are all recorded. There are peculiarities in some of the graphs. Pinatubo (1992) appears under “Notable Volcanic Eruptions”, but “Notable Earthquakes” does not include the Armenian earthquake of 1988 which caused the deaths of 55,000 people.

Thematic maps are interesting, sometimes dramatic and thought-provoking, and always colourful. Thematic maps on p.24-25 show “Available Health Care” in the world colour-coded according to “People per physician”, “Life Expectancy”, “AIDS...Reported cases per 1 million people” and bar charts of “Causes of Death” in selected, representative areas such as United States and Malawi. The editors are careful to warn that “often the patterns on one thematic map become more meaningful when compared to the patterns on another” (p. [6]).

A thematic map showing “International Trade Organizations” coverage of the world, is also interesting. Mexico’s entry into the North American Free Trade Agreement came too late for inclusion in the area covered by NAFTA. Another interesting map on the theme “Major Languages”, has Quebec divided almost in three: Romance/Celtic, American Indian, and Inuit/Aleut. The atlas even includes ozone depletion maps for the northern and southern hemispheres, and a world fisheries “annual catch per 1,000 people” map.

The graphics are very fine. A good example is the small “Speed of Travel” graph on page 29 listing significant or world records set by different modes of travel from New York to Europe. Each record is represented by a coloured silhouette of the vessel or plane. The ship Queen Elizabeth II which, according to the chart, made a cross-
ing in 5 days in 1993, is accurately profiled. One wonders, however, why the “Lucania”, never noted for speed, is included in the list - and inaccurately depicted as a “four-stacker”- while there is no mention of the fastest ship of all time, the S.S. United States, whose record-breaking crossing of 3 days, 10 hours, and 40 minutes remains unbeaten to this day. The atlas is somewhat uneven in its coverage of transportation. Only U.S. interstate highways and the Trans-Canada Highway are shown, and rail systems for the U.S. and Europe. A small world map tucked away at the bottom of page 135 indicates shipping lanes and annual amount shipped.

Cross-section physical representations are especially fine and effective with the use of colour and 3D to graphically convey the wide range of landscapes of different countries and regions.

In addition to the standard table of contents, the atlas provides a list of thematic maps and graphs, a complete, easy-to-read legend and, at the back of the book, country tables by region giving the capital, principal languages, population, area, population density, and natural population growth per 100 people. (Canada’s principal languages are listed as English, French, Italian, and German.) A glossary, index, and pronunciation key are also provided.

This is a good, visually appealing atlas to buy for an American high school library collection, and possibly also for a Canadian one if an up-to-date atlas emphasizing Canada did not exist. Datedness mentioned in a review of a 1994 publication raises the question of the effectiveness of printed atlases in comparison with more easily updated - but more costly - computerized packages. The Nystrom Desk Atlas is already dated on a couple of points. But almost all of it is up to date and it can still be recommended especially for schools on a tight budget. Its wide variety of thematic maps in addition to the standard political and physical maps all wrapped up in a relatively compact, attractive package is almost guaranteed to stimulate young minds. It would also make an attractive, educational gift for a first or second year high school student. An American public library conscious of its high school clientele would also benefit by having a circulating copy in its collection, rebound in hardcover of course.

Marilyn Fransiszyn
Library Instruction
McGill University Libraries
ALBERTA

William C. Wonders Map Collection, University of Alberta (Sandy Campbell)

As of August 31, 1994, Ron Whistance-Smith formally retired from his position as Curator of the William C. Wonders Map Collection. He is now a volunteer, getting done some of the things that he always wanted to do in the collection.

ONTARIO

OCUL Map Group (Trudy Bodak, Chair)

OCUL Map Group Meeting: Report of the November 18th Meeting

On November 18th, the OCUL Map Group held its fall meeting at the University of Toronto. One of the major topics on the agenda was the Ontario Ministry of Natural Resources Electronic Information Multiple End-User Licence Agreement. Copies of the agreement were distributed to members, and C. Moulder from McMaster reported on McMaster's multi-user licence agreement for the OMNR Ontario base map digital data. After considerable discussion, a small subcommittee of the OCUL Map Group was established to review the OMNR multiple end-user licence agreement. The subcommittee plans to meet with OMNR in the New Year to discuss and clarify any problems with the agreement.

There was also some discussion about the CANCOPY agreement, since some member institutions had already signed or were in the process of signing this agreement.

B. Farrell from Carleton gave a report on the Depository Services Program Review and on the Data Liberation initiative. There was general agreement among members that, although we can do little in the immediate future, we need to monitor these developments closely. We must also make our needs known, and we must liaise more with Government Documents people.

The status of the Canadian phase of the ARL GIS Literacy Project was a topic on the agenda. Members learned that the delivery of Arcview 2 is imminent and that training for those Canadian libraries that want to participate is in the planning stages for early 1995. There was little information available about the acquisition of Canadian data files, except for the fact that work is ongoing to secure these files.

The meeting ended with R. Pinnell from Waterloo giving a demonstration of the University of Waterloo's hypertext information system (Electronic Library). Anyone with an internet connection and Mosaic software running on a PC or Macintosh can access the Electronic Library using the following URL: http://www.lib.uwaterloo.ca/.

University of Guelph (Flora Francis)

A message from Flora...

As I leave the Map Collection and the Library at the University of Guelph to enter a new phase in my life, that of retirement, I would like you all to know how much I enjoyed being a member of the ACMLA and meeting so many interesting and friendly people over the years. The Association has enabled me to see Canada from Alberta to Newfoundland via the annual conferences. I did miss the Victoria and Edmonton conferences but I hope to make up for that at Vancouver next year.

I'd like to say a sincere thank you to all and I will cherish all the memories both through photographs and other memories. I plan to keep in touch, so I'll end here by extending my "Best Wishes for a Most Successful New Year in the Map Library world".

Flora Francis
Serge. A. Sauer Map Library, University of Western Ontario (Cheryl Woods)

Three major projects have been completed: moving 2000 US County Soil Surveys from the Map Library to a nearby storage room; weeding 376 drawers of non-Canadian material pre-1970; and doing an atlas inventory of our 2221 titles. We very happily accepted the donation of an original De L'Isle map entitled Carte de la Louisiane et du cours du Mississippi. The Geography Department has set up an information site about the programs in the department and its units that includes information about the Map Library at: http://sparky.s scl.uwo.ca

Map Library, Canadian Geoscience Information Centre, Geological Survey of Canada, Ottawa (Irène Kumar)

Beverly Chen, formerly the Coordinator for the Special Collections which include the Map Library, is now the Associate Head of the Canadian Geoscience Information Centre. We wish her all the best in her new position.

Since mid-October, the Map Library circulation has been partially automated. Basically, all map series sheets and catalogued monographic maps are barcoded as required to fill the circulation requests and checked out through our integrated library system (Innovative Interfaces Inc.). More than half of our total circulation is now done in this fashion.

Denis Allen and I demonstrated the Geological Survey of Canada Map Information System at the ASTED Conference, on October 29th, 1994, in Hull, QC. This system provides graphical access to bibliographical references on over 16,000 maps published by the Geological Survey of Canada. It will eventually include the GSC open files released as maps and some provincial mapping. We demonstrated the version 2 although it is still in its experimental phase. This new version, scheduled to be released in 1995, will be PC-based and menu-driven and will be using ArcView GIS software.

More about Beverly...

Effective November 07, 1994, Beverly Chen was appointed Associate Head of the Canadian Geoscience Information Centre, Geological Survey of Canada. Beverly was formerly Map Librarian and then Coordinator, Special Collections for the Centre. As Associate Head, Beverly will be involved in helping to refine and develop operations and services for the Centre as a whole, which, in these times of diminishing resources, will challenge her creativity. In her new position she is also managing or coordinating a number of special projects and coordinating the Bibliographic Access Team which includes staff responsible for the Centre's acquisitions, cataloguing, serials processing, GEOSCAN database, products and promotion activities.

Beverly is going to miss being directly involved in the map world and ACMLA but will try to stay in touch and remain as active as possible. Her office is now in room 350, 601 Booth St., Ottawa, K1A 0E8 and she can be reached at (613) 947-6587, FAX (613) 943-8742, Internet: chen@gsc.emr.ca.

University of Ottawa Map Library (Grace Welch)

The public PC workstation was recently upgraded to a 486 DX/66 Mhz with 8 MG of RAM. As well, a printer has been installed on the public access terminal so that users can save and print bibliographies from ORBIS.

In late November, Bruce Robin successfully defended his masters thesis in history at the University of Ottawa. His thesis is entitled *Religious controversy and historical methodology in Pierre Bayle's Critique Générale*.

Map Library information is now available on the University of Ottawa gopher (gopher.uottawa.ca). Our new acquisitions list, guide to the collection, list of cartographic references and list of electronic products can be found in the Map Library section (under About the Library Network, Information by library menu items).

The cataloguing reconversion of the collection is progressing well. Cataloguing of Canada as a whole has just been completed and is now available in the ORBIS. All of the sheets in the 5th edition of the National Atlas of Canada and the ACMLA Facsimile series have been catalogued individually to improve access to these key reference works.

Map Library staff actively participated in the Joint NACIS/CCA Conference which was held at the University of Ottawa in early August. The Map Library mounted two exhibits for the conference; a selection of early Canadian maps from the collection was displayed in the foyer adjacent to the conference; and a display in the Map Library entitled "Map Libraries: Bridging the Gap between the Map Producer and Map User" showing publicity material, posters, facsimile maps, etc. from various Canadian map libraries highlighting their efforts to publicize and educate users about cartographic products. Thanks to all those map librarians who contributed material for the display.
Another map library on the move! The Map and Air Photo Library moved from its longtime location in a building housing several related academic departments to the new Joseph S. Stauffer Library, which opened in October 1994. The Stauffer Library and the renovated Douglas Library will form the central library complex. The move and attendant reorganization make operational the integration of the Map and Air Photo Library, the Social Science Data Centre and Government Documents within the Documents Unit. There is to be more staff sharing in service support and delivery. The plan is that reference staff will provide assistance to all aspects of the collection from one service desk and have responsibility for in-depth service and collection development within a field of specialization.

NOUVELLES RÉGIONALES

ALBERTA

Collection de cartes William C. Wonders, Université de l’Alberta (Sandy Campbell)

Depuis le 31 d’août 1994, Ron Whistance-Smith a pris sa retraite, il occupait le poste de conservateur de la collection de cartes William C. Wonders. Il est maintenant un bénévole et s’affaire à différents projets dans la collection des cartes.

ONTARIO

Groupe de cartes «OCUL» (Trudy Bodak, Présidente)

Rencontre du groupe de cartes «OCUL» : Rapport de la rencontre du 18 novembre

Le 18 novembre, le groupe de cartes «OCUL» a tenu sa rencontre automnale à l’Université de Toronto. Un des sujets principaux à l’ordre du jour était l’entente «Electronic Information Multiple End-User Licence» du ministère des Ressources naturelles de l’Ontario (MRNO). Des copies de l’entente ont été distribuées aux membres et C. Moulder de l’Université McMaster a fait rapport de l’entente «sous licence» multi-utilisateurs pour la base de données digitales de cartes du MRNO. Après de longues discussions, un petit sous-comité a été mis sur pied pour revoir les «multiple end-user licence agreement» du MRNO. Le sous-comité planifie une rencontre avec des représentants du MRNO pendant la nouvelle année afin de clarifier tous les problèmes qui pourraient exister avec l’entente.

Il y a aussi eu des discussions au sujet de l’entente «CAN COPY», puisque certaines institutions membres ont déjà signé ou avaient entamé le processus afin de signer cette entente.

B. Farrell de l’Université Carleton a présenté un rapport sur le «Depository Services Program Review» et sur le «Data Liberation initiative». Les membres étaient généralement d’accord sur le fait qu’ils peuvent faire très peu pour le moment, mais ils doivent suivre ces développements de près. Nous devons faire connaître nos besoins et nous devons avoir un contact plus régulier avec les personnes travaillant aux documents gouvernementaux.

Le statut de la phase canadienne du projet «ARL GIS Literacy» était aussi à l’ordre du jour des discussions. Les
membres ont appris que la livraison de «Arcview 2» est imminente et que la formation pour les bibliothèques canadiennes qui veulent y participer est dans la phase de planification pour le début de 1995. Il y avait peu d'information disponible en ce qui a trait à l'acquisition des fichiers d'information canadiens sauf pour le fait que le travail est sans relâche pour obtenir ces fichiers.

La rencontre s'est terminée avec la présentation de R. Pinnell de Waterloo, sur le système d'information «hypertexte» de l'Université de Waterloo (bibliothèque électronique). Toute personne ayant accès à Internet et ayant le logiciel «Mosaic» sur son ordinateur Macintosh ou autre peut avoir accès à la bibliothèque électronique en utilisant l'adresse «URL» suivante : http://www.lib.uwaterloo.ca/.

Cartothèque Serge A. Sauer, Université Western Ontario (Cheryl Woods)

Trois projets d'importance ont été complétés : 2000 «US County Soil Surveys» relevés de comtés américains ont été déménagés de la cartothèque pour être entreposés dans une pièce; 376 tiroirs ont été délestés de matériel non canadien de la période d'avant 1970; un inventaire de nos 2221 titres a été réalisé. Nous avons accepté avec joie le don d'une carte originale de De L'Isle intitulée «Carte de la Louisiane et du cours du Mississippi». Le département de géographie a instauré une aire d'information en ce qui a trait aux programmes offerts par le département et ses unités qui incluent l'information sur la cartothèque à : http://sparky.sscl.uwo.ca

Cartothèque, Centre canadien de l'information géoscientifique, Commission géologique du Canada, Ottawa (Irène Kumar)

Beverly Chen, anciennement la Coordonnatrice de l'équipe des collections spéciales, qui comprend la cartothèque, est maintenant le Chef associé du Centre canadien de l'information géoscientifique. Nous lui souhaitons bonne chance dans sa nouvelle position.

Depuis la mi-octobre, la circulation de la cartothèque est partiellement automatisée. En principe, toutes les feuilles provenant des séries cartographiques et les cartes monographiques cataloguées sont étiquetées au moyen d'un code à barres dès qu'une demande de prêt est requise. Ces cartes sont ensuite empruntées en utilisant notre système soit, Innovative Interface Inc.


A propos de Beverly...

En vigueur depuis le 7 novembre 1994, Beverly Chen a été nommée «responsable associée» (Associate Head) du Centre canadien d'information de géoscience (Canadian Geoscience Information Centre), Commission géologique du Canada. Beverly occupait précédemment le poste de cartothécaire, elle a aussi agi à titre de coordonnatrice des collections spéciales pour le Centre. En tant que responsable associée, Beverly offrira son appui afin de raffiner et de développer les opérations et les services pour le Centre de façon globale, ce qui, dans le contexte actuel de rationalisation des ressources représentera pour elle un défi pour sa créativité. Dans son nouveau poste, elle gérera et coordonnera certains projets spéciaux, tout en assurant la coordination de l'équipe d'accès bibliographique qui inclut des responsabilités au niveau du personnel pour les acquisitions du Centre, le catalogage, le traitement sériel, la base de données «GEOSCAN», les produits et les activités de promotion.

Beverly s'ennuiera probablement du fait qu'elle n'est plus impliquée directement dans le domaine cartographique et l'ACACC, mais elle tentera de rester en contact et d'être aussi active qu'elle le peut. Son bureau est maintenant au 601 rue Booth, pièce 350, Ottawa (Ontario), K1A 0E8 et son numéro de téléphone est (613) 947-6587, télécopieur (613) 943-8742, Internet: chen@gsc.emr.ca.

Message de Flora Francis, Université de Guelph

Comme je quitte la cartothèque et la bibliothèque de l'Université de Guelph afin d'entamer une nouvelle phase de ma vie, soit la retraite, j'aimerais vous dire à tous le plaisir que j'ai eu à être membre de l'ACACC et à rencontrer tant de personnes intéressantes et amicales au cours des ans. L'Association m'a permis de voir le Canada de l'Alberta à Terre-Neuve par le biais des conférences annuelles. J'ai manqué les conférences de Victoria et d'Edmonton, mais j'espère me reprendre en
assistant à celle qui aura lieu à Vancouver en 1995.

J’aimerais vous remercier tous sincèrement et je chéris toujours les souvenirs sous forme de photographies ou autres que j’ai amassés avec le temps. Je veux garder le contact, alors je terminerai ici en vous souhaitant mes meilleurs voeux pour une nouvelle année remplie de succès dans le monde des cartothèques.

Aurevoir.

Flora Francis

**Cartothèque Université d’Ottawa (Grace Welch)**

Le poste de travail informatisé disponible au public a récemment été amélioré, l’ordinateur est maintenant un 486 DX/66 mHz avec 8 mg de RAM. De plus, une imprimante a été reliée au terminal disponible au public afin que les usagers puissent sauvegarder et imprimer les bibliographies de ORBIS.

A la fin novembre, Bruce Robin a défendu avec succès sa thèse de maîtrise en histoire à l’Université d’Ottawa. Le thème de sa thèse était « Religious controversy and historical methodology in Pierre Bayle’s Critique Générale ».

L’information pour la cartothèque est maintenant disponible au « gopher » de l’Université d’Ottawa (gopher.uottawa.ca). La liste de nos nouvelles acquisitions, le guide à la collection, la liste des références cartographiques et la liste des produits électroniques se trouve maintenant dans la section de la cartothèque (sous « About the Library Network »), information selon les items du menu de la bibliothèque).


Les membres de la cartothèque ont participé activement à la conférence conjointe « NACIS/CCA » qui s’est déroulée à l’Université d’Ottawa au début du mois d’août. La cartothèque avait préparé deux expositions pour la conférence soit : une sélection de cartes datant des débuts du Canada provenant d’une collection ont été exposées au foyer adjacent à la conférence; et une exposition à la cartothèque intitulée « Map Libraries: Bridging the Gap between the Map Producer and Map User » avec du matériel publicitaire, des affiches, des cartes fac-similées, etc. de diverses cartothèques canadiennes soulignant leurs efforts afin de publiciser et d’informer les utilisateurs au sujet des produits cartographiques. Nous remercions toutes les cartothèques qui ont fourni du matériel pour cette exposition.

**Cartes et photographies aériennes, Bibliothèque Stauffer, Université Queen’s (Shirley Harmer)**

Une autre cartothèque en mouvement! La cartothèque et la bibliothèque de photographies aériennes a été déménagée du lieu qu’elle occupait depuis longtemps à un édifice abritant plusieurs départements académiques liés à la nouvelle bibliothèque Joseph S. Stauffer, qui a ouvert ses portes en octobre 1994. La bibliothèque Stauffer et la bibliothèque Douglas rénovée formeront le complexe bibliothècaire central. Le déménagement et la réorganisation rendent l’intégration de la cartothèque et la bibliothèque de photographies aériennes opérationnelle, le centre d’information des sciences sociales et les documents gouvernementaux à l’intérieur de l’unité des documents. Il y aura un plus grand partage des ressources humaines les services de soutien et la prestation des services. Le but est d’avoir un guichet unique à partir duquel les employés pourront offrir services et assistance dans tous les aspects de la collection en plus d’avoir la responsabilité d’offrir des services en profondeur et le développement de collections dans un champ de spécialisation.

**QUÉBEC**

**Université de Québec à Chicoutimi (Pierre Roy)**

Les Archives Nationales du Québec, Centre d'Archives de Québec et de Chaudière-Appalaches - Division des archives cartographiques et architecturales (Claude Boudreau)

Environ 10 000 cartes et plans manuscrits ont jusqu'à ce jour été décrits et saisis sur base de données (Edibase). En plus de contenir les zones de descriptions propres aux règles de catalogue (RCAA2) et aux (RRDA), la description comporte aussi des zones décrivant les lieux couverts selon l'importance, soit : Entités géographiques principales (provinces, villes, cantons, seigneuries, fleuve, etc.) et entités géographiques secondaires (paroisses, rues, rangs, anses, etc.). De plus, la description comporte une zone sujet qui fait référence au contenu, et ce, tant en ce qui concerne les éléments naturels (relief, réseau hydrographique et autres) que les éléments anthropiques (divisions administratives, habitats, industries, réseau routier, etc.). La fonction GrechercheH du système permet d'utiliser jusqu'à trois termes lors de l'interrogation de la base de données. Ainsi, la question GBeauportH donner tous les plans montrant en tout ou en partie la seigneurie, la ville, la paroisse ou la rivière Beauport. La question GBeauport & riviere& moulinH ne sortira que les plans montrant des moulins sur la rivière Beauport. Il est donc possible d'obtenir des réponses rapides à des questions précises.

La base de données n'est pas encore prête à être distribuées, mais vous pouvez adresser vos demandes de recherche au responsable de la Division des archives cartographiques et architecturales par courrier ou par télecopieur.
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The Visual and Sound Archives Division, National Archives of Canada has the following topographic maps for redistribution. These plans are available by contacting our Division at 395 Wellington Street, Ottawa, Ontario K1A ON3, or by calling Heather Stevens at (613) 996-7639; fax (613) 995-6575; or Internet hstevens@archives.ca
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<td>1233</td>
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<td>6301</td>
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**Vector Electronic Charts**

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<td>29-Jul-94</td>
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<td>5596</td>
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<td>5720</td>
<td>Loon Islands et Approches/and Approaches</td>
<td>Cancelled by NC 5820 which was Released on 31-Mar-94</td>
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</tbody>
</table>
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Saskatchewan Government on the move

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Environment Canada Departmental Library

In the context of program review within the federal government it has been proposed that the following “adjustment” be made: “Converting the Departmental Library into a “virtual library” with the accent on reference search, inter-library loans and the maintenance of the departmental publications collection; we would no longer have book collections nor do any acquisitions.”

The meaning of this statement is that the staff of the library will be reduced to 4 or 5 from the present complement of 14 and that there would be no collection or subscriptions to support its activities.

Source: Internet (GOVDOCS-L)

U.S. Fish and Wildlife Service

Effective 7/27/94, the National Wetlands Inventory map data is available over the Internet. Connect to enterprise.nwi.fws.gov (192.189.43.33); when connected, cd to dlgdata and get the readme.dlg file.

U.S. Geological Survey

USGS will have a new product, the Digital Raster Graphics, from 1:24,000-scale maps, on CD-ROM. Digital orthophotoquad CDs are $32 each from USGS; questions or comments to 703/648-6896.

GNIS CD

Geographic Names Information System, by the U.S. Board on Geographic Names, is available on CD-ROM for $57 U.S. from USGS-ESIC, Mail Stop 507, National Center, Reston, VA 22092.

National Aeronautics and Space Administration

Jupiter comet impact images are available over the Internet: http://nssdc.gsfc.nasa.gov/planetary/comet.htm/
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(WAMLIB Electronic News & Notes)
## 1995 Conference Calendar

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<tbody>
<tr>
<td>February 27-March 2</td>
<td>American Congress on Surveying and Mapping / American Society for Photogrammetry and Remote Sensing Annual Convention, Charlotte, North Carolina</td>
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<tr>
<td>March 27-30</td>
<td>Ninth Annual Symposium on Geographic Information Systems, Vancouver, British Columbia</td>
<td></td>
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</tr>
<tr>
<td>April 2-4</td>
<td>GIS and Libraries: Patrons, Maps and Spatial Information, University of Illinois, Champaign, Illinois. Contact: Linda Smith <a href="mailto:dpc@lexia.lis.uiuc.edu">dpc@lexia.lis.uiuc.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 7-10</td>
<td>1995 National Geodata Forum, Hyatt Regency Hotel, Crystal City, Virginia.</td>
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<tr>
<td>May 9-13</td>
<td>Association of Canadian Map Libraries and Archives/Western Association of Map Libraries Joint Conference, University of British Columbia, Vancouver. Contact Tim Ross <a href="mailto:tim_ross@library.ubc.ca">tim_ross@library.ubc.ca</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 24-28</td>
<td>Canadian Cartographic Association, Calgary, Alberta. Contact: Michael R.C. Coulson, Dept. of Geography, University of Calgary, Alberta. T2N 1N4 email <a href="mailto:coulson@acs.ucalgary.ca">coulson@acs.ucalgary.ca</a></td>
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<tr>
<td>June 13-15</td>
<td>7th International Conference on Geomatics, Ottawa Congress Centre, Ottawa.</td>
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<tr>
<td>September 3-9</td>
<td>International Cartographic Association, Barcelona, Spain.</td>
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<tr>
<td>September 11-16</td>
<td>16th International Conference on the History of Cartography, Vienna, Austria, c/o Austrian National Library, Map Dept. and Globe Museum, Josefsplatz 1, A-1015 Vienna AUSTRIA.</td>
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<tr>
<td>September 14-17</td>
<td>British Cartographic Society Annual Technical Symposium, University of Exeter.</td>
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<tr>
<td>October 15-18</td>
<td>Western Association of Map Libraries, Las Vegas; Kathy Rankin, program planner.</td>
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<tr>
<td>November 13-17</td>
<td>GIS/LIS '95 and ACSM/ASPRS Fall Convention, Nashville, Tennessee.</td>
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</tbody>
</table>

See you... at the ACMLA/WAML joint conference
May 9-13
University of British Columbia, Vancouver, B.C.
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Titles/Titres


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