BULLETIN

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES / ASSOCIATION DES CARTOTHÈQUES ET ARCHIVES CARTOGRAPHIQUES DU CANADA

MEMBERSHIP in the Association of Canadian Map Libraries and Archives is open to both individuals and institutions having an interest in maps and the aims and objectives of the Association. Membership dues are for the calendar year and are as follows:

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John Arrowsmith, *Map of Vancouver Island and the Adjacent Coasts...*, 1849. Reproduite à partir d'un original figurant dans la Division de carte, les Archives Provinciales de Colombie Britannique, dans la Série de cartes fac-similés de l'ACC, carte No. 66 (ISSN 0827-8024).

PRESIDENT'S MESSAGE

MESSAGE DE LA PRÉSIDENTE

2003 Conference: Conference time is now approaching and I know that many of you have begun to make plans to be in Victoria. It looks to be an exciting conference and I hope that as many members as possible will be able to attend. This conference will be our first joint conference with both the Canadian Association of Geographers and the Canadian Cartographic Association.

National Archives: As president of the Association, I was invited, along with representatives from two other Associations, to a consultation meeting with the National Archivist, Ian Wilson. Mr. Wilson held a number of meetings in early 2003 with interested stakeholders to assist in the planning for the new organization, Libraries and Archives Canada (LAC), which merges the National Library and National Archives. I was impressed by Mr. Wilson's grasp of the key issues related to the cartographic community and his understanding about the challenges of preserving and providing access to geospatial data. Staff at LAC are now drafting legislation to put the two entities together and expect it to go to Cabinet by March, with the goal of proclaiming the new organization on July 1. They hope to modernize the Library act which is quite old (the Archives act was updated more recently. Mr. Wilson is aware of the importance placed upon the recommendations of the English study. He is talking about creating Centres of Excellence for special media, mentioning for example, the Music Division of the National Library as a good example. We also touched on cataloguing, digitization, access, role to institutions (not just the public), partnerships, and the implementation of legal deposit for cartographic information.

Ontario Library Association SuperConference: In our strategic plan, we identified the need to promote our Association and the work of map librarians to a broader community. Colleen Beard and Sharon Janzen from Brock, Suzette Giles from Ryerson and I gave a presentation on "GIS in Map Libraries" to about

Conférence 2003 : La conférence s'en vient vite et je sais que plusieurs d'entre vous ont commencé à planifier leur voyage à Victoria. Il semble que ce sera une conférence passionnante et j'espère que les membres participeront en grand nombre. Cette conférence sera la première à regrouper l'Association canadienne des géographes et l'Association canadienne de cartographie.

Archives nationales : À titre de présidente de l'Association, j'ai été invitée, avec des représentants de deux autres associations, à une rencontre de consultation avec l'archiviste national, Ian Wilson. M. Wilson a tenu plusieurs rencontres avec les parties intéressées en début d'année afin de participer à la planification du nouvel organisme de la Bibliothèque et Archives du Canada (BAC) qui regroupe la Bibliothèque nationale du Canada et les Archives nationales du Canada. J'ai été impressionné par son appréciation des grands dossiers relatifs à la communauté cartographique ainsi que sa compréhension des défis de conservation et de diffusion des données géospatiales. Les employés de la BAC sont en train de préparer les dispositions législatives qui réuniront les deux entités et ils s'attendent à les présenter au Cabinet en mars dans le but de formaliserl le nouvel organisme le 1 juillet prochain. Ils souhaitent moderniser l'acte de la Bibliothèque qui est maintenant désuète (celle des Archives nationales a été révisé plus récemment). M. Wilson est au courant de l'importance accordée au rapport English. Il examine la possibilité de créer des centres de perfectionnement en média spécialisé en utilisant à titre d'exemple, la Division de la musique de la Bibliothèque nationale. Plusieurs autres sujets concernant l'information cartographique ont été abordés tels que le catalogage, la numérisation, l'accès, le rôle des institutions (pas seulement le public), les partenariats, et l'implantation de dépôts légaux.

SuperConférence de l'Association des bibliothèques de l'Ontario : À l'intérieur du plan stratégique de l'Association, nous avons

REMOTE SENSING IMAGE TECHNOLOGY IN ARCHIVES

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Introduction

Our visual experience with the world is typically from a more or less horizontal viewpoint. Under these conditions, our view is usually limited to an area of a few kilometres at most. The total area available to us is enlarged considerably if we peer downward. From such a perspective, our impression of the surface below is notably different. The myriad of surface features are seen in their appropriate spatial and contextual relationships, and not obscured by vegetation, buildings or geologic features.

All landscapes contain structure (spatial organization), function (interaction between the spatial elements) and change (alterations in the structure and function over time). The spatial pattern of a landscape strongly influences the ecological characteristics of that landscape and shows that the relationship among ecosystems is interactive and dynamic. The implication is that the form of the landscape is indicative of its function and that landscape patterns are the result of complex and interacting processes that function over a range of spatial and temporal scales. The development of information technologies has made remotely sensed data which express this structure of the landscape and their corresponding interpretative techniques more widely accessible. It is this combination of features that has led to such material as aerial photography and remote sensing data and images becoming highly valued by various researchers and requiring that archives make some effort to develop policies and procedures for dealing with such records.

Background

Attempts, dating from the earliest development of the photographic process, have been made to photograph the Earth from above. In the early days, cameras were attached to almost anything that could be raised above the ground and retrieved again – balloons, kites and even pigeons. There is an abundance of aerial photographic material which often shows features in great detail; however, to ensure that these records can be used, effective and reliable ground control points are required and in most, these points are lacking or insufficient in number. Today, aerial photography and satellite imagery are common in the workplace and the trend is for the use of computer-based technologies which make the insertion of such points easier. Photographs and other images of the earth taken from the air and from space allow for a great deal of information about our planet's landforms, vegetation and resources. Comparisons of images acquired at different times allow for the study of transient phenomena, such as seasonal vegetation and contaminant discharges. That these images contain so much information and have the potential for diverse research intrigues many archives. Therefore, aerial and satellite images, commonly known as remotely sensed images, permit accurate mapping of land cover and make the job of understanding landscape features possible on regional, continental and even global scales. These features also make them incredibly important to government and industry planners, environmentalists, engineers and scientists for evaluating decisions made or for developing action plans.

Remote sensing provides an approach for assessing the landscape as a consequence of the spatial, spectral, temporal and radiometric resolutions in

be able to seek out relevant transfers and donations. As much as possible, the archives should try to convince the sources of the value of providing the necessary supporting documentation for the records. This includes providing technical details on the processes by which the record was created, the reasons that lay behind the record, the information contained and the types of analysis that have been done on the records. (For suggestions on the information that should be submitted with records, see Appendix A.) Alternatively, archives may have to rely upon regularly acquired 'snapshots' or history files from the producers and preserve these together with the records. Given the quantity of material available and the expense that an archives must incur to properly care for the records, some have suggested that instead of transferring to outside institutions, the producers of the records be made responsible for ensuring the historicity and authenticity of their records and providing access to any user. If this were increasingly the case, archives would be able to reduce their functions in this area, but would lose the capability of ensuring that records were being made available and preserved on a more objective basis. Additionally, archivists should be aware of the cost implications of time, equipment/technology and staffing to adequately work with such records.

Access

The biggest hurdle to making this material available is the limited/poor knowledge of data availability and/or of the mechanisms by which data can be made available. Proper access relies upon the efficiency by which a search can be made of the holdings to find the area of interest, the filming data or the technical characteristics. The information about the remote sensing imagery should be at least linked (if not integrated) with related records of other media to give researchers the fullest possible view of the research request. An initial search of the holdings will identify the broadest potential information for the researcher; after reviewing the needs of the researcher, a revised search can be conducted prior to the production of copies. As with all reference activities in archives, the search should be made as precise as possible to avoid excess handling of the records and wasting valuable time and money.

The making available of GIS data to researchers for most institutions is a difficult and costly challenge. Dozens of software systems offer GIS decision-making capabilities, often making it difficult to discern the strengths and limitation of each, and archives must be aware of this variance in order to determine the best way to handle the records and to determine an accessible system. One solution that is on the rise is the use of the Internet. Like most resources in archives, the Internet is seen as a dramatic method that will greatly enhance the exposure of their institution and holdings. Now instead of using Local Area Networks, the technology dependence of the record can be addressed through integrating database software with web pages. For instance, Microsoft SQL (Standard Query Language) Server databases can be established and then served to the public via the Internet. The database will contain compressed satellite and aerial image data, combined with uncompressed database data. Clients can then send requests to the Internet Information Server built into Windows NT and the requests can be passed to Active Server Pages programmed in Visual Basic Script. In turn, the queries can be sent to stored procedures in the SQL Server database to fetch image tiles. The Active Server Pages dynamically construct the web pages necessary in order to combine the tiles together to make a complete picture, sending the HTML code back to the client's browser. The browser program then requests the images needed to fill in the picture and the user can access the data. Archives will need to be aware of innovations that will increase the speed and bandwidth of the connection between server and user, and methods that will reduce the amount of requisite data transferred between server and user.

If the archives can make the investment in staff (training and numbers), time and money to accommodate the needs of these records, there will be a infinite number of ways in which the records are likely to be used. Categorical map analysis looks at such things as the composition of the image, the number of categories of image displayed (the diversity and proportions) and the configuration (the sizes and shapes of patches, the patch density, connectivity of information). Alternatively, researchers may employ spatial point data analysis. This analysis is based on the continuous sampling of the landscape generated regularly or irregularly in space. This information can then be analyzed using geostatistical techniques and ideas developed

which sensor systems and reconnaissance platforms operate. Remote sensors depend upon the principle that when wavelengths of radiation are emitted against a (soil) surface, the differences in texture will result in variations in the reflection of the wave. Today, computer modules are being programmed to look for distinctive signatures of energy as recognition of those features. Spatial resolution refers to the ground area simultaneously sensed by a particular sensor system. Spectral resolution is the wavelengths of the electromagnetic system in which the sensors operate. Temporal resolution is the periodicity or return interval of a satellite within its prescribed orbit around the Earth. And radiometric resolution refers to the range of intensity levels used to quantify spectral responses asserted by the receptive sensor system. These four remote sensing resolutions combine to characterize the landscape from local to global scales, within multiple regions of the electromagnetic spectrum, through seasons and years, and on a radiance-intensity range designed to discriminate between landscape features and process variables. In addition, satellites offer landscape studies a vantage point of Earth observation, computer compatibility of sensed data, historical perspectives and near-global coverage. The introduction of multispectral sensors (covering a variety of wavelengths - for instance, microwave and infrared) has increased the types of information available.

Aerial photographs primarily result from exposing film to solar energy from the earth. By using colour and black/white infrared film, records can be made of the energy from portions of the electromagnetic spectrum and this is useful for distinguishing between healthy and diseased vegetation, for marking out bodies of water and for penetrating atmospheric haze. Multispectral remote sensing – as the name implies – is able to simultaneously analyze a wide range of different wavelengths, many of which are more sensitive to, for example, vegetation status, than either the eye or photographic film. The limited spectral range of photographic film is overcome by using a sensor that records data digitally. Colour infrared film detects longer wavelengths somewhat beyond the red end of the light spectrum and is extremely sensitive to slight variations. Infrared photography suffers from the same problems that conventional photography has – you need light and clear skies. Thermal-infrared multispectral scanners are six-channel scanners

that measure the thermal radiation given off by the ground, typically with accuracy to 0.1° C. The pixel is the square being sensed and is directly proportional to sensor height. Airborne Oceanographic Lidar is a laser device that can make profiles of the earth's surface. The beam pulses to the ground 400 times per second, striking the surface about every 8 centimetres and bounces back to its sources. The time elapsed between the received impulses allows for a determination of surface heights. Synthetic Aperture Radar also beams energy waves to the ground and records the energy reflected. These are only a few of the types of platforms presently acquiring remotely sensed data.

Geographic Information System (GIS) technology offers an analytical framework for data synthesis that combines a system capable of data capture, storage, management, retrieval, analysis and display. GIS techniques can examine spatial and non-spatial (attribute or descriptor) relationships through analytical tools and techniques that include attribute operations, overlay operations, neighbourhood operations and connectivity operations or represent an array of landscape perspectives through the integration of geographically registered spatial coverages. Information can be displayed through a variety of data visualization approaches for spatial and temporal pattern analysis – for example, singular thematic coverages or composite coverages through cartographic and/or statistical approaches. GIS also has the capability of co-occurrence of spatial and non-spatial data through database manipulations. When remotely sensed data are combined with other landscape variables organized within a GIS environment, the analytical power of the system is expanded tremendously.

Sources

There is a growing body of companies and organizations creating remote sensing data records, yet the government remains the largest supplier of these records to archives. These data have become a tool for understanding the evolution of urban and environmental phenomena, cultural heritage studies (including environmental, panorama, archaeological, artistic and historical), and contentions and legal issues (including land claims). Through an identification of those bodies involved in the above subject areas, archives will more easily

as to the trend surface, fractal dimensions and autocorrelation indices. Each of these techniques provides a valid way to describe and analyze spatial phenomena, but the archives needs to be aware of these and other methods, so that they are able to provide researchers with the appropriate records for this analysis.

Description

Description is the means by which an archivist establishes intellectual control over the holdings and is the primary means that helps researchers find information relevant to their needs. If consistency is developed in the level at which you assign keywords, the process can be made easier. Keywords assigned to the records should be either those which are commonly applied in the industry which created the data and/or those by which they are commonly requested by users – this will require developing or using thesauri of terms. The creation and use of metadata is likely to become an important part of dealing with digital and traditional media. Metadata can be stored in a database and linked to the original resource or embedded in (or otherwise directly associated with) the original resource. Resource discovery and rights management metadata has the potential to form a searchable database to give access, while metadata specifying technical formats, migration strategies and use history should be stored closer to the documents themselves.

Some of the more obvious features of the item need to be described in order to provide researchers and staff a means of identifying appropriate resources.

• Foremost amongst these characteristics is the coverage of the records – the extent. This is not extent in the context of archival extent, but a reference to either the physical area mapped or studied or the time period over which observations were collected. It is possible to identify this location in a number of ways including text descriptions (i.e., place names and data type) and numeric descriptions (latitude and longitude, including such information as furthest north/south/east/west position).

• It is essential when describing spatial data to keep track of both numeric and textual description, as researchers will come with requests for either –

the text descriptions are particularly helpful when complete, i.e. duplicate place names are differentiated. For numeric descriptions of an image location, there must be provision of a valid geographical centre point, bounding box or polygon description. It is important to note the x, y and z (think in three dimensions) clearly and specify the unit of measurements if particular features are identified.

• The next characteristic that should be examined is the altitude from which the image was taken. In combination with the physical characteristics of the sensors/detectors used to create the record (such as focal length of the lens), this will help to determine certain characteristics of the image, such as the area covered and the level of detail depicted.

• The description of the format of these records has become increasingly important with more and more of this type of imagery being produced in a digital form. This information is important for determining the most cost-effective solutions for existing, developing and future systems (including potential migration strategies). Some of the common data formats that may be encountered include image exchange formats, proprietary image formats and propriety raw data formats. Identifying the format may also help in identifying whether special equipment will be necessary for the record(s) to be accessed and/or whether special storage considerations will be required.

• It is a good idea for archives to keep a technical description of the images – its type. Aerial photography types are variations on vertical or oblique photographic. Depending on the instrument used, there may be several planes of information representing different bands. Types include: oblique panchromatic, oblique colour, oblique False Colour, vertical panchromatic and multispectral scanner. There are also a variety of types which may be assigned to GIS data, most of which are technology dependent and will vary depending on the system used for creation.

• Archivists will need to be aware of three subcategories of information related to processing details – pre-processing, cleaning and rectification. Pre-processing usually encompasses any processing steps which are performed in order to get the data

into a useful form for analysis and interpretation; this includes what the original intention was for the creation of the image – what information was it trying to show and how was it to be used. In describing procedures related to the cleaning of the image, for instance, all radiometric correction, all noise reduction or despiking activities (interference that created technical problems), references will be to any software that was used (specifying specific versions) to make the data more apparent. Finally, it is important to document all known processes carried out in the rectifying or geo-referencing of the resultant image. This includes specifying target coordinate points, how coordinates were established (from field measurements, from maps or from other images), and the rectification/transformation method used. By identifying the rectification method used, those accessing the record will be able to make an evaluation as to the potential error in the image. There are many methods available and each carries its own set of advantages and disadvantages and each has some unavoidable error, since one is still trying to represent a 3-dimensional world in, essentially, a 2-dimensional medium.

•   Some secondary technical details that are required about the record include instrumentation and resolution/scale. It is essential to understand the limitations and characteristics associated with the variety of instrumentation used to create the record(s). Sensors differ markedly in how they record data and how they reflect or emit energy in the visible, near infrared and thermal-infrared portions of the spectrum in order to create records. The majority of remote sensing data is collected and supplied in digital raster format. This means that each single digital number represents one observation of a piece of the earth's surface. The size and shape of this area is the spatial resolution. Resolution is related to scale and precision (quantifying the size and location of the smallest feature that can exist in the data), but not to accuracy (indicating whether a specific stated size or location is, in fact, correct). Information about resolution is important as it implicitly specifies both the geographic precision, the size of features that one can reasonable expect to discover in the data, the minimum mapping unit, pixel size (in the case of digital records) and time interval.

•   Interpretations of aerial photography or remote sensed data require documentation about the graphical conventions used, and the legend is one of the ways this is accomplished. Descriptions gathered from the legend can include the numeric value, colour coding, shading, symbols or stippling associated with specific features. Legends often reflect the complexity of the software used to provide information on the data or data structure associated with specialized software. In the case of colour coding, a simple description of the variance may be all that is required, particularly when dealing with electronic/digital images.

•   As part of the means of gaining intellectual control over the record, an archives should endeavour to obtain materials that allow copyright to be transferred or permission to be easily granted. As part of this, records should be created which give a clear indication as to the copyright status of the work. This is essential information for determining by whom and how the record can be used in the future.

•   Another feature that should be identified in the description is the creator of the record. The term 'creator' can be a bit misleading, because often no single person can be credited with the primary intellectual responsibility for these images. Instead, it is helpful to track anyone whose involvement helped to produce the record in its present/most common form. This includes information about the funding agency or developer who paid for the images, interpretation or research, the company or organization responsible for the production of the source images, the photographers, the rectifiers, the image processors and the project managers. However, one should not get too carried away and list every person, but rather choose the people and organizations most important in helping to create and maintain the record and to whom the potential researchers may be referred.

•   The date given in a description field should refer to the date of image capture; any other date information including interpretation date, documentation date, publication date should also be provided in your description. In some cases, it is essential to record the exact time an image was recorded.

•   Any unique text or number code used for identification should be recorded. Examples include image or photographic frame numbers from

commercial data suppliers, project identification numbers and accession numbers. A brief description should also be considered for explaining its relevance.

The above categories of information can be considered the primary types of data that users are likely to require for accessing the data and for understanding its informational content. Details should be added where necessary about the provenance of the record and whether additional records exist within the institution. As stated at the beginning, those responsible for describing the data must use consistent methods to describe the content and image of the data. Ultimately, such consistency will dictate that standards (international/ universal) be established in order to more easily compare records. If possible, such as in corporate archives, provisions should be made to ensure that particular spatial data and technical characteristics are recorded by the creators. By adopting a clearinghouse approach, the archives will be able to better understand the technical needs of the records, exhibit greater exposure of common elements and express richer information.

Preservation

When it comes to the care and handling of these records, the diversity of their formats can create problems for archives. As with all records under the care of an archives, there are three fundamental requirements for the proper preservation of the records:

1. Information must continue to be accessible and retrievable; this involves such things as the preparation of supporting documentation that identifies potential access points.

2. Information must continue to be understandable.

3. Information must continue to be authentic in a way that a user can be sure that the information received is the same information that the 'author' originally created.

Some of the materials which come into the archives under the banner of aerial photography are in a traditional medium, and most archives realize and

can provide the proper care required to prevent its breakdown and thus are able to fulfill the needs outlined above. Enclosures can be made of inert materials – including acid-free paper and tissue – to assist with the buffering against chemical degradation. Exposure to electromagnetics must be limited to control fading, the speeding up of chemical degradation, etc. Conditions of storage and use should eliminate ultraviolet radiation (or at least reduce to under 20 W/Lumen) and infrared radiation should be controlled. There should be continual monitoring of temperature and relative humidity levels, both of which will control the rate of degradation (such as acid hydrolysis and structural disintegration). Proper handling techniques should also be employed by users; for instance, limiting the handling of the originals by supplying researchers with copies, forcing researchers to use lint-free cotton gloves or increasingly making the records available in a digital form. If the environment and handling techniques are properly controlled, the traditional materials can survive for an extensive period of time.

Digital media deposited with an archives present a major and growing problem for archivists. The three criteria outlined above cannot always be guaranteed. There are four main strategies which can be employed – secure backups, data refreshment, data migration and documentation. Most have heard of backing up – the making of duplicate copies of data and storing those copies in a secure environment. The creation of secure back-up copies does not protect from degradation of the media on which they are stored. To accomplish this, research into appropriate conditions needs to be conducted, primarily those for magnetic and optical media. Data refreshment involves the copying from one medium to the next as the original medium reaches the end of its lifespan (of readability – equipment availability and software dependence issues need to be considered at this time to determine if the format will still be accessible). Data migration is the actual transfer of the data from one format to another. Such strategies need to be carefully planned, tested and analysed to ensure that ideally no information is lost. The final stage is documentation. No archives can successfully preserve data that does not have complete documentation. This is because at each of the steps described previously, there is a potential for the loss of information; without knowing what you have as a record, you will not be aware of what you have

lost. Proper documentation should be kept on all records, not just digital, as it will assist with all of the basic tasks that are needed to keep the records under one's control.

Conclusion

Satellite remote sensing and geographic information systems are emerging technologies that need to be addressed by archives. They offer a unique opportunity to gain information about the environment through the spatial, temporal, spectral and radiometric resolutions of remote systems and through the analytical and data integration capability of GIS. The two technologies can be interconnected into a synergistic system that is particularly well suited to an examination of the Earth. The unique informational content and the frequently high technological dependence the records exhibit present challenges to the way in which archives provide services and how they describe their records. For instance, records based on GIS may be dependent on customized software to fit certain types of decision making (demographic forecasting, transportation planning, environmental/resource analysis), making it difficult to establish a particular method of accessibility. Handling the material involves more than simply acquiring equipment to display and store the records, describing the records, preserving the records and making them available. Efforts need to be made at the institutional level to examine:

•   Their competencies and roles they wish to fulfill (for instance inter-institutional cooperation);
•   Technical aspects (data, metadata, services, products and standards);
•   Legal aspects (authorization, protective mechanisms);
•   Economic aspects (costs, qualities, qualifications); and
•   Other aspects (standards and norms, systems, access).

Ultimately, individual archives will have to make their own determination as to whether it is worth the expense to care for these records, or whether to pass the records on to other institutions that would be better able to find the resources of staff, time and money to care for the records.

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Appendix A: Accompanying Information with Donations [1]

Project Title
History of the Original Project
    Purpose of the project
    Topic(s) of research
    Geographic limits
Information about Methods
    Methods used to create data set
    Methods used to georeference data
    Consistency checks
    Error corrections
    Sampling strategies employed
Source Materials to Create Dataset
    Previous evaluations of the area
    Data selection or sampling procedures
    Procedures for updating, combining, or enhancing source data
Content of dataset
    List of filenames and description of contents
    Type of hardware and software used to create and manipulate the data
    List of codes used and what they mean
    Descriptions of any known errors
    Descriptions of any known areas of weakness
    Data dictionaries
    Documentation of record conversion to new systems and formats
    Names of primary project staff
    History of how the format of data set has been changed
    History of how the dataset has been used
Relationship of records to others produced previously
Bibliographic references to any publications about the project
Access restrictions
Copyright details

1. Based on information provided at http://ads.ahds.ac.uk/project/goodguides/apandrs/section53.html, "Section 5 – Archiving Your Dataset".

PROJET POUR UN PORTAIL UNIVERSITAIRE QUÉBÉCOIS DE DONNÉES NUMÉRIQUES ET GÉOSPATIALES

Conférence des recteurs et des principaux des universités du Québec (CREPUQ)
Groupe de travail sur les fichiers de données numériques
Sous-groupe de travail sur la géomatique ou les données numériques à référence spatiale

I- Mise en contexte

Dans le cadre de l'Initiative de démocratisation des données de Statistique Canada (IDD), un consortium désormais permanent auquel adhère la majorité des bibliothèques universitaires québécoises, et des capacités du Web à diffuser l'information, l'accès aux données numériques a connu une croissance considérable au cours des dernières années. C'est pour tirer profit de ces nouvelles possibilités que les bibliothèques membres de la CREPUQ se sont dotées d'outils collectifs pour la consultation des données acquises en consortium : **SHERLOCK** donne maintenant accès aux microdonnées de quelque 140 enquêtes alors que le Site des tableaux de données statistiques agrégées offre des milliers de tableaux, principalement en format IVT.

Alors que les données du Recensement figurent parmi les produits de Statistique Canada les plus utilisés, l'IDD a également rendu accessibles les fichiers géographiques du Recensement, tant en format ArcInfo que MapInfo, ouvrant la voie aux nouvelles possibilités de représentation géospatiale des données. Cette thématique a d'ailleurs occupé une place considérable lors de la conférence annuelle conjointe de l'Association canadienne des utilisateurs de données publiques - CAPDU et de l'Association des cartothèques et des archives cartographiques du Canada - ACACC, démontrant bien les relations étroites qui prévalent entre les données et leur représentation spatiale. L'un des ateliers thématiques de cette conférence faisait d'ailleurs place aux témoignages de certaines bibliothèques qui ont déjà amorcé une fusion de leur service de

données et de leur service de géomatique. Par ailleurs, l'un des ateliers les plus importants de la conférence portait sur les produits géographiques du Recensement offerts en consortium par la firme DMTI Spatial Inc., un consortium auquel participent plusieurs bibliothèques québécoises. Parallèlement aux données géographiques de Statistique Canada, une entente est également intervenue en mai 2002 entre Ressources naturelles Canada, le Programme fédéral des services de dépôts (PSD) et l'Association des cartothèques et des archives cartographiques pour l'accès aux cartes topographiques numériques. De plus, des discussions sont actuellement en cours avec la Photocartothèque québécoise du ministère québécois des ressources naturelles pour l'accès aux cartes topographiques numériques produites par ce ministère.

C'est devant la multitude des ressources présentement disponibles qu'est apparue aux membres du Groupe de travail sur les fichiers de données numériques (GTFDN) l'idée d'une réflexion sur la création d'un guichet à accès unique aux données numériques et géospatiales. Puisqu'il y a un chevauchement important entre l'univers des données numériques et celui des données géospatiales, il était primordial que ce guichet donne accès aux deux univers. À cette fin, une collaboration entre les membres du Sous-groupe de travail sur la géomatique ou les données numériques à référence spatiale (SGTG) et les membres du GTFDN pour la réalisation de ce projet s'imposait.

Une première rencontre exploratoire a eu lieu à

Ce document est disponible à http://www.crepuq.qc.ca/Bibl/portail.pdf

l'Université Laval le 28 février 2001. Outre les membres du GTFDN, Bruno Langlois de l'UQAR, Sébastien Nadeau et Guy Teasdale de l'Université Laval se sont joints aux discussions afin d'élaborer les éléments de base d'un futur portail qui ne devait alors porter que sur les données numériques. Puis à partir du moment où la nécessité d'avoir les deux composantes, données numériques et données géospatiales, est apparue clairement, le Sous-groupe de travail sur la géomatique a été sollicité pour participer comme partenaire à l'élaboration du projet.

Définition d'un portail de données numériques et géospatiales

À la suite des discussions et afin de rassembler les idées émises, il est apparu nécessaire d'adopter certaines définitions permettant d'établir ce qu'est, ou ce que devrait être, un portail de données numériques et géospatiales. La définition qui suit est une adaptation, dans le contexte des données numériques et géospatiales, de la définition de portail proposée par l'Office de la langue française dans le *Grand dictionnaire terminologique* :

> Site Web dont la page d'accueil propose, en plus d'un moteur de recherche, des hyperliens avec une foule d'informations et de services, qui est conçu pour guider les internautes et faciliter leur accès au réseau des données numériques ou géospatiales, mais surtout pour les attirer et fidéliser le plus grand nombre d'entre eux, au point de devenir leur porte d'entrée aux données numériques et géospatiales disponibles dans Internet.

> L'objectif du portail est donc de devenir la page de démarrage aux données numériques et géospatiales du plus grand nombre d'internautes. Les termes porte d'entrée et site de démarrage sont donc parfois associés à cette notion de portail.

Par ailleurs, il n'est pas inutile de rappeler que le projet de portail développé ici est pleinement compatible avec le projet de bibliothèque virtuelle actuellement en développement au Sous-comité des bibliothèques, et qu'il pourra logiquement s'y s'intégrer comme un volet spécifique de cette infrastructure collective.

II- Contenu du portail

Préambule

Il ne fait aucun doute que la qualité du contenu du Portail est une condition essentielle à la réussite du projet. En effet, sans un contenu de qualité, à la fois exhaustif et d'actualité, il est fort peu probable que le Portail devienne une ressource intéressante pour les différents usagers de données numériques et géospatiales des établissements universitaires québécois. C'est pour cette raison que la création de ce Portail ne se limite pas à son lancement initial, mais bien à une gestion continue de ce qu'il est et de ce qu'il aura à offrir.

Après de nombreuses discussions, il est devenu évident que le Portail devait donner accès en priorité aux données acquises par les membres de la CREPUQ par le biais d'ententes de consortium. De même, il était primordial que les ressources locales développées par les institutions universitaires membres de la CREPUQ soient mises en évidence. Cependant le monde des données numériques et des données géospatiales étant vaste et diversifié, il était clair que le Portail ne pouvait se limiter aux seules données achetées ou produites par les membres de la CREPUQ. Par conséquent, il est apparu nécessaire d'intégrer le maximum de sources de données pouvant intéresser les usagers des établissements universitaires québécois concernés par ce projet, dans la mesure du possible bien sûr.

Par ailleurs, il est important de préciser que la seule mention des ressources disponibles ne suffit pas pour faire du Portail un outil incontournable. En effet, il a été convenu que cet accès devait avoir un côté dynamique et pédagogique pour qu'il puisse remplir sa mission première, à savoir un outil facilitant l'accès aux données numériques et géospatiales dans le cadre d'activités académiques. Il a donc été convenu qu'une composante du Portail serait dédiée à l'aide et à la formation, tandis qu'une autre répondrait aux besoins de communication entre

cette source d'information et ses utilisateurs. Le contenu du Portail universitaire québécois de données numériques et géospatiales sera donc divisé en trois modules conceptuels que l'on peut visualiser au **schéma** à l'Annexe I.

Ces trois modules conceptuels seront repris un à un pour donner une idée plus claire du contenu du Portail.

Module 1 – Ressources

Ce module recense les différentes sources de microdonnées, données agrégées et données géospatiales, acquises grâce à des ententes de consortium CREPUQ ou grâce à l'IDD ainsi que celles auxquelles on peut avoir accès autrement, notamment les ressources Internet et les portails existants de données numériques.

Pour ce qui est des données géospatiales, ce sera au Sous-groupe de travail sur la géomatique d'identifier précisément les ressources de ce type de données qui devront faire partie du Portail. Mais voici déjà, à titre indicatif, une liste des différentes ressources proposée par les membres de ce Sous-groupe de travail :

- Banque nationale de données topographiques (BNDT) et autres produits numériques géospatiaux de Ressources naturelles Canada
- Produits géospatiaux de la Photocartothèque québécoise
- DMTI

Voici à titre indicatif une liste des ressources de microdonnées et/ou données agrégées qui, selon les membres du GTFDN, doivent faire partie du Portail :

- **SHERLOCK** (http://sherlock.crepuq.qc.ca)
- Site CREPUQ des tableaux de statistiques agrégées (http://ivt.crepuq.qc.ca)
  - Données de l'IDD
  - Données de l'Institut de la statistique du Québec (ISQ)
  - Autres sources
- CIQSS et CADRISQ
- SourceOECD de l'OCDE
- CANSIM II @ CHASS
- Canadian Census Analyser via CHASS

- Profil des communautés canadiennes – site public de Statistique Canada
- E-STAT (produit du PSD)
- Bilan du siècle (http://bilan.usherbrooke.ca)
- Les recensements canadiens depuis le début, E-STAT, site de CHASS à la University of Toronto : http://www.chass.utoronto.ca/datalib/major/censusag.htm
- ICPSR
- Roper Center (sondages aux États-Unis)
- Stat-USA
- Sites Internet des gouvernements du Canada et du Québec (Statistique Canada, ISQ, ministères, organismes)
- Sites Internet du gouvernement des États-Unis
- Sites Internet gouvernementaux de différents pays (agences statistiques nationales, universités)
- Sites Internet des organisations internationales (OCDE, UNESCO, ONU, Union européenne, FMI, Banque Mondiale)
- Site Internet de la Ville de Montréal, telles les données sur l'immigration par quartier et sites d'autres municipalités au Canada
- Statistiques historiques du Canada (accès gratuit de Statistique Canada)
- Sites locaux des universités du Québec traitant des données numériques
- Autres portails de données numériques au Canada et ailleurs, en économie, sciences sociales

Module 2 – Aide et formation

Ce module recense différentes ressources utiles pour la compréhension des données numériques, des données géospatiales, de la statistique (nécessaire pour le traitement des microdonnées), de l'utilisation des ressources mentionnées dans le module 1 et de la compréhension des aspects techniques relatifs au monde des données numériques et à celui des données géospatiales. De plus, il donne accès à une banque d'expertises que les utilisateurs du Portail voudront partager avec leurs collègues.

Voici, à titre indicatif, une liste des principales composantes de ce module :

- Définitions des données numériques, données géospatiales, microdonnées, données agrégées

- La statistique (définitions, méthodes, exemples)
- Bibliographie : sources imprimées et électroniques utiles pour la compréhension des données numériques et des données géospatiales (complément aux définitions)
- Guides pour l'usage des banques de données, logiciels de traitement statistique (SPSS, SAS), logiciels de traitement de données géospatiales
- Didacticiels
- FAQ (Foire aux questions)
  - Recherches par thèmes
  - Banque d'expertises (Questions-réponses)
  - Aide technique

Module 3 – Communication

Ce module est composé des services permettant le développement de liens dynamiques entre l'outil et ses utilisateurs.

Voici, encore une fois à titre indicatif une liste des principales composantes de ce module :

- Listes de diffusion (*listserv* des responsables de **SHERLOCK** dans les établissements universitaires membres de l'entente, *listserv* élargi selon les demandes)
- Annonces d'activités par un bulletin en ligne des ateliers de perfectionnement CREPUQ et IDD, conférences, congrès, nouveaux produits et services
- Formulaire Internet pour les suggestions, cet élément est très important pour fidéliser les utilisateurs, assurer leur participation au développement du Portail, leur permettre de partager leurs expériences et expertises.

III- Structure du portail

Dans le chapitre II, nous avons présenté les trois modules au cœur du Portail : ressources, aide et formation, et communication. Mais il s'agit là des modules pour l'organisation conceptuelle du contenu et non de la structure physique du portail proprement dite. L'usager accédera au contenu du Portail par de multiples points d'accès suivant son niveau de connaissances des données numériques, de la nature de son besoin d'information et du contexte de sa recherche.

Par ailleurs, il est important de préciser que le Portail sera entièrement bilingue pour répondre à l'ensemble des clientèles des établissements membres de la CREPUQ. La page d'accueil du Portail dirigera l'usager vers les pages françaises ou anglaises du site, suivant le modèle de **SHERLOCK**. La communication entre les pages françaises et anglaises sera assurée par la présence d'un bouton dans la bannière de chaque page permettant la navigation facile vers la page équivalente dans l'autre langue.

Le choix de la langue fait, la deuxième page présentera à l'usager un **choix de points d'accès** dans le but de répondre aux différents besoins des clientèles de tous les niveaux, allant de l'usager novice qui cherche une simple statistique à l'usager expérimenté dans la manipulation des fichiers de microdonnées. Ces points d'accès comprendront notamment les suivants :

- Accès thématique indépendemment du type de données
- Accès par type de données : données numériques, données agrégées, microdonnées d'enquêtes; données géospatiales
- Accès géographique : considérant que la recherche de données se fait très souvent en fonction d'un pays ou d'une région; ce point d'accès pourrait également être intégré à l'accès thématique
- Accès par moteur de recherche, ce sujet sera traité au chapitre suivant
- Accès didactique : pages à l'intention de l'usager novice qui n'est pas familier avec les concepts de base de la recherche dans le domaine des données numériques (données agrégées, microdonnées)
- Accès par ordre alphabétique des ressources : pour l'accès rapide à une ressource déjà connue
- Accès par le nom des organismes producteurs des données.

Sur la page Web, une présentation graphique mettant en relief les différents points d'accès pourrait faciliter le choix de l'usager vers convenant le mieux à sa recherche. Cette page devra également comprendre des liens vers celui

les modules « Aide et formation » et « Communication ».

En ce qui a trait à l'accès thématique, il faudra établir un plan de classification, travail qui a déjà été entamé par les membres du Groupe de travail sur les fichiers de données numériques dans le contexte des travaux d'amélioration de **SHERLOCK**. À ce stade-ci, un plan de classification non hiérarchique suivant le modèle du site Web de la University of Toronto Data Library est préconisé (http://www.chass.utoronto.ca/datalib/other/findcans.htm). On pourra également s'inspirer d'autres modèles déjà en place sur le Web, tel le plan de classification de CANSIM sur le site de Statistique Canada. Pour faciliter la navigation dans l'ensemble des pages du portail, en particulier le passage d'un type d'accès à l'autre, un bandeau de navigation sur toutes les pages semble incontournable. Les éléments qui devront s'y retrouver sont notamment les suivants : les différents points d'accès, un lien vers le module « Aide et formation » et un lien vers le module «Communication ». Enfin, un plan complet du site sera disponible pour permettre aux utilisateurs d'avoir un aperçu global du Portail.

IV- Moteur de recherche

L'implantation d'un moteur de recherche efficace pour le Portail soulève un certain nombre de problèmes. Ainsi, il y aura dans le Portail des ressources de nature différente comme des pages statiques en HTML, des enquêtes de **SHERLOCK** présentées dans un mode dynamique avec des scripts Perl et possiblement des notices issues d'un logiciel de gestion de bases de données. Le moteur de recherche devra donc prendre en compte toutes ces ressources.

Le moteur devrait permettre à l'usager de restreindre sa recherche sur une portion du Portail, à titre d'exemple **SHERLOCK,** ou au contraire permettre de faire une requête sur l'ensemble du Portail. Il devrait aussi permettre de consulter des moteurs déjà existants (**SHERLOCK**, tableaux IVT). On devra toutefois se pencher sur le problème de l'affichage des résultats lorsque ceux-ci proviendront de l'interrogation de moteurs de recherche différents.

Par ailleurs, il faudra voir si le moteur de recherche pourrait prendre en compte, d'une façon qui reste à définir, la grille thématique permettant à l'usager un accès aux ressources par thèmes. On pourrait penser, par exemple, à la possibilité de restreindre une interrogation sur un thème donné.

Par ailleurs, à titre d'exemple parmi d'autres et sans présumer de la valeur d'un tel exercice, le système développé récemment à l'Université Western Ontario [1] semble intéressant et mérite d'être évalué. Ce système prend notamment en compte des fichiers de différentes natures et utilise des métadonnées, un moteur de recherche et une base de données SQL.

V- Étapes de mise en oeuvre

Sur la base des éléments établis précédemment, il a été recommandé que la mise en place d'un portail universitaire québécois de données numériques et géospatiales procède suivant les étapes suivantes:

1) Définition du concept et du contenu pour le projet du Portail universitaire québécois des données numériques et géospatiales.

2) Concertation entre les membres du Groupe de travail sur les fichiers de données numériques et ceux du Sous-groupe de travail sur la géomatique en vue d'établir une collaboration étroite pour la conception du projet.

3) Analyse du projet par le Groupe de travail responsable de la gestion de **SHERLOCK** (GTGS).

4) Soumission du projet à l'approbation du Sous-comité des bibliothèques et obtention des ressources nécessaires à la réalisation d'un devis.

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1. Gray, Vincent S. « Système de données sur Internet de la bibliothèque (SDIB) de l'Université Western Ontario ». *Bulletin de l'IDD* [En ligne]. Vol. 5, no 1 (printemps-été 2002), p. 2-9. http://www.statcan.ca/francais/Dli/Document/updatev51_f.pdf (Page consultée le 27 août 2002)

5) Réalisation du devis par un bibliothécaire spécialiste des données numériques et/ou géospatiales et un spécialiste en informatique, ayant de l'expérience dans la réalisation de portails, qui travailleront en tandem pour une période d'environ un mois. Les personnes choisies pour la préparation du devis devront consulter tout au long du processus les membres du Groupe de travail sur les fichiers de données numériques et du Sous-groupe de travail sur la géomatique afin de s'assurer que le devis répond bien aux attentes des institutions membres de la CREPUQ. En outre, il serait sans doute souhaitable d'associer d'une façon ou d'une autre (par sondage, par courriel) l'ensemble des responsables locaux de données numériques du Québec pour la réalisation du devis.

6) Présentation du devis au Groupe de travail responsable de la gestion de **SHERLOCK**.

7) Révision du devis en fonction des remarques, commentaires et suggestions d'ajustements des membres du Groupe de travail responsable de la gestion de **SHERLOCK**.

8) Soumission du devis de réalisation révisé à l'approbation des membres du Sous-comité des bibliothèques et obtention des ressources nécessaires à la réalisation du projet du portail.

9) Réalisation et implantation du projet du portail selon le devis. Mise au point et validation du fonctionnement, en collaboration avec différents groupes intéressés et en consultation avec des usagers éventuels.

10) Entretien et développement continu. Nomination d'un webmestre/responsable du portail et création d'un comité aviseur du portail composé en partie ou en totalité des membres du Groupe de travail sur les fichiers de données numériques et du Sous-groupe de travail sur la géomatique. La mise à jour constante et le développement continu sont des conditions essentielles à la réussite du projet.

11) Lancement officiel.

12) Évaluation du projet après une année.

Annexe II

Liste des membres du Groupe de travail sur les fichiers de données numériques (GTFDN)

Président : Jerry Bull (Université de Montréal)

Agent de liaison au Sous-comité des bibliothèques: Claude Bonnelly (Université Laval)

Membres

Richard Boily (Université du Québec à Rimouski)
Philippe Feredj (Université de Sherbrooke)
Guy Julien (Université Laval)
Anastassia Khouri (Université McGill)

Liste des membres du Sous-groupe de travail sur la géomatique ou les données numériques à référence spatiale (SGTG)

Présidente : Hélène Genest (Université Laval)

Agent de liaison au Groupe de travail sur les fichiers de données numériques : Guy Julien (Université Laval)

Membres

Lucie Gendron (Université de Sherbrooke)
Anastassia Khouri (Université McGill)
Françoise Lange (Université du Québec à Chicoutimi)
Marie Lefebvre (Université du Québec à Trois-Rivières)
Rosa Orlandini (Université McGill)
Jean-François Palomino (Bibliothèque nationale du Québec)
Pierre Roy (Université du Québec à Montréal)

Annexe I - Schéma conceptuel du contenu

Module « Ressources » (données acquises par consortium CREPUQ et autres données)
- Microdonnées (Sherlock, autres sources)
- Données agrégées (site CREPUQ des tableaux de statistiques agrégées, autres sources)
- Données géospatiales (notamment les fichiers géographiques du recensement de l'IDD)
- Ressources Internet internationales (gratuites et autres)
- Autres portails

Page d'accueil du Portail
Choix de la langue

Français
Points d'accès : thématique, géographique, par moteur de recherche, didactique, par type de données, par ordre alphabétique des ressources et par organismes producteurs de données

Anglais
Points d'accès : thématique, géographique, par moteur de recherche, didactique, par type de données, par ordre alphabétique des ressources et par organismes producteurs de données

Module « Aide et formation »
- Définitions pour les données numériques et les données géospatiales
- La statistique : concepts
- Bibliographie : sources imprimées et électroniques (Web)
- Guides : banques, logiciels de traitement statistique
- Didacticiels
- FAQ (recherches par thèmes, aide technique)

Module « Communication »
- Listes de diffusion
- Annonces des ateliers, conférences, congrès
- Suggestions et échange d'expertises

QUEBEC SCHOLAR PORTAL OF DIGITAL AND GEOSPATIAL DATA PROJECT

Conference of Rectors and Principals of Quebec Universities (CREPUQ)
Submitted to the Library Sub-Committee by the
Working Group on Numerical Data Files
Sub-group on GIS and Geospatial Data

Translation by Martine Rocheleau

I- Background

Access to digital data has increased substantially in the last few years thanks to the Statistics Canada Data Liberation Initiative (DLI), a consortium in which the majority of Quebec University libraries participate, as well as the distribution capabilities of the Web. In order to make use of these new capabilities, the Conference of Rectors and Principals of Quebec Universities (CREPUQ) member libraries equipped themselves with common tools to allow the consultation of the data acquired by the consortium. For example, SHERLOCK gives access to microdata files from 140 surveys and their site on aggregated statistical data offers thousands of tables in mostly IVT format.

While census data is the most used Statistics Canada product, DLI also gives access to all Census geography files in both ArcInfo and MapInfo formats. These files open up new possibilities in terms of geospatial data representation. The annual joint conference of CAPDU and ACMLA allotted a large part of its time to spatial representation of data, showing again the close relationship between data and geography. One of the conference sessions consisted of a discussion from libraries that have already started to integrate their data and geomatic services. There was another interesting workshop dedicated to DMTI Spatial Inc. census geography products offered through a national consortium which includes many Quebec universities. Complementing the Statistics Canada census geography files, an agreement was announced between Natural Resources Canada, the federal Depository Services Program (DSP) and the Association of Canadian Map Library and Archives

in May 2002, to provide access to the National Topographic Data Base. As well, there are on-going discussions with the Photocartothèque québécoise (Quebec airphoto library) of the Quebec ministère des Ressources naturelles to be able to access their digital topographic maps.

Faced with the diversity of data products now available, members of the working group on numerical data files (WGNDF) began discussion on creating a one-stop access service for numeric and geospatial data. Since numeric and geospatial data frequently overlap each other, it is essential that the one-stop service allows access to both types of data. In order to achieve this goal, a strong collaboration must be established between members of the sub-group on GIS and geospatial data (SGGGD) and members of the working group on numerical data files (WGNDF).

A first exploratory meeting took place at the Université Laval on February 28, 2001. In addition to WGNDF members, Bruno Langlois from UQAR (Université du Québec à Rimouski) and Sébastien Nadeau and Guy Teasdale from Université Laval participated in the meeting to elaborate the essential elements of a future Portal, focused at that time on numeric data only. However, given recent developments, it was agreed that the Portal should include both numeric and geospatial data components. Thereupon, a consultation with the sub-group on geomatics took place in order to collaborate in developing the concept and to ensure full participation of each member as equal players in the different steps of the project.

Definition of a Numeric and Geospatial Data Portal

It is important to establish a few definitions on what a numeric and geospatial data Portal is or should be. The following definition is a contextual adaptation of the definition of a Portal as proposed by the Office de la langue française from the *Grand dictionnaire terminologique*:

> The home-page of a Web site offering not only search engines but hyperlinks pointing to many services and information designed to guide users and facilitate access to numeric and geospatial data, designed in such a way that the Portal becomes their preferred gateway to numeric and geospatial data available on the Internet.

> The objective of the Portal is to be the starting page to most Internet users searching for digital and geospatial data. The term gateway and entry portal are often associated with this concept.

Finally, it is worth saying that the Portal project explained here is consistent with the virtual library project now being developed by the Library Sub-Committee and that it could easily be integrated as a specific component of the collective infrastructure.

II- Portal contents

Introduction

The quality of the content is critical to the success of the project. In fact, without high quality content which is both comprehensive and current, it is unlikely the Portal will become a key resource for different users of numeric and geospatial data in Quebec universities. For that reason, the creation of the Portal should not be limited to its initial launch but needs to be managed so that it is continuously developed and enriched.

On the basis of many discussions, it was obvious that the priority of the Portal should be the data acquired by CREPUQ members through the consortial agreements. As well, the important local resources created by Universities that are part of CREPUQ should be showcased. Since both digital and geospatial data environments are so broad and diversified, it is clear that the Portal cannot limit itself to data purchased or produced by CREPUQ members. It will be necessary to integrate, within the limits of practicality, the maximum data sources that would be of interest to Quebec University users.

It is also very important to emphasize that the Portal needs to be more than just data. Access has to be dynamic and instructive in order to fulfill its prime function of being a teaching tool providing easy access to digital and geospatial data for academic activities. Therefore, part of the Portal will be dedicated to support and training, while another component will focus on the communication needs between information and users. The Quebec Scholar Portal of digital and geospatial data will therefore consist of three conceptual modules as seen on the schema at the end of this article (Appendix I).

Module 1 – Resources

This section lists the different sources of microdata, aggregated data, and geospatial data acquired through CREPUQ consortium agreements, or through DLI, or other data available (free Internet resources, other data portals).

As a first step, the sub-group on GIS and geospatial data will identify the geospatial data resources to be part of the Portal. Here for example is a non-exhaustive list of some of the resources, as proposed by the members of the sub-group on GIS and geospatial data:

- National Topographic Data Base (NTDB) and other geospatial digital products from Natural Resources Canada
- Geospatial products from Photocartothèque québécoise (Quebec airphoto library)
- DMTI (limited access for certain institutions)

Second, this partial list of microdata and/or aggregated data resources should be part of the Portal according to members of the Working group on numerical data files (WGNDF):

- SHERLOCK (http://sherlock.crepuq.qc.ca)
- Aggregated statistics tables from CREPUQ site (http://ivt.crepuq.qc.ca)
  - DLI data

- • Data from Institut de la statistique du Québec (ISQ)
- • Other sources
- • Quebec Inter-University Centre for Social Statistics (QICSS) and Centre d'accès aux données de recherche de l'Institut de la statistique du Québec (CADRISQ)
- • SourceOECD from the OECD (limited access for certain institutions)
- • CANSIM II @ CHASS (limited access for certain institutions)
- • Canadian Census Analyzer via CHASS (limited access for certain institutions)
- • Community profiles from Statistics Canada site
- • E-STAT (DSP product)
- • "Bilan du siècle" (http://bilan.usherbrooke.ca)
- • Census of Canada from the beginning (e.g., E-STAT, CHASS site at U. of Toronto: http://www.chass.utoronto.ca/datalib/major/censusag.htm, etc.)
- • ICPSR (limited access for certain institutions)
- • Roper Center (United States surveys) (limited access for certain institutions)
- • Stat-USA (limited access for certain institutions)
- • Canadian and Quebec government Internet sites (Statistics Canada, ISQ, Departments, organizations, etc.)
- • United States government Internet sites
- • Government Internet sites from other countries (National statistics agencies, Universities, etc.)
- • International organizations internet sites (OECD, UNESCO, NU, European Union, IMF, World Bank, etc.)
- • City of Montreal Internet site (e.g., data on immigration by wards) and other Canadian municipality sites
- • Historical statistics of Canada (free access from Statistics Canada)
- • Quebec University local sites dealing with digital data
- • Other data portals in Canada or other countries (e.g., economy, social sciences, etc.)

Module 2 – Support and Training

This module enumerates different resources helpful in understanding digital, geospatial data and statistics (required for microdata analysis), to comprehend the use of various sources cited in Module 1 and to become familiar with different technical aspects pertinent to numeric and geospatial data environments. It also provides access to a bank of expertise that Portal users will want to share with colleagues.

For information purposes, this is a partial list of the different components of this module in no particular order:

- • Digital and geospatial data definitions (microdata, aggregated data, geospatial data)
- • Statistics (definitions, methods, examples)
- • Bibliography: printed and electronic sources useful to understand digital and geospatial data (as a supplement to definitions)
- • User guides for data banks, statistical software (SPSS, SAS, etc.), and geospatial data software, etc.
- • Tutorials
- • FAQ (Frequently asked questions)
- • Search by themes
- • Expert pool (question and answer)
- • Technical support

Module 3 – Communication

This module includes services that allow the development of dynamic relationships between users and resources.

To illustrate the different elements of this module, here is a partial list of the main components in no particular order:

- • Distribution list (e.g., listserv of SHERLOCK representatives in Universities as part of the agreement, expanded listserv depending on requests…)
- • On-line bulletin board advertising activities (CREPUQ and DLI continuous training workshops, conferences, congresses, new products and services, etc.)
- • Internet suggestion forms (which are very

important in establishing loyalty with users, give users a feeling that they are participating in the Portal process, allowing them to share their expertise and experiences, etc.)

III– Portal structure

In chapter II, we talked about three modules: Resources, Support and Training, and Communication. These are part of the conceptual model of the Portal and do not consist of the actual physical structure itself. Users will access the Portal content from various entry points depending on their knowledge of digital data, their types of needs and their research context.

The Portal will be fully bilingual in order to meet the needs of all CREPUQ users. The Portal home page will direct users to English or French pages in the same manner as the SHERLOCK site. A language button located on the banner of each page will allow users to easily switch back and forth from English to French pages.

Once the language is chosen, the second page of the site will offer users a choice of access points (pointers) corresponding to different users needs and levels. These pointers will meet novice users needs searching for simple statistics as well as being useful to expert users handling microdata files. Here is a list of access points to be included:

*   Thematic access: irrespective of data type
*   Access by data type: digital data, aggregated data, surveys microdata, geospatial data
*   Geographic access: considering that data search is often limited to a country or specific region, could be coupled with thematic access
*   Access by search engine: to be discussed in next section
*   Didactic access: specifically intended for novice users who are not familiar with basic concepts in digital data search (aggregated data, microdata, etc.)
*   Access to resources by alphabetical order: quick access to known resources
*   Data producer access

In order to facilitate navigation throughout the Portal pages, the Web page showing access points could be graphically designed in such a way that each type of access points would be highlighted. This page should also include hyperlinks to the Communication and the Support and Training modules.

For thematic access, a classification outline should be developed; the working group on numerical data files has already started an outline while working on the SHERLOCK upgrade. At this point, a non-hierarchical plan based on the model from the University of Toronto Data Library Web site (http://www.chass.utoronto.ca/datalib/other/findcans.htm) seems quite effective. Ideas from other existing models such as that used for CANSIM on the Statistics Canada Web site will also be considered.

To facilitate Portal browsing functions, including switching from one type of access to another, a common navigation bar on all pages is recommended. The navigation bar would include the different access points described earlier, and would link to both the Communication and the Support and Training modules. Finally, a site map would be included to provide users with a global view of the Portal.

IV– Search Engine

The introduction of an effective search engine for the Portal raises problems. For example, how will the search engine cope with all the different resource formats? The formats will include HTML static pages and surveys dynamically accessible through SHERLOCK that include PERL scripts and possibly information generated from database management software. The search engine has to address these issues.

The engine should allow users to not only limit their search on part of the Portal (e.g. SHERLOCK), but to make a query on the whole Portal, and should enable users to consult already existing engines (SHERLOCK, IVT tables, etc.). The problem with the display screen created when results are coming in from different search engine queries will have to be addressed.

Whether the search engine can take into account, in a manner to be more defined, the thematic grid that allow users to access resources by broad themes

is another problem to be addressed. As an example, a query could be limited to a specific theme.

Finally, the group believes that the system recently developed by the University of Western Ontario [1] is worth considering among other significant models. Their system recognizes files from different sources and uses metadata, a search engine and a SQL database.
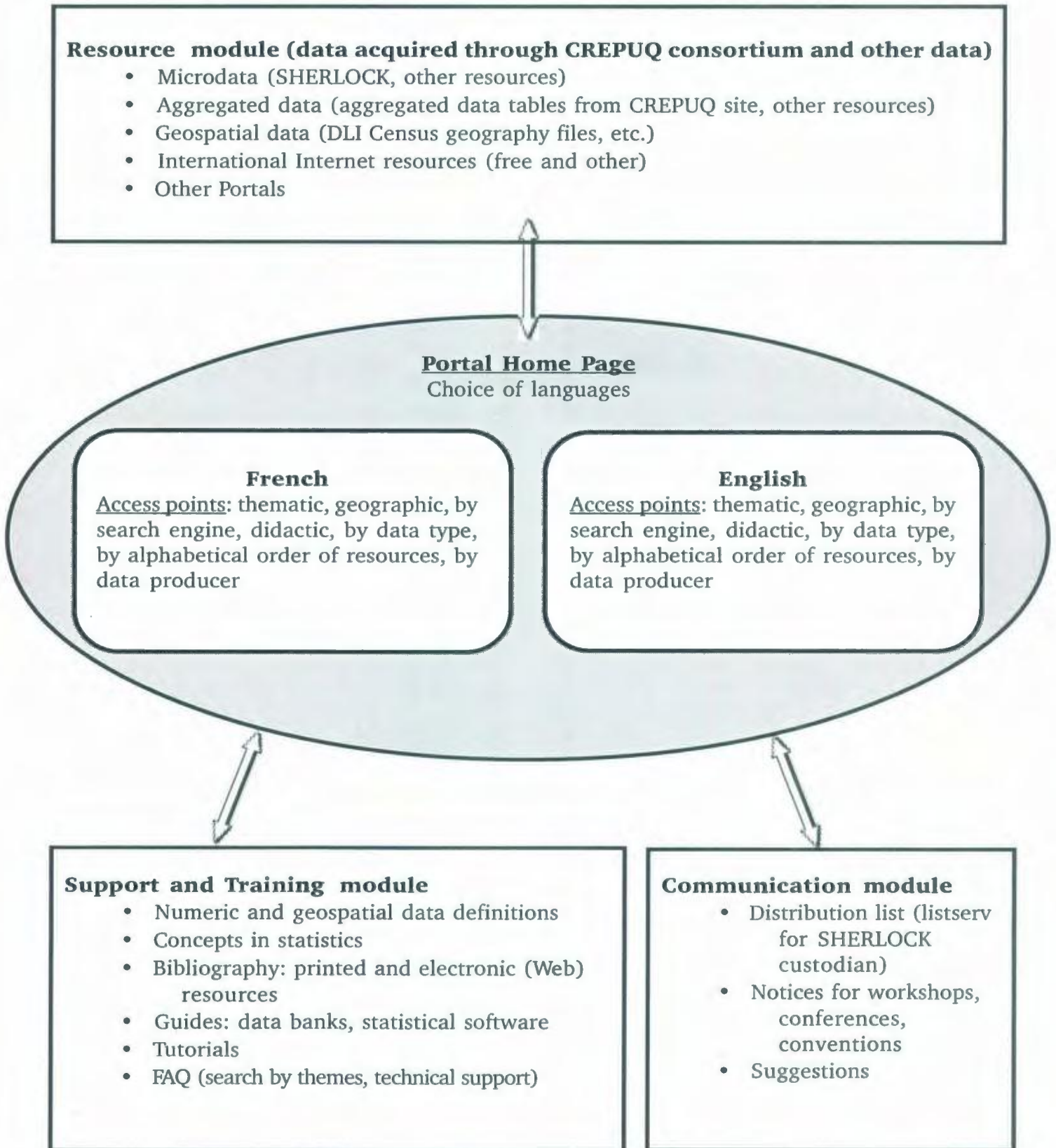
V– Steps for the Implementation

Based on these previously discussed elements, the Quebec Scholar Portal of digital and geospatial data should be implemented, following these steps:

1) Define concepts and content of the Quebec Scholar Portal of digital and geospatial data.

2) Discussion between members of the Working group on numerical data files and members of the sub-group on GIS and geospatial data to establish a close collaboration on the project.

3) Project assessment by the Working group responsible for managing SHERLOCK.

4) Suggest project to the Library Sub-Committee and acquire the necessary funds to make project available for tender.

5) A team consisting of a numeric and/or geospatial data librarian and a system specialist experienced with portals work together during a one-month period to develop the specification for a tender. These chosen specialists would report to the Working group on numerical data files and the sub-group on GIS and geospatial data in order to ensure that the tender meets CREPUQ member standards. Preferably all Quebec digital data specialists should be somehow involved in the process (e.g. e-mail surveys).

6) Present tender to the Working group responsible for managing SHERLOCK.

7) Revise according to comments, remarks, and suggestions made by members of the Working group responsible of managing SHERLOCK.

8) Tendering of the revised version approved by the members of the library subcommittee and acquisition of funds for Portal project production.

9) Production and introduction of Portal project according to specifications. Operational adjustments and verification in conjunction with different interest groups and consultations with potential users.

10) Continuous maintenance and development. Appointment of a webmaster/ Portal custodian and creation of a Portal advisory committee consisted of all or some of the members of the Working group on digital data files and sub-group on GIS and geospatial data.

Frequent updates and follow-ups are essential conditions to the project's success.

11) Official launch.

12) Assess project after one year.

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1. Gray, S. Vincent "The University of Western Ontario's Internet Data Library System (IDLS)". *DLI Update* [On-line]. Vol. 5, Issue 1 (Spring-Summer 2002), pp.2-8. http://www.statcan.ca/english/Dli/Document/ updatev51.pdf (Page visited on August 27 2002)

Appendix I - Conceptual Schema of Content

Resource module (data acquired through CREPUQ consortium and other data)
- Microdata (SHERLOCK, other resources)
- Aggregated data (aggregated data tables from CREPUQ site, other resources)
- Geospatial data (DLI Census geography files, etc.)
- International Internet resources (free and other)
- Other Portals

Portal Home Page
Choice of languages

French
Access points: thematic, geographic, by search engine, didactic, by data type, by alphabetical order of resources, by data producer

English
Access points: thematic, geographic, by search engine, didactic, by data type, by alphabetical order of resources, by data producer

Support and Training module
- Numeric and geospatial data definitions
- Concepts in statistics
- Bibliography: printed and electronic (Web) resources
- Guides: data banks, statistical software
- Tutorials
- FAQ (search by themes, technical support)

Communication module
- Distribution list (listserv for SHERLOCK custodian)
- Notices for workshops, conferences, conventions
- Suggestions

Appendix II

Members of the Working group on numerical data files (WGNDF)

President: Jerry Bull (Université de Montréal)

Liaison officer to Library Sub-Committee:
Claude Bonnelly (Université Laval)

Members

Richard Boily (Université du Québec à Rimouski)
Philippe Feredj (Université de Sherbrooke)
Guy Julien (Université Laval)
Anastassia Khouri (Université McGill)

Members of the sub-group on GIS or geospatial data (SGGIS)

President: Hélène Genest (Université Laval)

Liaison officer to the working group on numerical data files: Guy Julien (Université Laval)

Members

Julie Gendron (Université de Sherbrooke)
Anastassia Khouri (Université McGill)
Françoise Lange (Université du Québec à Chicoutimi)
Marie Lefebvre (Université du Québec à Trois-Rivières)
Rosa Orlandini (Université McGill)
Jean-François Palomino (Bibliothèque nationale du Québec)
Pierre Roy (Université du Québec à Montréal)

ACMLA Historical Maps Program

The ACMLA Historical Maps Program has long been the flagship of the ACMLA. The production and distribution of facsimiles of Canada's historical maps and Bird's Eye Views has served several purposes:
- The reproduction and distribution at a reasonable cost of significant historical cartographic works for educational, scholarly and other purposes
- A primary vehicle to maintain awareness of the ACMLA in the wider cartographic community
- A major source of revenue for the Association

Over the past 2 years the program and the committee responsible for it have been undergoing a major review. The results of the review and the revalidated direction for the program were approved at last year's Conference.

A number of goals were set out and member assistance is REQUIRED to accomplish them. The Historical Maps Committee **NEEDS YOUR ASSISTANCE**! At this time, the existing committee members can only maintain the order fulfilment from the present stock.

Your Association needs volunteers to assist in a number of ways:
- Identification of new Bird's eye views for reproduction and the finding of corporate sponsors

to support the production of facsimiles. Until recently, we were producing a pair of facsimiles every year.
- Increased marketing of our existing facsimiles. This could include activities such as:
- Exploring possibilities of advertising, or ideally feature stories about the facsimiles, in periodicals whose reader base includes cartophiles and/or libraries e.g. *Felicter*; *Beaver*; *Canadian Geographic*, etc.
- Exploiting the heightened interest in Canadian historical maps generated by the publication of *Where is Here* (Alan Morantz) and *Historical Atlas of Canada* (Derek Hayes). For example, it would be interesting to determine which maps in the *Historical Atlas of Canada* are also available as ACMLA facsimiles.
- Expanding the range of retail outlets for the facsimiles - Museum shops, etc.
- Expanding contacts with the Canadian History community

Please think about what you could do to help share our cartographic heritage, and help our Association, and contact:
David Jones david.jones@ualberta.ca
Gord Beck beckg@mcmaster.ca

TRIUNIVERSITY GROUP OF LIBRARIES METADATA PROJECT: DEVELOPING A GIS METADATA APPLICATION

Richard Pinnell
Map and Design Library
University of Waterloo

Since the mid 1990s, the libraries at the University of Waterloo and the University of Guelph and the Geography Department at Wilfrid Laurier University (WLU) have been acquiring and providing members of these three academic communities with access to geospatial data to support teaching, learning and research. The initial impetus for this interest in geospatial data was the Association of Research Libraries GIS Literacy (Canada) project, which, in 1995, provided Canadian Association of Research Libraries across Canada with free ArcView GIS software, U.S. geospatial datasets, and training by ESRI staff (ESRI is the developer of ArcINFO GIS software). Shortly thereafter, the Data Liberation Initiative (DLI) provided Canadian academic libraries with access to Statistics Canada geography data: census boundary files, census demographic data and street network files. Increasingly since the late 1990s, academic libraries in Canada have been able to acquire access to more and more licensed Canadian geospatial data including vector data, tabular data, and remotely sensed data. Sources of these datasets include government at all levels, the commercial sector, environmental agencies and the academic sector.

Staff at the University of Guelph, University of Waterloo and Wilfrid Laurier University are actively involved in acquiring geospatial data, and yet each institution operates independently of the others in terms of the data service that it provides. This is in spite of the fact that the libraries at these three institutions are partners in a collaborative initiative referred to as the TriUniversity Group of Libraries (TUG); collaborative projects include: an offsite storage facility, book and document delivery, shared (non-geospatial) data resources, and a union online catalogue. At the University of Waterloo and the University of Guelph, geospatial service is provided by the libraries, but at Wilfrid Laurier University it is provided by the Geography Department. Each institution develops its own solutions with respect to, for example, data collection policies, staffing

levels and training, choice of software, data storage, data cataloguing or description, and web activity for access to and delivery of information and data. The approaches that are taken to deal with the acquisition, storage, description, and delivery of large and complex GIS datasets, for example DMTI Spatial's RouteLogistics data or Ontario Ministry of Natural Resources' NRVIS data, differ greatly from one campus to the other.

Much time and effort are spent by TUG staff developing and implementing independent solutions. One of the best examples of this is in the area of data documentation. The various ways in which geospatial data are described include:

- MARC records using standards such as AARC2, Library of Congress (LC) classification, LC Subject Headings
- Web-based, free-text descriptions in html
- Paper-based resource guides written by library staff
- Reliance upon vendor supplied documentation, typically in Word or PDF formats
- No documentation at all because of lack of time and staff resources

The net result of this confusing situation is that students and faculty on each campus can experience great difficulty gaining intellectual and physical access to TUG datasets. As well, library staff often find it difficult to remember which datasets, at the theme level, are held by or accessible to the library and where these are located.

Within the past year, the staff in the Mapping, Analysis and Design (MAD) unit, Faculty of Environmental Studies (FES), University of Waterloo, under the direction of Dr. Brent Hall, have developed a web-based application, the Spatial Data Catalog, that provides access to metadata records

for geospatial datasets held by MAD: http://www.fes.uwaterloo.ca/computing/services/spatialdata/. In mid-September 2002, representatives from TUG and WLU Geography Department attended a presentation by MAD staff at the University of Waterloo; these staff demonstrated how MAD has configured various software products from ESRI and a locally developed metadata editor to provide UW students with access to metadata that conforms to the FES metadata standard. It was generally agreed by those attending this demonstration that it should be possible for TUG to build on this work and, by working collaboratively with MAD staff, to develop an application that provides TUG clients with much better access to jointly held geospatial datasets.

The metadata project described in this paper is the outcome of that general agreement. This project was initiated in December 2002 and will terminate in May 2003.

Project Purpose

The objectives of this project are to:

- Develop a TUG metadata standard, building upon the current FES Metadata Standard, for documenting TUG geospatial datasets
- Create metadata records, conforming to this TUG standard, for selected geospatial datasets held jointly by TUG
- Test MAD's web-based metadata server application for proof-of-concept in delivering web access to these TUG metadata records

Project Team and Resources

The project team includes members from each of the three universities: Jenny Marvin (Guelph, Library), Pam Schaus (Laurier, Geography), Richard Pinnell (Waterloo, Library), Scott MacFarlane (Waterloo, Mapping Analysis and Design), and Shawn Morgan (Waterloo, Mapping Analysis and Design). Two other staff have offered to serve as metadata consultants to the team: Amy Chan (Waterloo, Library) and Anne Maricic (Waterloo, Mapping Analysis and Design).

The Steering Committee for TUG's TriUniversity Data Resources (TDR) approved the project in October 2002 and also approved sufficient funding to employ two graduate students. In December, Mike Leahy (Waterloo, Geography graduate) was hired to work part-time to develop the TUG Metadata Editor and the associated Style Sheet. In January, Phil Lam (Waterloo, Geography graduate) was hired to work part-time to develop the web interface and to document selected TUG geospatial resources using the Metadata Editor. Between them, these two students have knowledge of web scripting (XML, Java Script), Visual Basic, Active Server Pages (ASP) technology, ArcGIS and ArcIMS.

FES Spatial Data Catalog

It is worth repeating that the FES Spatial Data Catalog, developed by staff in the Mapping, Analysis and Design unit, is the application that supports this project. There would be no TUG Metadata Project as described above were it not for the hard work and creativity of the faculty, staff and students in the Faculty of Environmental Studies to provide web access to datasets held by that faculty. Having said that, it is fair to say that the work currently being done by the TUG team is a further development and enhancement of this earlier application. Indeed this enhanced application is customized for the TUG data environment and therefore better suited to library needs and interests. One good example of this is the fact that many of the metadata fields are repeatable to enable us to document values (e.g., data formats, contact personnel) that differ from one TUG partner to the other.

TUG Metadata Standard

Development work commenced on the TUG Standard in December and is continuing as we gain more experience documenting the geospatial resources we have targeted for the project. The team reviewed existing geospatial standards including but not limited to Federal Geographic Data Committee's (FGDC) Content Standard, Open GIS Consortium, ISO 19115 (and other ISO), and the FES Metadata Standard. The FES Standard, a modification of FGDC's Content Standard, is of particular interest because of its enhanced remote sensing content. The focus of these various standards is, quite properly, the interests and needs of data providers, data publishers and data creators. What seems to be lacking is the library context; there are no obvious provisions for call numbers, for example.

Section I – Identification Information									
Sub. Category	TUG ID	FGDC Identifier	TUG Field	Description	Field Type	Shortform	Domain	Oblig.	Max Occ.
Citation	1.1.1	No FGDC	ISBN	International standard book number	Text	isbn	free text	O	1
	1.1.2	No FGDC	ISSN	International standard series number	Text	issn	free text	O	1
	1.1.3	No FGDC	Government Number	Government document classification number	Text	govnum	free text	O	1
	1.1.4	No FGDC	Call Number	Library call number ("owner" attribute required to indicate relevant library)	Text	callnum	free text	M	Unl
	1.1.5	No FGDC	Language of Data	Language Code ("standard" attribute O to identify the name of the code standard used)	Text	langdata	free text	M	Unl
	1.1.6	No FGDC Equivalent	Data Set Identifier	Unique string to identify a data set	Text	datsetid	free text	M	1
	1.1.7	1.1/8.1	Originator	The name of the organization or individual that developed the data set	Text	origin	free text	M	1
	1.1.8	1.1/8.4	Title	The name(s) by which the data set is known.	Text	title	free text	M	Unl
	1.1.9	8.7.1	Series or Aggregate Data Set	Information about the series or aggregate data set to which this particular data set belongs	Text	sername	free text	O	Unl
	1.1.10	8.11	Collective Title	Common title with holdings note	Text	lworknt	free text	O	Unl
	1.1.11	1.1/8.8.2	Publisher	The name of the organization or individual that made the data set publicly available	Text	publish	free text	M	1
	1.1.12	1.1/8.2	Publication Date	The date when the data set is published or otherwise made publicly available	Date	pubdate	yyyymmdd, free text	M	1

Figure 1. Section of TUG Metadata Standard.

Ultimately then, we developed a local standard that represents a blend of several existing standards, but one that is primarily grounded in the FES Standard and hence the FGDC Standard. We have included in our standard a field which provides a cross-walk to FGDC or to other international standards as applicable. We recognize that as international standards evolve and hopefully converge we shall have to revisit and revise the TUG Standard. Figure 1 illustrates part of section 1 of the TUG Metadata Standard.

TUG Metadata Editor

Written in Visual Basic, the Metadata Editor is a custom program designed to operate within ESRI's ArcCatalog. It provides a wizard-style interface for creating metadata using the TUG Metadata Standard. Because the team had access to the program code for the FES Metadata Editor, it was not necessary to develop a new product but rather to "tweak" the FES program. This is very much a dynamic and interactive process, in that a revision to the Standard often necessitates a change to the Editor, which we refer to as the TUG Metadata Editor. Installation of this program is a simple matter; one needs only copy a single DLL file to the appropriate folder in ArcCatalog and then browse to this location within ArcCatalog.

Figure 2 is a screen capture showing the documentor's view of the Editor as he/she enters values for the attribute labelled OC_CONCERN, one of the fields in the conland (Other Conservation Lands) shapefile. The data that are being input into this particular screen are in conformity with section 5 (Entity and Attribute Information) of the TUG Metadata Standard.

TUG Style Sheet

This document, written in Extensible Stylesheet Language (XSL), specifies how the metadata (in XML) that is output by the Editor should display in a web browser. Styling requires a source XML document (containing the information to be displayed) and a style sheet (which describes how to display a document of a given type). The XML document is created automatically as output by the Metadata Editor. This XML file is transformed and rendered to create a display such as the one shown in Figure 4. Figure 3 is a screen capture of a small portion of the TUG Style Sheet.

Metadata Display on the Web

At the present time, the application that provides web access to our metadata is running on a Windows 2000 server owned and operated by the Faculty of Environmental Studies. This server hosts
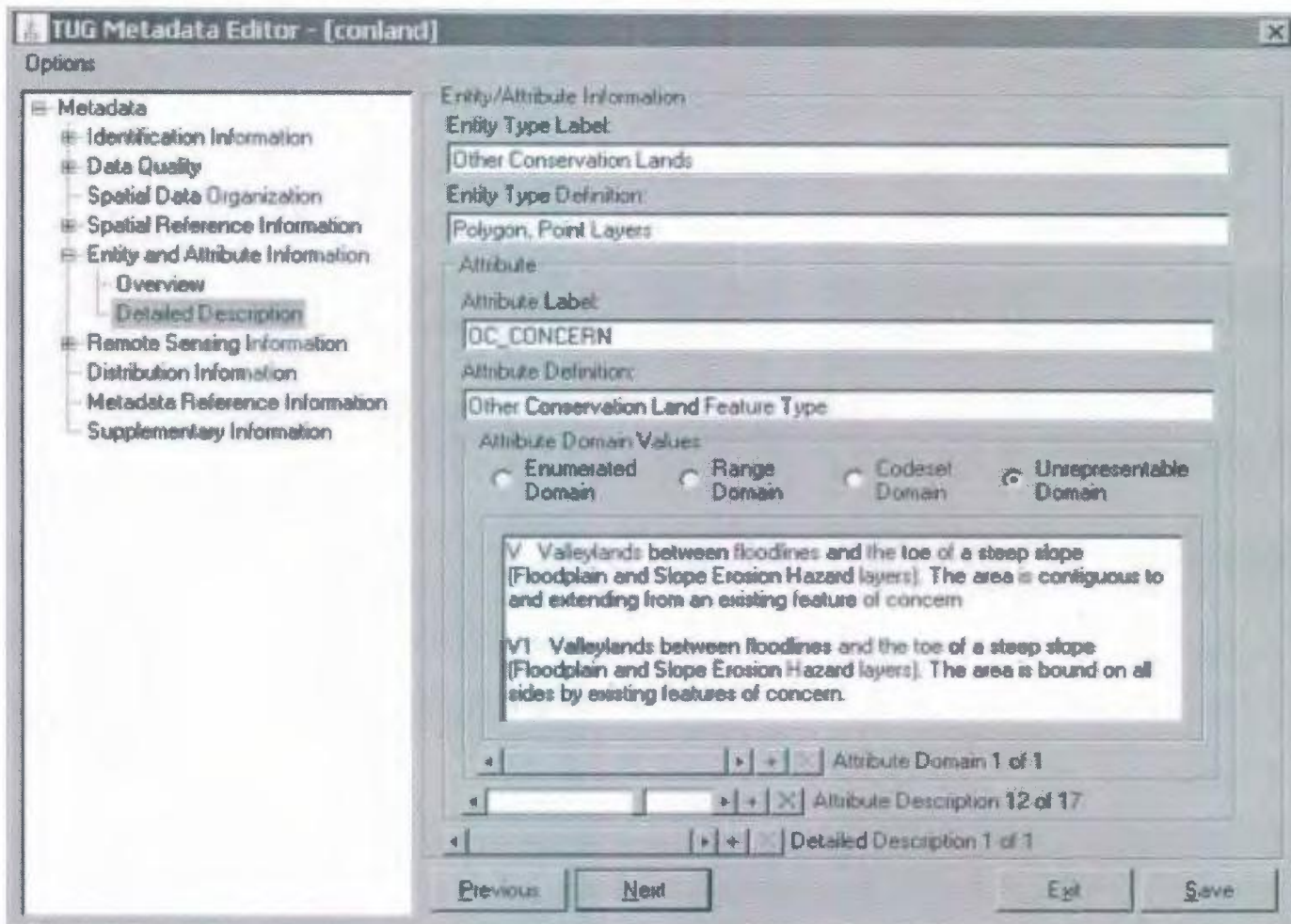
Figure 2. TUG Metadata Editor screen, for data entry.

Figure 3. TUG Style Sheet, which dictates how a document will display in a web browser.

Figure 4. Metadata output as displayed in a web browser. Thumbnail data preview shown in upper left.

Figure 5. Detailed metadata display for part of Section 1 (Data Set Identification), TUG Standard.

the web interface, search utility, metadata files, style sheet, and several ArcIMS map services. For the duration of the project, the search interface will be located at: http://www.fesspatial.uwaterloo.ca/library/. As this page loads, the Java Script does a browser check and reports only if the browser is not supported (e.g., less than Netscape 6.2.3). The Search Results page displays the results of a successful search; this display includes for each hit: the theme name, map service name, and URL hot link to the metadata display. Figure 4 illustrates the metadata for a theme named Other Conservation Lands. Note that all nine metadata sections are collapsed (i.e., hidden) by default in this initial display. In order to view metadata content, one must double click on a particular section heading (e.g., Data Quality Information) or click the Show All link in the upper right. A thumbnail preview of the dataset in shown in the upper left corner. This preview provides a link to the Spatial Data Viewer (see below).

Figure 5 illustrates the metadata content for part of section 1 (Identification Information) of the TUG Standard.

Spatial Data Viewer

It is beyond the scope of this article to discuss in detail the Spatial Data Viewer component of the application. Suffice it to say that this is an ArcIMS map service and that the viewer provides standard map service functionality including overview mapping, zooming, panning, adding/removing themes, and Layer List/Legend toggling. Figure 6 is a screen capture of a view of watershed data for the Grand River Valley. Two layers are turned on: River Watch Sites (points) and Floodplain (polygons); it is very difficult to interpret the detail in this graphic because it has been grey-scaled for publication. The overview map in the upper left shows the extent of the dataset in the view. A toggle button in the lower left enables one to toggle between the Layer list and the Legend in the rightmost frame.

Project Progress

Clearly the development of the application is a work in progress. We are currently working our way through a long list of observed errors, design issues, and content problems. However, many of these are
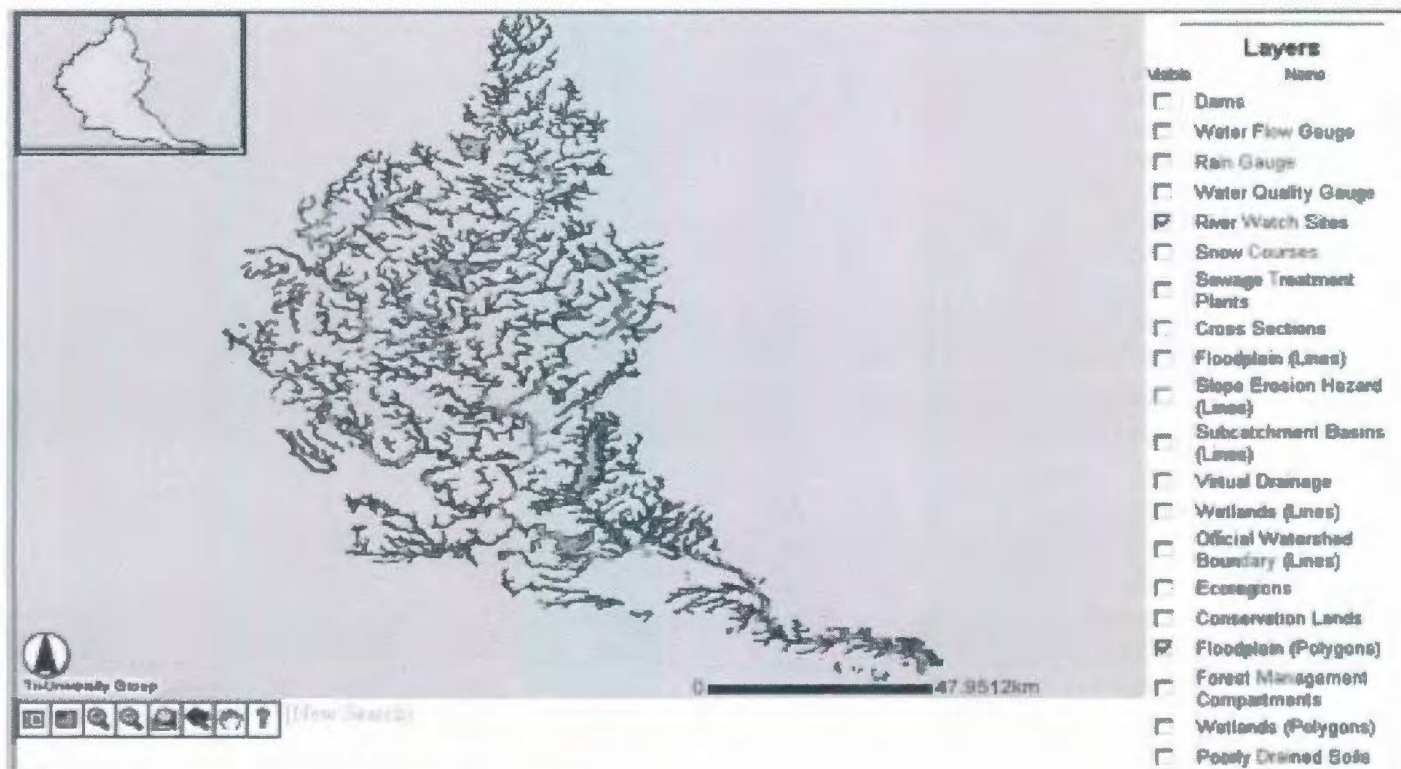

Figure 6. Sample of Spatial Data Viewer screen.

"fixed" as quickly as they are discovered, and we are getting better at detecting and resolving problems. Although the Standard will continue to improve and evolve for the reasons given earlier, development work on this document has slowed considerably during the past week (late March). We believe we have a standard that will provide us with records that adequately describe the resources we have on hand. The Style Sheet and the Editor evolve, to a great extent, in step with the Standard. It is therefore particularly burdensome when we add new fields to the Standard because that necessitates changes to the Style Sheet and the Editor.

The Spatial Data Viewer works well, although there are some design issues such as ensuring that themes (e.g., layers) are assigned distinguishing colours and that point and line features overlay polygonal features.

Issues

The work we have done so far has enabled us to identify a number of issues, some of them technical, others more fundamental in that they relate to first-principles. As we progress further, undoubtedly more issues will arise and will have to be addressed or earmarked for future consideration. Some of the issues are:

• Concerns about the application on the part of the data publisher: one data publisher has asked that we disable the Spatial Data Viewer for the map service that documents their data

• Consortial issues: the geospatial service environment at each institution is different; the Standard must remain flexible enough to accommodate these differences

• International metadata standards: there will be an impact upon our standard as the international scene changes (e.g., FGDC is currently being overtaken by ISO)

• Tiled datasets such as National Topographic Data Base (NTDB): although the metadata is based on a description of a single tile, this description must be broadened to encompass the complete dataset

• Browser issues: the application does not support all web browsers; Java incompatibility is often the cause of this problem

• Keywords: we have not yet found a theme-based thesaurus we can use to control the keyword vocabulary

• Computing environment: the application is running on an FES server; we need to ensure that when the application eventually migrates to a library server it continues to run

Next Steps

If by May this year we can demonstrate proof of concept to the TDR Steering Committee, then we will apply to mount a second metadata project which builds on the work of this one. Indeed we hope that we can commence this new project some time before May. At that time, we will investigate the feasibility of replacing our current application with ESRI's Metadata Explorer, which comes bundled with ArcIMS. However, early indications are that reprogramming and tweaking this software may prove to be too difficult since this requires solid knowledge of JSP and Java. We plan therefore to investigate alternate interface softwares, some of which are freely available for download on the Internet.

Another aspect we will investigate is better database management of our records; one promising direction is Oracle DBMS, interfaced to ArcIMS. We also need to ensure that we do not develop an application that we cannot migrate to a library environment. However, because there is a great deal of computing expertise within our three institutions and because there is a demonstrated willingness and enthusiasm on the part of our staff to work together for the benefit of our clients, then these issues are ones we can address.

Our ultimate goal is, depending upon the success of our feasibility and pilot projects, to move from project mode and into production mode; that is, we are hopeful we can roll out an application that TUG staff will use to document all the geospatial resources that we hold in common as well as those held by individual institutions. We believe that by working collaboratively we can develop an application that provides TUG clients with much better access to geospatial datasets than is currently the case.

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES

ANNUAL GENERAL MEETING - MAY 30, 2002
RAMSEY WRIGHT BUILDING, UNIVERSITY OF TORONTO

1.0 Establishment of quorum; call to order.

It was established that a quorum was reached, so the meeting was called to order at 2:40 p.m.

2.0 Approval of Agenda.

The agenda was approved with one addition - Item 10.11 National Archives report. (Amy Chan, Tim Ross) CARRIED

3.0 Minutes of previous Annual General Meeting.

The minutes of the previous Annual General Meeting held June 1, 2001 in Montreal, as previously circulated and published in the ACMLA Bulletin No. 113, were **approved** as printed. (Richard Pinnell, Lori Sugden) CARRIED

4.0 Business arising from previous AGM minutes.

In reference to item 7.2 of the previous minutes, Grace Welch mentioned that the letters had been sent to both the National Archivist and the National Librarian.

5.0 President's report.

The President's report was sent on CARTA as an attachment and is on the ACMLA web site. Grace Welch, ACMLA President, made one correction, noting that the National Archives' Government Records Branch did not absorb all of the former Visual and Sound Archives Division, only the Cartography and Architecture Section.

5.1 DSP for maps

Grace introduced Karen Lochhead who has a contract with Communications Canada, Depository Services, to prepare the agreement package for the new DSP [Depository Services Program] for Maps. Karen mentioned that she was working on

compiling a list of depository institutions and that the list may be expanded since there is more interest to acquire digital products. In early June, the Depository Services will create an advisory committee to look at applications to join the DSP in view of the cost limitations involved in adding new institutions to the list. Also, there is a possibility that other map producing departments could contribute to the DSP for Maps, such as Environment Canada. Karen invited members to e-mail her if they have any concerns with the Licensing Agreement.

Pierre Roy asked if there was a way to get a copy of the previous agreement in an electronic format. Karen will check. Pierre also asked if a FAQ could be developed for the agreement. Karen agreed that this could be developed.

Grace mentioned that the new license agreement will be reviewed and possibly changed since it is somewhat restrictive. Shirley Harmer asked if we will acknowledge the DSP for their part in establishing the agreement. Grace agreed that we should.

ACTION - Grace will send a letter to the DSP, thanking them for negotiating the agreement.

5.2 GeoConnections

Grace indicated that her report on GeoConnections was posted on the ACMLA web site and that Jeff Labonte, Director of the GeoConnections Secretariat, would be in attendance tomorrow if anyone has any questions.

6.0 Treasurer's report.

6.1 2001 Financial report

Pat McIntyre went through the financial report for 2001. He noted that there was extra money from the 2001 Conference receipts and congratulated Pierre Roy for his role in achieving this surplus. Also, Pat noted that executive travel was down to under $600. There were no questions.

It was **moved** to accept the 2001 Financial Report as presented. (Betty Kidd, Cheryl Woods) CARRIED

6.2 SSHRC Committee chair

Pat talked about finding a new chair for this committee to replace Tom Nagy. A call will go out on CARTA this fall. Pat looked after dispersing the travel grants this year and explained that not all the money was dispersed this year, in order to carry some over to next year since the conference will be in Victoria.

7.0 First Vice-President's report.

7.1 Committees reporting to the First Vice-President

Susan mentioned that her report was on the web site and added that the effort from all the committee members is well appreciated.

7.1.1 Copyright Committee

Richard Pinnell will continue as Chair. It is expected that this committee will become very active this year.

7.1.2 Archives

Jeff Murray sent a letter to Susan informing her that he was stepping down as ACMLA Archivist. Susan sent a call on CARTA asking for a volunteer to replace Jeff. Louis Cardinal offered to take on this role. The ACMLA will make some funds available to Louis to hire a student or contractor to organize the ACMLA archives. The new archivist will implement the ICA Archiving guidelines.

7.1.3 Awards Committee

Lori Sugden, Chair of the Awards Committee, announced that the committee has selected two honours awards and a paper award. They will be presented at the conference closing banquet.

7.1.4 Conferences

Susan again thanked Pierre Roy and Pierre Lépine for their effort on the 2001 Conference in Montreal. She also thanked Marcel Fortin for his efforts on the current conference.

Lori Sugden is our representative on the organizing

committee for the 2003 Conference that will be held jointly with CCA [Canadian Cartographic Association] and CAG [Canadian Association of Geographers]. Lori mentioned that planning was going well and she showed the poster already prepared for the event.

Susan is working on the conference manual and the latest draft has been presented to the Board. Anyone who would like to contribute to the manual is welcome.

There are as yet no volunteers to host the 2004 conference. Susan invited members to consider hosting in 2004.

7.1.5 Membership

The membership report is in the financial report. Membership has remained constant, but we could always use more members.
.
Bruce Weedmark is stepping down as membership coordinator. Susan put forward a resolution to thank Bruce for his efforts:

Be it **resolved** that the Association of Canadian Map Libraries and Archives express its deep gratitude to Bruce Weedmark for his long and excellent devotion as the Chair of the Membership Committee. (Susan Jackson, Cathy Moulder)   CARRIED

7.1.6 Bibliographic Control Committee

Report is on the web site. Thanks to everyone on the committee for their excellent work.

8.0 Second Vice-President's report.

8.1 Committees reporting to the Second Vice-President

Reports posted on the web site

8.1.1 Publication Committee

The Publication Committee held an open meeting this afternoon to discuss Betty Kidd's report on publications. The report was well received and her recommendations were endorsed by members. David announced that Betty has agreed to be the Chair of the Committee.

8.1.2 Historical Maps Committee

Gord Beck has accepted to be Co-Chair of the Historical Maps Committee. David will continue as Co-Chair until a replacement can be found. The committee will move ahead on some of the recommendation outlined in Danny Forbes' *Historical Maps Marketing Plan*.

8.1.3 ACMLA *Bulletin*

David commended Cathy Moulder for her excellent work in editing and managing the *Bulletin*. There will be new criteria developed for the New Maps list, maybe to include 'new resources' such as geomatic products. The Publication Committee will review suggestions from members.

8.1.4 Webmaster and web site development

David thanked Nan Fern for her work in improving the ACMLA web site and announced that an ad-hoc Web Site Committee will be formed to work on developing the site which is expected to become the hub of the Association's publication activities. A call will go out in the fall for volunteers. Anyone who is interested in participating in the development of the web site should speak to David.

9.0 Past President.

9.1 IFLA membership

Grace talked about background and rational of James Boxall's recommendation to the Board that the ACMLA not apply to be members in IFLA.

9.2 Nominations

This item was deferred to the end of the meeting.

9.3 Changes to Rules and Procedures

Marc reported that there would be some changes and updates to the ACMLA Rules and Procedures. These amendments will be drafted by the Board and presented at the 2003 AGM. He also mentioned that the Board is considering changes to the ACMLA By-laws to update the Association's objectives to reflect the emergence of GIS and Geomatics.

10.0 New Business.

10.1 Mentoring Program - Colleen Beard's report

Grace introduced the report prepared by Colleen Beard. She asked if members would like to become mentors and if the mentoring program seemed like a reasonable proposal. The objective is for new members to feel welcome and have a resource person if they have questions. As well, the web site could include a 'tool kit' for new members and a list of contacts who would act as 'subject specialist'. Members expressed some reservation about posting this kind of list on the Internet and that maybe a closed list (Intranet) might be more appropriate. It was suggested that the ACMLA form its own closed listserv as a forum for unique issues relating to the Association (Colleen mentioned that MAGERT has this kind of forum and that she would find out how busy it is). Richard expressed that he would like to see more discussion about the mentor's role and that many of the functions already discussed are probably already part of our jobs.

Colleen explained that the mentor's role is not necessarily about discussing skills but more about advising on career development and professional perspective. Our senior members would have much to offer in this regard.

Grace ended the discussion saying that the Board would move forward on Part One of the recommendations. A show of hands indicated that there is general support from the members to pursue the objectives of Colleen's report.

10.2 Honorary Members

Grace Welch had sent a message on CARTA reminding members that this award was available and members could nominate individuals at any time. Since no one was nominated, the Board decided that it should be pro-active in nominating some of the pioneers who helped in creating the ACMLA. **Grace Welch put forward a motion:**

To recognize their role in creating the ACMLA and for their outstanding contribution to the association over the years, that the following individuals be considered for Honorary Lifetime Membership: Joan Winearls, Yves Tessier, Barbara Farrell, Serge

Sauer, and Betty Kidd. (Elizabeth Hamilton, Richard Pinnell)

Richard asked if there was any criteria established for this award and if there were other current or past member that should be considered for this award. As well he asked if any provision has been made for the awarding of this honour posthumously. Grace noted that there are no solid criteria in the By-laws and Rules and Procedures and that other members could be nominated at any time. The purpose of the present motion was to begin the process of recognizing some of the pioneers of the ACMLA. Elizabeth Hamilton mentioned that the criteria for this award should be reviewed every year. There was a general consensus from members that this should happen before the present motion is passed, to ensure that all deserving members and past members are considered.

As a result of the discussion and uncertainty about the aims of the motion, it was agreed that **the tabled motion be withdrawn.** (Withdrawn by Elizabeth Hamilton and Richard Pinnell)

ACTION - The Board will examine the By-law for this award in terms of establishing some criteria and process for nominating individuals. Elizabeth Hamilton volunteered to assist the Past President in this review.

10.3 CARTA archives and new listserv

As a point of information, Grace wanted to ensure that members are aware that the CARTA listserv archives on the ACMLA web site is searchable by anyone. She asked if members would be more comfortable with a separate 'closed list' that would only be available to ACMLA members and which would allow a more open discussion.

Marcel Fortin asked about origins and purpose of CARTA and supported the idea of creating a separate listserv for the ACMLA. Richard Pinnell noted that a separate ACMLA listserv would spell the end of CARTA. Through a show of hands, there was a general consensus that the ACMLA should not create a separate listserv.

10.4 Revision of ACMLA objectives

Grace explained that the ACMLA objectives, as they

appear in the current By-laws were last revised at 1994 Conference in Guelph. She noted that they make no mention of Geomatics or GIS. She asked if anyone would like to take this on. Richard Pinnell volunteered to do this and mentioned that he would also look into changing the name of the ACMLA to reflect the new reality.

10.5 GIS Day sponsorship

GIS Day is an ESRI initiative that some map libraries have celebrated. Grace asked whether the ACMLA should be an official sponsor of the event and there would be no financial commitment. Members agreed that Grace go ahead and indicate that ACMLA will be a sponsor of GIS Day.

10.6 Student paper award

This is a new idea that the Board would like to promote. It was suggested that a $200 student papers award be established and that the winning entry would be published in the *Bulletin*. The ACMLA would have to send a notification to the various archive and library schools. It was agreed that this would be a good incentive to get students thinking about maps librarianship or archiving.

ACTION - It was decided that a student paper award should be created. It was referred to the Awards Committee, which will establish some criteria, process, and decide the monetary value of the award. They will present their recommendations to the Board before the next AGM.

10.7 Proposal for funding support to present at other conferences

For information. The idea is to make some funds available to ACMLA members to help defer the cost of attending conferences of interest to the ACMLA. Tabled to a future meeting to work out the details. Referred to SSHRC committee.

10.8 MapInfo proposal

Grace received an email from MapInfo, who are looking for ways to break into the educational market. Grace discussed the merits of their proposal and asked whether members would be interested in pursuing an agreement with this company that would make GIS software available at reduced cost.

There is some interest.

ACTION - Grace will follow up with MapInfo.

10.9 Certificates of appreciation

For information. Grace read the certificates of appreciation that were presented to DMTI and ESRI.

10.10 CLA/ALA Conference

David mentioned that the joint CLA/ALA Conference will be held in Toronto in 2003. This could be a good opportunity for ACMLA participation. There could be funds available for ACMLA members to attend.

ACTION - David will look into the possibility of having a booth at the 2003 CLA/ALA Conference for marketing our publications and historical maps.

10.11 National Archives Report

A written report will be posted on the web site. David Brown highlighted a couple of points, mentioning that the National Archives had acquired the 1657 Bressani map and that the 1901 Individual Census Returns had been launched on ArchiviaNet. As well, planning is under way to digitize 800,000 items this year, including approximately 4,000 maps.

Grace mentioned that Marilyn Osborne, Director General of the Government Archives Branch had extended an invitation to hold a consultation session with the ACMLA and that hopefully this could be arranged for next year.

11.0 Business Plan.

Grace talked about the background and organization of the draft ACMLA Business Plan and thanked James Boxall and Susan Jackson for their contribution. This is the first attempt for the Association to create a business plan, and although the ACMLA has done well for a small group, it is hoped that the Business Plan will help make the best use of our limited volunteer energy.

Grace went through the goals and expected outcomes of the Business Plan, highlighting the issues that are of most concern to members, and outlining what may be done with these. This was

followed by some discussion about how to move these initiatives forward. It is a very ambitious plan but members generally agreed that many of the outcomes are achievable. Grace welcomes feedback and will follow-up. In some cases, task groups may need to be created these objectives - all volunteers are welcome. On behalf of ACMLA members, Elizabeth Hamilton thanked the crafters of the plan.

12.0 Proposed Budget.

Pat went through the proposed budget for 2002/2003. He noted that there was an additional $750 to hire a student for ACMLA Archives and a further $500 was allocated to the Publication Committee to help cover Betty's travel and administration costs.

It was **moved** to adopt the Treasurer's proposed budget with the amendments made at the meeting. (Elizabeth Hamilton, Shirley Harmer) CARRIED

13.0 Other Business.

13.1 ICA Report

Grace announced that Alberta Woods had sent her ICA report and that it would be posted on the web site.

13.2 Nominations

Marc introduced the new Board member for 2002/2003, who was acclaimed to office. Marcel Fortin is the new Secretary.

14.0 Next meeting.

Victoria, 2003.

15. Adjournment.

Meeting adjourned at 5:00 p.m.

Respectfully submitted by:

Marc Cockburn, Secretary
Grace Welch, President

CATALOGUING NOTES
FROM THE BIBLIOGRAPHIC CONTROL COMMITTEE

Velma Parker
National Archives of Canada

With all of the changes on the cataloguing front due to the controversy over content versus carrier, it is difficult to know how to code some cartographic materials such as *geomatic data sets* and *microforms*. When all the smoke has cleared, we find that content is winning the war. Another problem area concerns the coding of *remote-sensing images*. The following gives some guidance on the various fields which need to be coded consistently and in concert.

MARC 21 DEFINITIONS FOR LEADER 6 (TYPE OF RECORD) CODES [1]

Microforms: Microforms, whether original or reproductions, are not identified by a distinctive Type of record code. The type of content characteristics described by the codes take precedence over the microform characteristics of the item.
(Source: printed version, not in on-line version)

Electronic resources: Computer files are identified by a distinctive Type of record code only if they belong to certain categories of electronic resources as specified below; in all other cases, the type of content characteristics described by the other codes take precedence over the computer file characteristics of the item.
(Source: printed version, not in on-line version)

e - Cartographic material
Code e indicates that the content of the record is for non-manuscript cartographic material or a microform of non-manuscript cartographic material. This code is used for maps, atlases, globes, digital maps and other cartographic items.
(Source: printed version; on-line version not as inclusive)

f - Manuscript cartographic material
Code f indicates that the content of the record is for manuscript cartographic material or microform of manuscript cartographic material.
(Source: printed version)

m - Computer file
This code indicates that the content of the record is for the following classes of electronic resources: computer software (including programs, games, fonts), numeric data, computer-oriented multimedia, online systems or services. For these classes of materials, if there is a significant aspect that causes it to fall into another Leader/06 category, the code for that significant aspect is used instead of code m (e.g., vector data that is cartographic is not coded as numeric but cartographic). Other classes of electronic resources are coded for their most significant aspect (e.g., language material, graphic, cartographic material, sound, music, moving image). In case of doubt or if the most significant aspect cannot be determined, consider the item a computer file.
(Source: on-line version)

LEADER 06 AND THE GMD

Leader 06 should be coded "e" for all cartographic material regardless of the carrier used with the exception of digital and microform images of manuscript cartographic materials when code "f" is used.

Leader 06 and the GMD go hand in hand and so should match. Therefore, when Leader 06 = e (or f), the GMD should be given as [cartographic

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1. Print version: *MARC 21 format for bibliographic data* / prepared by Network Development and MARC Standards Office, Library of Congress in cooperation with Standards and Support, National Library of Canada. 1999 ed. Washington: Library of Congress, Cataloging Distribution Service; Ottawa: National Library of Canada, 1999- .

On-line version: *MARC 21 concise format for bibliographic data*. 2002 concise ed. [Washington] : Library of Congress, Network Development and MARC Standards Office, 2002. <http://www.loc.gov/marc/bibliographic>

material], or for those cataloguing in French [document cartographique].

Electronic resources

The Library of Congress has prepared "Guidelines for distinguishing cartographic materials on computer file carriers from other materials on computer file carriers" (see http://lcweb.loc.gov/marc/crmap.html) on this issue. In this article they outline, with examples, the instances when Leader 06 should be coded "e" and not "m" and also when "m" should be used. A companion document "Guidelines for coding electronic resources in Leader/06", may be found at http://lcweb.loc.gov/marc/ldr06guide.html. Please note that the Library of Congress does not use the GMD except in a very few instances, thus the GMD in the cartographic examples in these documents is incorrect and should really be records as [cartographic material] and not [electronic resource]. When questioned on this, the LC reply was the GMD in the two texts would not be amended as they did not use the GMD for cartographic materials.

Code "e" for electronic resources

The following is a verbatim listing of instances when coded "e" should be used:

"Images of cartographic material, whether scanned or constructed from digital files with file formats such as: GIFs, TIFFs, BMPs, JPEGs, etc. Treat images of geographic features as cartographic when they are combined with spatial or geo-referencing tools (such as the geographic coordinates longitude and latitude, or grids).
Data, primarily vector data, that produce cartographic images when processed by software products such as geographic information systems (GIS).
Atlases, including multimedia atlases whose significant aspect is cartographic, even those that may include large quantities of textual or alphanumeric data. Multimedia atlases often include non-cartographic data that facilitate a spatial understanding of things, concepts, conditions, processes, or events in the human world.
In cases of doubt, also consider the following factors to be an indication of when to use code "e." These factors should be used on a case-by-case basis, particularly in situations where the item is not mounted for examination:

- Publisher's intent, as evidenced by words in the title, descriptions on accompanying materials, containers, etc.
- Publisher history, for example a product developed by a publisher whose main activity is the production of cartographic materials (e.g., Rand McNally, DeLorme, Thomas Bros.)"

Code "m" for electronic resources

There are instances when Leader 06 should be coded "m" for electronic resources and the GMD "electronic resource" used. It should be used for:
- computer software (including programs, fonts, games (even those with cartographic or geographic content)
- numeric data
- computer-oriented multimedia
- online systems or services.

RELATED FIXED FIELDS 008, 006 AND 007 AND THEIR CODING

There are a number of fixed fields which work in concert to express the intellectual and physical nature of the material being described:

008 Leader 06 governs the 008, so if the code "e" is used, then the 008 which appears in the record is that for cartographic material.

006 To express the information for the carrier (that has itself a valid Leader 06 code) the 006 which corresponds to the carrier is also coded. For example, if the material is coded as cartographic but its carrier is electronic, the 008 Maps is coded as well as 006 Computer files for electronic resources. If it were an electronic cartographic serial we would choose both the 006 for computer files and the 006 for serials. In short, use as many 006 codes as apply to the material being catalogued.

007 Physical description fixed field.
There are quite a number of 007 fields which may apply to cartographic material (e.g., map, computer file, globe, tactile material, projected graphic (for slides, transparencies), microform, remote-sensing image). For example, to cover the physical characteristics for a map on a computer file, both the 007 for cartographic and for computer files are coded. Similarly, if we have a microform version of a cartographic item both the 007 for maps and the 007 for microforms are coded.

Remote-sensing imagery.

In order to fully describe the physical aspect, both the 007 Map and the 007 for remote-sensing imagery need to be coded, as there are codes in 007 Map which are not present in 007 remote-sensing imagery.

GENERAL MATERIAL DESIGNATION (GMD)

The GMD that should be used for cartographic material is "cartographic material" (French equivalent: document cartographique). This GMD is to be used for all cartographic material regardless of the form (map, atlas, remote-sensing image, etc.) or medium (paper, microform, digital, etc.) in which it is presented. Until the Joint Steering Committee (AACR2) concludes its work on issues resulting from the change to 0.24, the GMD may not be qualified except for terms for the visually impaired (i.e., braille, large print, tactile) as stated in 1.1C1. To do so will result in the records containing non-standard qualifiers and so interferes with the matching process in the union catalogue.

Warning: if you contribute records to the union catalogue or if you plan to, <u>do not qualify the GMD</u> except as allowed by AACR2 rule 1.1C1.

EXAMPLES OF CODING TO FIXED FIELDS, GENERAL MATERIAL DESIGNATION (GMD) AND SPECIFIC MATERIAL DESIGNATION (SMD)

1. Remote-sensing image (colour infrared print)

Leader 06	e
008 Map	.....s1969....onc.......z..f..1.......d
007 Map	ar|canza
007 Remote-sensing image	ru|bc0bbbda
245 GMD	$h[cartographic material]
300 SMD	$a1 remote-sensing image

2. Geomatic data set

Leader 06	e
008 Map	.....s2000....onc.......b..ss.0/eng.d
006 Computer file	m........c.s......
007 Map	aj|cenzn
007 Computer file	co|cg.|||a|aaa
245 GMD	$h[cartographic material]
300 SMD	$a 125 maps on 1 computer optical disc

3. Microform cartographic material

Leader 06	e
008 Map	.....r19841680dcui......e..fa.0.....
007 Map	ad|arzdb
007 Microform	hd|bfb010buca
245 GMD	$h[cartographic material]
300 SMD	$a1 atlas (4 v.) on 1 microfilm reel

4. Remote-sensing image on microfiche

Leader 06	e
008 Map	.....s1961....onc.......z..f..1......d
007 Map	ar|aanza
007 Remote-sensing image	ru|bc0bbbaa
007 Microform	he|bhb030buca
245 GMD	$h[cartographic material]
300 SMD	$a10 remote-sensing images on 1 microfiche

5. Remote-sensing image on computer file

Leader 06	e
008 Map	.....s1991....onc..........fs.0....d
006 Compute file	c........c.f.......
007 Map	ar|azzzn
007 Remote-sensing image	ru|bc0cmbaa
007 Computer file	cf|bz.|||m|am|
245 GMD	$h[cartographic material]
300 SMD	$a10 remote-sensing images on 1 computer cassette

ERRATA NOTICE

In the article "Core Level Cataloguing for Non-serial Cartographic Material" in *Bulletin* No. 112 (Fall 2001) page 14, there is a typographical error in the table under 008. Character position 18-25 should be corrected to 18-2<u>1</u>.

DUPLICATES IN THE UNION CATALOGUE ON AMICUS

Those of you searching in the union catalogue on AMICUS will likely have noticed duplicate records which is understandable as the matching procedures at National Library of Canada (NL) can accomplish only so much. If there is any doubt, the NL policy is to leave the records as separate entities. We are in a better position to ascertain that the items in question are really duplicates. So, if you spot duplicates, please note the AMICUS numbers, and send them to the Chair of the Bibliographic Control Committee. The Committee will arrange to have the duplicates deleted.

HOW TO CLIP MULTIPLE LAYERS OF GEOSPATIAL DATA IN ARCVIEW 3.2

This procedure outlines the steps required to batchclip multiple geospatial datasets in ArcView, retaining the attribute table structure of each individual theme. While you can easily clip a single file using the GeoProcessing Wizard (see *Bulletin* 110, Winter 2001, pp.26-28), you must add a new extension called "batchclip" to clip more than one file at a time.

Acquiring "batchclip.avx"

The batchclip extension can be downloaded from the ESRI ArcScripts website at http://arcscripts.esri.com/ Search for the script "batchclip" without the quotations, and download the script to your local harddrive. Unzip the file and store the batchclip.avx file in the ArcView extensions directory. This directory is typically found in C:\ESRI\AV_GIS30\ARCVIEW\EXT32.

Loading the script

Open ArcView.

Select **File** then **Extensions**. You should see BatchClip appear in the extensions listing. Click in the box beside the name to turn the extension on. Click OK.
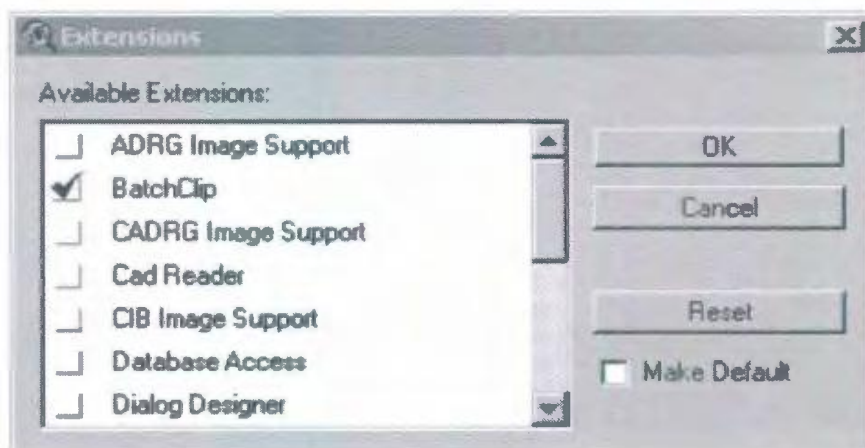
Open a View.

A new button appears in the toolbar

Add your data files to the View, both the data files you would like to clip and the boundary file you want to use as the "clipper". Click on the Add Data button , navigate to the directory holding your data, select the files to add and click OK.
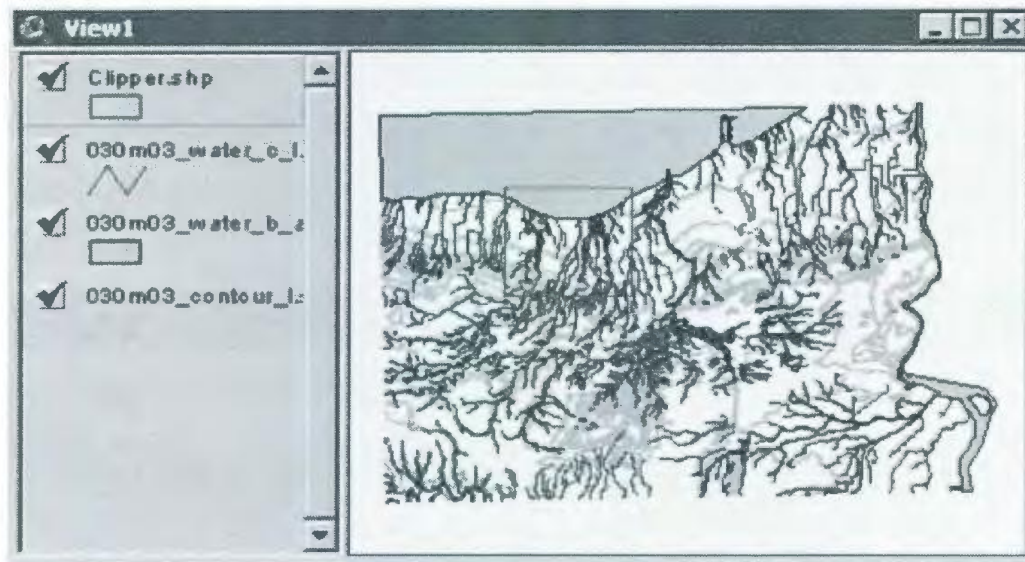
Setting the Working Directory

You must set the working directory before proceeding. Select **File** then **Set Working Directory...**

Enter the path leading to the directory where you want your files stored. Do NOT add a backward slash at the end of the path. ArcView does this automatically. See image below for details. Click OK.

Running BatchClip

Click the BatchClip button on the toolbar .

Click YES when prompted with the message regarding the working directory.
Select the themes to be clipped. Click OK.
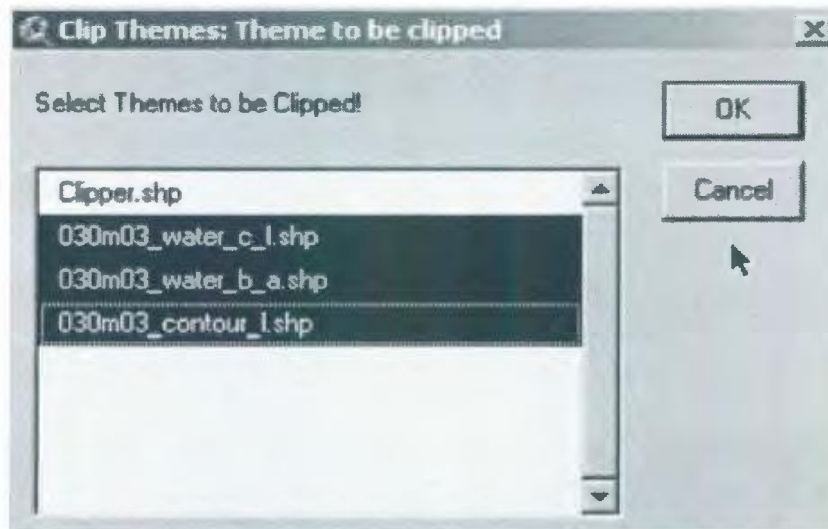
Select the boundary theme to clip with. Click OK.
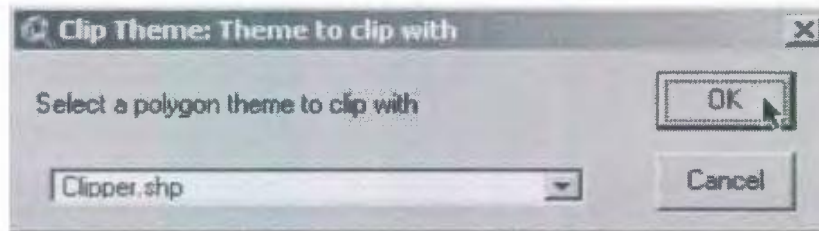
The process begins. The clipped shapefiles are added automatically to your view with "_clip" added to the file name. When the process is finished you are prompted with a message window. Click OK.
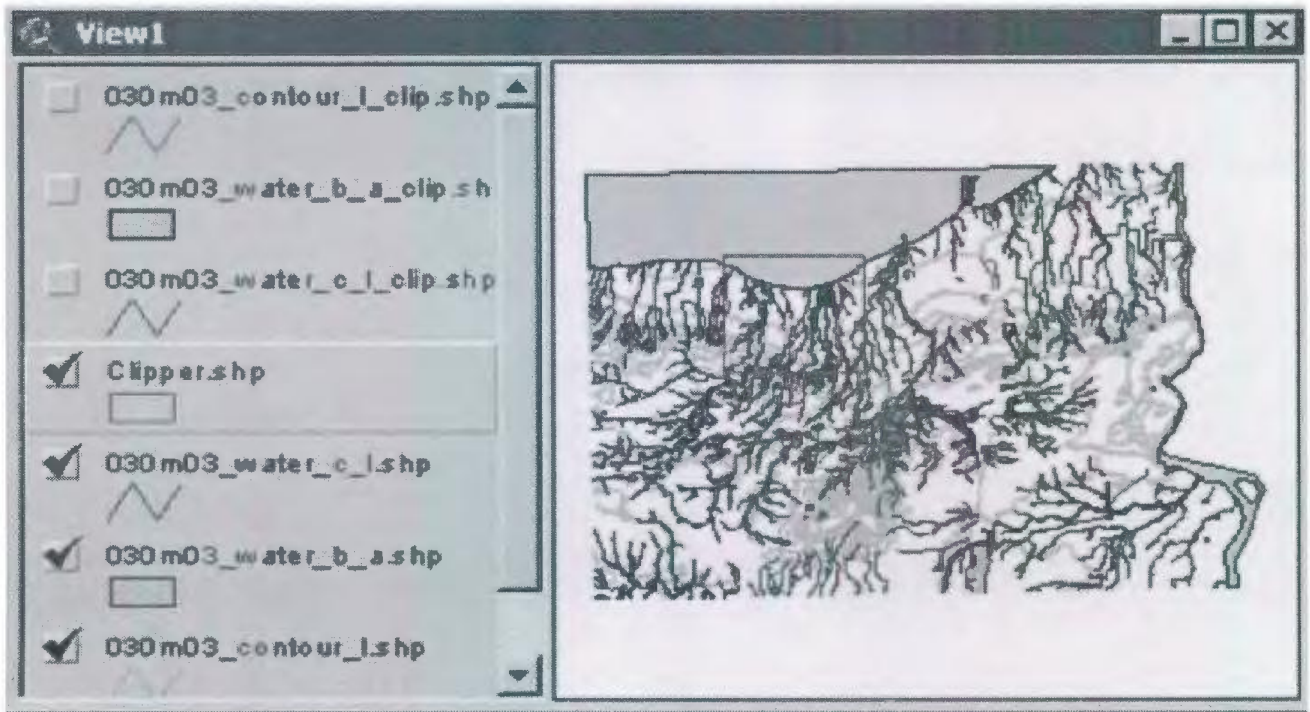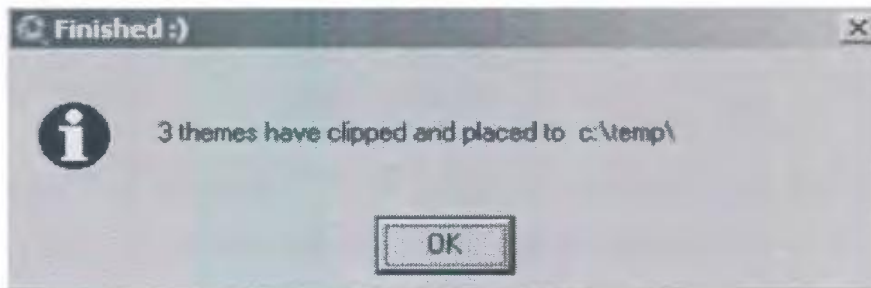
Turn OFF the original layers, and turn ON the newly clipped layers.

Zoom to the study area for a better view.
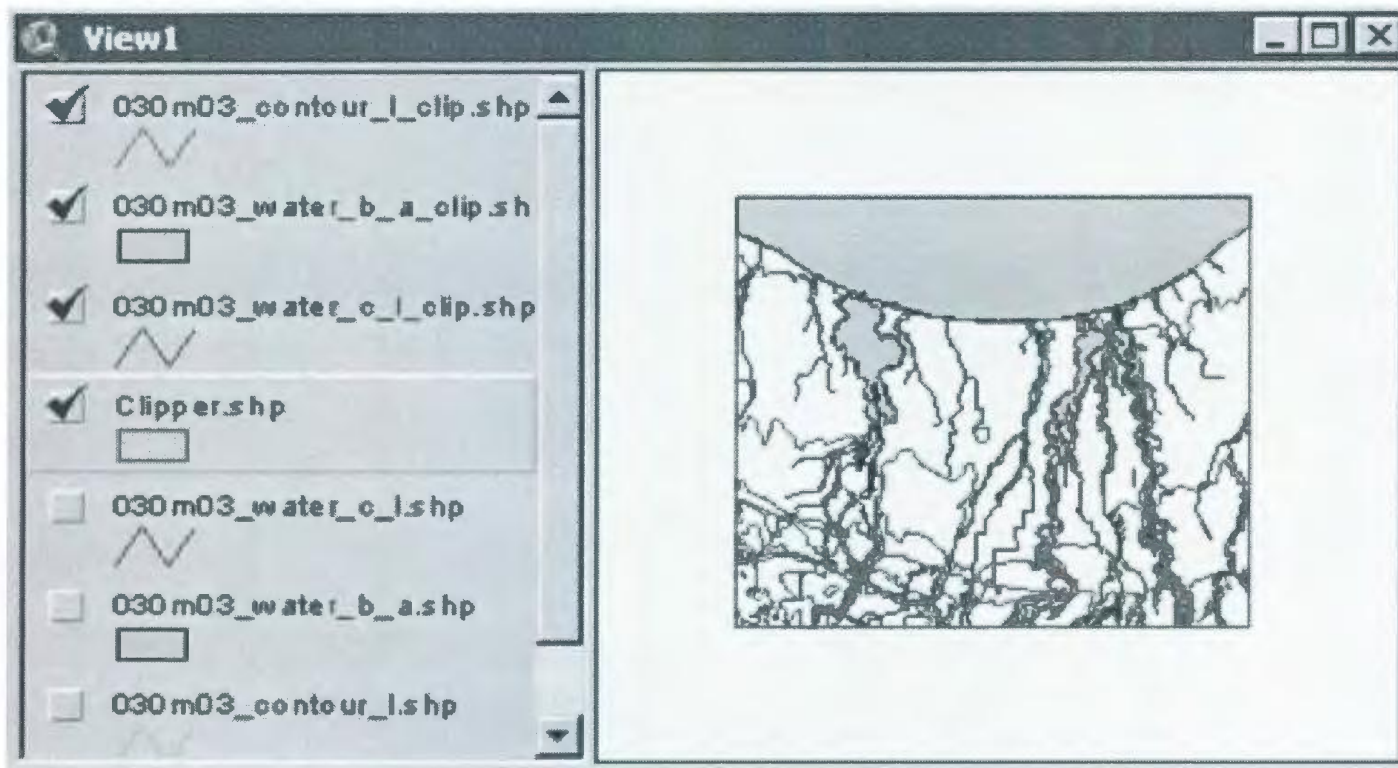
You should see all layers clipped to the shape of your boundary file.

The attribute table for each theme should contain only those features within the boundary.

ACMLA Help!! Column

The instructions for this ACMLA Help!! Column were prepared by Sharon Janzen, Map Library, Brock University, St. Catharines, Ontario. They are also available on the Internet at http://www.brocku.ca/maplibrary/procedures/clip_AV32.htm.

The ACMLA Help!! Column is a way of sharing user guides, help sheets, and other instructional materials. The aim is to prevent duplication of effort, and to share information of common interest. If you have instructional materials which you would be willing to share, please contact the Editor.

REGIONAL NEWS

Pierre Roy

British Columbia

University of British Columbia
Rare Books and Special Collections
Frances Woodward
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Map Society of British Columbia

Yes, the Map Society is still active. Work continues on the "Early Maps of the British Columbia Area" project. About 2,400 maps have been listed, and 11 x 17 photocopies made. We are hoping to upgrade the quality of some of the photocopies to allow scanning low resolution images for web viewing. Plans are developing to have the cartobibliography with images on a new Society website.

Among the speakers in the past year have been: Derek Hayes on his *Historical Atlas of British Columbia and the Pacific Northwest* and *First Crossing: Alexander Mackenzie, His Expedition Across North America and the Opening of the Continent*; Frances Woodward on fire insurance plans; Stanley Deane on Copan; Michael Layland on his experience as specialist staff lecturer of the history of exploration and cartography aboard the Lindblad Expedition's MS *Endeavour* from Cadiz, Spain to Salvador, Brazil, and reviewed maps of Amerigo Vespucci and other early voyages to South America; John Crosse on Jacinto Caamano and his voyage in the *Aranzazu* in 1792; Bob Ward on his research into Drake's voyage to the Northwest Coast; and Derek Hayes on his *Historical Atlas of Canada: Canada's History Illustrated with Original Maps*.

Rare Books and Special Collections, University of British Columbia Library

We recently marked the first anniversary with Ralph Stanton as Rare Books and Special Collections Librarian. The University Archives is now a separate administrative unit, although we share a service desk and reference duties, and our name was changed last spring. The cartographic archives remain with RBSC. We are still trying to reduce our cataloguing backlog of maps, books and other items, and I am trying to upgrade cartographic inventories and get them onto our website.

We have recently been faced with some new problems with the Map Library moving to the Koerner Library. In addition to losing the Map Library's resources in Main Library, we have also lost the relatively convenient access to the large photocopiers. Now we have to face the prospect of transporting rare maps across campus in Vancouver's rare liquid sunshine!

UBC Library is now in the throes of planning a new learning commons to replace Main Library. The wings will be taken off starting in April with the new building which will be constructed around the heritage core building, to be opened before the end of 2005 (the major donor's request). The library is to occupy the north wing of the new structure, with a large automated storage retrieval unit at its core. Rare Books and Special Collections, University Archives, and some Map Library storage are part of the library to be housed in the new building.

University of British Columbia
Map Library
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In December 2002, after months of planning and preparatory work, the UBC Map Library's collections were divided into two, with the higher use portion moving to the nearby Walter C. Koerner Library, which is the undergraduate library at UBC. This portion of the collection, now called the Map and Atlas Collection, forms part of the Reference Department at the Koerner Library. Tim Ross, Map Librarian, retains his title and duties, and will take on additional general reference assignments. The lesser used portion of the collection remains in the former Map Library, which is now a closed area known as Map Storage. A retrieval service has been established to provide rapid delivery of items from storage to the new service area.

Daniel Brendle-Moczuk, former Map Library assistant and recent library school graduate, has been appointed to a six-month term cataloguer position, and is concentrating on retrospective cataloguing of high-use thematic maps. As the last remaining support staff position in the former Map Library has been eliminated, processing and shelving duties are now performed by a student assistant and Government Publications support staff when time permits. Recently announced plans for a new $60 million library, to be opened on the site of the current Main Library in 2005, provide for a new map storage area, but do not call for the reconsolidation of cartographic materials under one roof.

Ontario

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Colleen Beard and Sharon Janzen gave a live ArcGIS demonstration "Spatial Data and GIS: How it all works!" for a session entitled "GIS and Digital Map Reference for Non-Map Librarians" at the Ontario Library Association SuperConference 2003, in Toronto, held January 30 - February 1, 2003. The entire session, which also included talks from OCUL colleagues Grace Welch and Suzette Giles, was well attended and received excellent evaluations. Although Colleen and Sharon have done several GIS demonstrations to students over the years, this was the first time they took their show on the road.

Sharon has created several GIS procedures including the steps necessary to convert the CDED data in ArcView 3.2 for use in 8.2. This and many others are available on the web site http://www.brocku.ca/maplibrary/procedures/procedures.htm. Sharon welcomes any comments to sjanzen@brocku.ca. As other procedures are created, they will also be posted.

Map Library group orientation and library instruction have become a large component of our daily activity over the last few years. Between September 2002 and Feb 2003, 451 students from 11 different courses and 4 faculties took part in orientation. (This is actually a decrease from 617 last year.) Orientation varies from basic Map Library use to customized course assignments using map resources including GIS activity.

More specifically, Colleen and Ian Gordon, Science Librarian, were extensively involved with library instruction for a 2nd year Biogeography course in the Earth Science Department during the Fall term. The objective was to determine how the presence of librarian/student interaction throughout the entire term (not just at the beginning of term) affects the level of literacy achieved by the students with library and research skills. Instruction was focussed on a term assignment where the students were required to research and discuss the effects of human impact on environmental change for a specific world site. Colleen and Ian's efforts involved organizing orientation sessions on map library/library use, designing a lab assignment, attending lab sessions throughout the term to provide follow-up research tips, assisting with the design of the final lab exam, and student evaluation of the course. General comments from the students indicated that they appreciated the increased presence of librarians and their assistance throughout the term to "keep them on track" of the assignment and to provide a forum for addressing library related difficulties.

The Map Library received a large donation of multiple copies of coloured historical map prints of Canada from a local donor for the purpose of generating revenue for Map Library resources. Over the last year a total of $2,500 has been raised from sales. The prints can be viewed on the web at http://www.brocku.ca/maplibrary/facsimile/facsmaps.htm.

The Map Library will be hiring a student for the Summer 2003 to create a series of census maps from the 2001 census that will update the 1996 series. Currently there are over 200 census maps on the Map Library's web site for major cities across Canada and Niagara CMA based on 1996 census.

In June of 2002, Colleen accompanied students to Greece as part of Geography 3F95 "Study of Greece: Topoclimatology, winemaking and viticulture practices". The 23-day trip involved visits to 14 wineries (tasting 81 labels in total, officially) and 23 historical/museum sites. The knowledge obtained about the wine industry has provided me with a better understanding of the requirements of Brock's CCOVI (Cool Climate Oenology and Viticulture Institute) not to mention a sound appreciation for Greek wines!

McMaster University
Cathy Moulder
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On June 12th and 13th, McMaster University Library will be hosting a special workshop for library assistants and other support staff who work with geographic information. The purpose of the workshop is to provide an opportunity for Map Library Assistants to visit another university map collection, to meet with their counterparts and colleagues from other Ontario universities, to compare and share procedures and practices of common interest, and to participate in educational sessions specifically aimed at support staff needs and interests. The workshop is aimed at staff from the Ontario Council of University Libraries (OCUL) Map Group member universities, and is being supported by a grant from the ACMLA. More details on the workshop can be found at the website http://library.mcmaster.ca/maps/workshop/home.htm.

Queen's University
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Since changing to complete LC map classification will not be occurring in the short term, we thought it expedient to revise and reprint the Boggs-Lewis classification guide. This had not been done for many years and the "subject" and "area" guides, which were compiled many years ago, were well annotated and showing their wear. The guide for the public area was done in the same format which has worked well for us over the years – that is the "Area" guide is fastened on the left margin and the "Subject" guide on the right margin of the same base. Since the guide is electronic now, we can easily make changes and reprint pages as necessary.

The Student Assistant manual is now a proper document with chapter headings and a table of contents.

We are pleased to be participating in the agreement with Natural Resources Canada and, since we now have a data/map technician in place, have started to publicize on campus the availability of these files. An announcement has been put on the "What's New" section of the Documents Unit and Map Library's home pages

http://library.queensu.ca/webdoc/WhatsNew/ or http://library.queensu.ca/webdoc/maps/

Quebec

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Let us specify initially that Maryse Héon, technician in documentation and Jocelyne Charton, clerk, do an excellent job within the Map library. We welcomed a trainee, Stéfano Biondo, graduate student in geography at UQAM and finishing student of Montreal's Library School. His training duty spread out from January 8th until March 28th 2003, of which the first third was carried out in the governmental publications Service. He carried out a very good project by updating our Web page and especially developing and preparing a Web page of geospatial data which will be a launching ramp for a first diffusion in three stages: an index page giving access to the principal geospatial bases offered by the Map library and a links' page to external resources. The third stage presents explanations on the interactive cartography suggested by E-Stat as well as references towards different tutorials. The whole operates within the project's framework of relocating the CD-ROMs to the reserve counter and writing procedures and maps index so we could partially automate the data search and retrieval by our patrons. When the whole is available on line, we will make an announcement on CARTA.

This winter, we acquired more than 750 colour air photographs taken in May 2002 and covering the territories of the new Montreal and Longueuil cities at 1:8 000 scale. We also acquired the Cartographic digital base (1:1 000) and the updated Cadastral base (1:500) covering the new Montreal city. Next year, we project to buy the digital colour orthophotos (1:8 000) of sector Ville-Marie in which UQAM is located. We are hopeful, by a CREPUQ agreement, to obtain in the short run, an institutional licence for "geographical reference information" from the Ministry for Natural Resources of Quebec. In last hour, we have learned that our training student, Stefano Biondo, was selected to prepare the realization estimation of a **Quebec Scholar Portal of Digital and Geospatial Data Project** (see *Bulletin* page 18).

Newfoundland

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Another busy semester is underway with work being done on organizing some of the air photos not previously indexed. Student sleuths are discovering areas of coverage and creating indexes. We have four students working for us this semester, including Roger Drinkall (a geography student from Jamaica), Keri Mulloy (a general studies tending towards business student), Carmen Remartinez (a geography student specializing in GIS), and Susan Cull (a history student). Roger and Keri provide general assistance in filing, shelving, indexing, and helping users. Carmen and Susan are working on special projects funded by the university's MUCEP (Memorial University Career Enhancement Program) grants to explore files received and available from DMTI and prepare user guides for them, including the DEM files, do additional work on the map treasures web pages to get them ready for the new library web server, scan early photographs of Newfoundland scenes and revamp those web pages, use GEODEX to update indexes and holdings information for large scale map series, assist students and others in preparing maps using ArcView and MapInfo, as well as to find appropriate information for their projects or classes.

Suanne Reid has been granted another year's leave of absence, while Rose Marie Power has been extended to continue to serve as her replacement. Rose has begun a Library Studies certificate program with a correspondence course in reference services, while Joanne Costello is auditing an earth sciences class on the evolution of rock systems.

Options are being explored about better ways to provide access to DEM files. Alberta Auringer Wood continues to serve six hours a week on the main Information Desk and presented several library instruction classes in a variety of subjects. She is the recipient of another Smallwood Foundation grant of $3,500 which she hopes to use in the spring to do additional research in England on maps of Newfoundland and Labrador. Dan Duda continues with his collection development responsibilities in history, economics and political science, as well as putting in hours on the Information Desk. He notes interesting new atlases and works relating to cartography to us upon occasion for which notices come across his desk.

President's Message

25 public and school librarians at the OLA SuperConference held in Toronto at the end of January. We received a very enthusiastic response to our presentation, and participants expressed an interest in more GIS sessions at future conferences. It is encouraging to see the interest in GIS spread to other types of libraries.

Geospatial Data: Most of our members will have seen the message on CARTA about the initiative from the Manitoba government which makes their GIS data freely available on the web (http://mli.gov.mb.ca/). Let us hope that other provinces will follow this new model. We are even now beginning to see progress at the municipal level where a number of cities are making their geospatial data freely available for educational purposes, thanks in part to the efforts of our members.

Depository Services Program for Maps: The procedures for requesting Geological Survey of Canada maps in paper and digital form under this program have now been distributed. Karen Lochhead, a former ACMLA member who was on contract with the DSP to help work out the organization details of the program is now working on contract at the National Library.

Map Cataloguing: The revised version of *Cartographic Materials: A Manual of Interpretation* has been sent for publication and is expected to be jointly published by the American Library Association and Canadian Library Association this spring. As you know, ACMLA has played a very active role in the revision of this publication, primarily through the efforts of Velma Parker. I was also involved as the representative of the Association from the Bibliographic Control Committee. A map cataloguing workshop based on the revisions to AACR2 which will be in the revised manual, is planned for the joint ALA/CLA conference.

International Cartographic Association: The Association has submitted several of its bird's eye views for consideration for the Canadian map exhibit for the ICA meeting which will be held in South Africa later this year. A summary of our Association and its activities from 1999-2003 was submitted for a special issue of *Geomatica* which will provide a four year report of Canadian cartographic activities for the meeting.

NOUVELLES REGIONALES

Pierre Roy

Colombie-Britannique

Université de Colombie-Britannique
Livres rares et collections spéciales
Frances Woodward
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Société des cartophiles de Colombie-Britannique

La société est toujours active. Les travaux continuent sur le projet des « Cartes anciennes de la région de Colombie britannique ». Environ 2 400 cartes ont été inventoriées et des photocopies au format A4 produites. Nous espérons obtenir une meilleure qualité de photocopie pour certaines cartes afin d'en placer une copie numérisée sur le Web. Un projet est en préparation pour accompagner les images de notices carto-bibliographiques.

Soulignons la contribution de quelques conférenciers l'an dernier : Derek Hayes sur ses monographies « _Historical Atlas of British Columbia and the Pacific Northwest_ » et « _First Crossing: Alexander Mackenzie, His Expedition Across North America and the Opening of the Continent_ », Frances Woodward sur les plans d'assurance incendie, C. Michael Layland sur son expérience comme conférencier de l'histoire de l'exploration et de la cartographie effectuées par l'expédition Lindblab à bord du MS Endeavour parti de Cadiz (Espagne) vers Salvador (Brésil) ainsi que de ses analyses des cartes d'Amerigo Vespucci. Mentionnons aussi les participations de John Crosse sur le voyage effectué par Jacinto Caamano en _Aranzazu_ en 1792, de Bob Ward sur ses recherches concernant l'expédition de Drake le long de la côte Nord-Ouest et celle de Derek Hayes sur son « _Historical Atlas of Canada: Canada's History Illustrated with Original Maps_ ».

Livres rares et collections spéciales, Université de Colombie-Britannique

Nous avons souligné la première année de service de Ralph Stanton comme bibliothécaire à la section « Livres rares et collections spéciales ». Le Service des archives est devenu une entité administrative séparée, malgré que nous partagions toujours un comptoir et des services de référence et que notre nom a été modifiée le printemps dernier. Les archives cartographiques restent sous la responsabilité des «Livres rares et collections spéciales ». Nous tentons encore de réduire notre retard de catalogage de cartes, monographies et autres items et je compte placer nos inventaires de cartes sur notre site Web.

Le déménagement de la Cartothèque dans la Bibliothèque Koerner nous occasionne certains problèmes. Tout en devant se priver des ressources de la Cartothèque, nous n'avons plus accès au photocopieur grand format de tel sorte que nous devrons sortir nos cartes anciennes de leur environnement protecteur.

La bibliothèque de l'Université prépare les plans d'un nouvel espace à l'intention des usagers. Le tout commencera à prendre forme en avril, le nouveau bâtiment étant construit autour de la structure existante et devrait être ouvert vers la fin de l'an 2005. La bibliothèque occupera l'aile nord de la nouvelle structure et devrait comprendre un système automatisé de rangement et de retrait des documents. La section « Livres rares et collections spéciales », les Archives de l'université et une partie du fonds de la Cartothèque seront localisés dans ce nouveau bâtiment.

Université de Colombie-Britannique
Cartothèque
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En décembre 2002, après des mois de planification et de préparation, le fonds documentaire de la Cartothèque a été divisé en deux collections. La première section comprend les documents les plus utilisés et a été déplacée proche de la bibliothèque générale Walter C. Koerner. Cette section porte maintenant le nom de « Collection des cartes et atlas» et est administrativement incluse dans le Service de référence de la bibliothèque Koerner. Tim Ross, cartothécaire, conserve son titre et ses responsabilités en plus d'être affecté à des tâches de référence générale. La portion la moins utilisée de la collection reste dans l'ancienne Cartothèque qui devient un lieu d'entreposage fermé. Un service de navette rapide a

été mis en place afin d'offrir aux usagers des documents qui sont rangés dans cet espace.

Daniel Brendle-Moczuk, ancien assistant à la Cartothèque et récent diplômé de en Bibliothéconomie, a obtenu un contrat de six mois comme cataloguer et concentre ses efforts sur le traitement rétrospectif des cartes thématiques les plus utilisées. L'autre poste d'assistant ayant été éliminé, la manipulation et le rangement des documents incombent maintenant à un étudiant et au personnel des Publications gouvernementales, lorsque le temps le permet. L'annonce récente de la construction, pour 2005, d'une nouvelle Bibliothèque intégrée à la Bibliothèque principale au coût de 60 $ millions, comprend un nouvel espace de rangement des cartes, mais n'implique pas la relocalisation du fonds documentaire sous un même toit.

Ontario

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Colleen Beard et Sharon Janzen ont présenté l'abécédaire de l'exploitation des données géospatiales avec ArcGIS : « Données géospatiales et SIG : comment ça marche ! » lors d'une session offerte aux bibliothécaires sans formation spécifique dans le domaine. Le tout s'est tenu durant la « Ontario Library Association SuperConference 2003 », à Toronto, du 30 janvier au 1e février 2003. La session, incluant des présentations orales de collègues de l'OCUL, Grace Welch et Suzette Giles, a été bien reçue et l'évaluation des participants fut excellente. Colleen et Sharon ont rodé cette démarche auprès des étudiants depuis quelques années, mais c'était la première fois que le « spectacle » prenait la route.

Sharon a créé plusieurs procédures pour la manipulation des données dans un SIG, dont une comprenant les étapes de conversion des DNEC d'ArcView 3.2 à 8.2. Plusieurs de ces précieuses procédures sont disponibles sur la page Web http://www.brocku.ca/maplibrary/procedures/procedures.htm Au fil du temps, d'autres procédures viendront s'ajouter. Sharon accueillera vos commentaires et suggestions à l'adresse sjanzen@brocku.ca.

Les cours de formation à la recherche documentaire, des plus généraux aux plus spécifiques, incluant l'utilisation d'un SIG, ont pris de l'ampleur ces dernières années. De septembre 2002 à février 2003, 451 étudiants provenant de 4 facultés ont participé à ces activités.

Plus précisément, Colleen et Ian Gordon, bibliothécaire, furent engagés dans une session de formation intégrée à un cours de biogéographie donné au Département des Sciences de la terre à l'automne. L'objectif était de déterminer comment l'interaction étudiant/cartothécaire, appliquée durant toute la durée du cours et non seulement au début, affectait le degré d'habileté des étudiants à acquérir des aptitudes de recherche plus efficientes et efficaces. La période de formation s'est tenue dans le cadre d'une tâche où les étudiants devaient faire des recherches et discuter des effets de l'impact humain sur l'environnement pour un site mondial précis. Colleen et Ian ont organisé des sessions de recherche documentaire à la Cartothèque ainsi qu'à la Bibliothèque principale, structuré un exercice, suivi les étudiants pour les former à une recherche plus poussée, structuré l'examen final et l'évaluation du cours. Les commentaires des étudiants exprimaient leur appréciation de la présence accrue des bibliothécaires au cours du travail.

La Cartothèque a reçu un don de plusieurs copies de reproduction de cartes anciennes. Ces cartes génèrent des revenus qui comblent une partie de ses besoins. Ainsi, l'an dernier nous avons amassé 2 500 $. Vous pouvez visionner ces reproductions sur le site http://www.brocku.ca/maplibrary/facsimile/facsmaps.htm.

La Cartothèque engagera cet été un étudiant afin de produire une série de cartes du recensement 2001 qui renouvellera celle de 1996. Il y a présentement environ 200 cartes de recensement sur le site Web de la Cartothèque couvrant les principales villes du Canada et la RMR de Niagara.

En juin 2002, Colleen a accompagné un groupe d'étudiants en Grèce, dans le cadre du cours de Géographie 3F95 « Études hellénistes : topoclimatologie, production et pratiques de viticulture ». Le voyage de 23 jours comprenait la visite de 14 vinicultures, dégustation de 81 étiquettes et visite de 23 musées et sites historiques. La connaissance acquise sur l'industrie du vin m'a permis une meilleure compréhension des besoins du CCOVI (Institut d'œnologie et de viticulture en climat frais) sans mentionner une appréciation de premier choix des vins grecs!

Université McMaster
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Les 12 et 13 juin 2003, l'Université McMaster sera l'hôte d'une formation dédiée aux personnels des bibliothèques et autres personnels ayant à travailler avec l'information géographique. Le résultat recherché est de leur permettre de visiter une Cartothèque différente, de rencontrer leurs collègues des autres universités ontariennes, de comparer et d'échanger différentes procédures d'intérêt commun et de participer à des sessions de formation axées sur leurs besoins et intérêts. L'atelier s'adresse aux employés du « Ontario Council of University Libraries (OCUL) », section Cartes et est parrainé par l'ACACC. Plus de détails sont disponibles sur le site http://library.mcmaster.ca/maps/workshop/home.htm.

Université Queen
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Depuis que nous savons que la mise en place du système LC section Cartes n'est pas pour demain, nous avons décidé de réviser et de réimprimer le guide Boggs & Lexis. Ça n'a pas été fait depuis des années et les guides par sujet et par région montrant une usure marquée, ont été longuement annotés. Le guide à l'usager a été préparé selon le modèle qui nous a si bien servi au fil des ans : la section divisée par régions se trouve à gauche de la page alors que la section par sujets occupe la moitié droite. Depuis que le guide a été édité en format électronique, les modifications et réimpressions sont facilitées. Quant au manuel d'Aide à l'étudiant, il a été repris avec une table des matières et des têtes de chapitres.

Nous sommes partie prenante du dépôt des données géospatiales de Ressources naturelles Canada et depuis qu'un technicien spécialiste travaille pour nous, une campagne de publicité est en cours au niveau du campus. Un message a été placé dans la section « What's New » de notre unité, à l'adresse http://library.queensu.ca/webdoc/WhatsNew/ ou http://library.queensu.ca/webdoc/maps/.

Québec

Université du Québec à Montréal
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Précisons d'abord que Maryse Héon, technicienne en documentation et Jocelyne Charton, commis, font un excellent travail à la Cartothèque. Nous avons accueilli comme stagiaire Stéfano Biondo, détenteur d'un baccalauréat en géographie de l'UQAM et finissant de l'École de bibliothéconomie de Montréal. Son stage s'est tenu du 8 janvier au 28 mars 2003, en premier lieu au Service des publications gouvernementales et internationales et en majeure partie à la Cartothèque. Il a effectué un bon travail de mise à jour de notre page Web et surtout il a créé et développé une page Web de données géospatiales. Celle-ci se veut une rampe de lancement pour une première diffusion en trois volets : une page index donnant accès aux principales bases géospatiales offertes à la Cartothèque, une page d'hyperliens menant vers des ressources externes. Le troisième volet présente des explications sur l'utilisation de la cartographie interactive proposée par E-Stat et propose des renvois vers différents tutoriaux. Le tout s'inscrit dans le cadre d'un projet de rapatriement des cédéroms de données géospatiales à la réserve et de l'écriture de procéduriers et de cartes-index afin d'automatiser partiellement la recherche et l'extraction des données par l'utilisateur.

Cet hiver, nous avons fait l'acquisition de plus de 750 photographies aériennes couleur prises en mai 2002 et couvrant les territoires des nouvelles villes de Montréal et de Longueuil à l'échelle du 1: 8 000. Nous avons aussi acquis la Base numérique cartographique (1 : 1 000) et la Base cadastrale mise à jour (1 : 500) de la nouvelle ville de Montréal. Nous projetons acheter l'an prochain les orthophotos numériques couleur au 1 : 8 000 de l'arrondissement Ville-Marie dont fait partie l'UQAM. Nous sommes confiants, à titre de membre de la CREPUQ, d'obtenir une licence institutionnelle de « l'information géographique de référence » du Ministère des ressources naturelles du Québec. En dernière heure, nous apprenons que notre stagiaire, Stefano Biondo, a été choisi comme responsable de la préparation du devis de réalisation d'un **Portail universitaire québécois de données numériques et géospatiales** (voir la page 11 du *Bulletin*).

Terre-Neuve

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Un semestre très occupé est en cours. Quatre étudiants

travaillent pour nous dont Roger Drinkall (étudiant en géographie venant de la Jamaïque), Keri Mulloy (études en affaires), Carmen Remartinez (étudiante en SIG) et Susan Cull (étudiante en histoire). Ils sont mis à contribution pour indexer des photos dont les secteurs de couverture ne sont pas connus et doivent jouer au détective pour localiser les lignes de vol. Roger et Keri offrent une assistance générale en reclassant les documents et en aidant l'usager. Carmen et Susan travaillent sur un projet financé par le MUCEP (Programme de préparation au travail de l'Université Memorial) consistant en la préparation des données du DMTI, de guides à l'usager, incluant les fichiers MET, la mise à jour de pages Web pour l'inauguration du nouveau serveur des bibliothèques, la numérisation de photos d'archive de Terre-Neuve, l'emploi de GEODEX pour mettre à jour les index et conserver l'information sur les séries de cartes à grande échelle. Elles aident aussi les étudiants dans la préparation de cartes avec ArcView ou MapInfo tout en les guidant dans leur recherche d'information nécessaire pour leur devoirs et leurs projets.

Suanne Reid est en congé pour une autre année et est toujours remplacée par Rose Marie Power. Celle-ci a commencé un certificat en Bibliothéconomie par un cours par correspondance sur les services de référence. Joanne Costello, elle, suit un cours en Sciences de la terre.

Diverses options sont considérées afin d'offrir un meilleur accès aux fichiers de MET. Alberta Auringer Wood continue de travailler six heures par semaines au Comptoir d'information principal et présente plusieurs sessions de formation documentaire sur une variété de sujets. Alberta a reçu une autre bourse de 3 500 $ qu'elle espère utiliser au printemps pour faire des recherches additionnelles sur Terre-Neuve et le Labrador, en Angleterre. Dan Duda est toujours responsable du développement des collections en histoire, économie, et sciences politiques tout en travaillant au comptoir d'information. Il nous réfère quelques atlas intéressants et travaille occasionnellement pour nous.

Message de la présidente

identifié le besoin de promouvoir nos activités ainsi que le travail des cartothécaires à une communauté plus étendue. Dans cette perspective, Colleen Beard et Sharon Janzen de Brock, Suzette Giles de Ryerson et moi-même avons fait une présentation sur la place des SIG dans les cartothèques devant environ 25 bibliothécaires lors de la

SuperConférence qui a eue lieu à Toronto à la fin janvier. Nous avons reçu une réponse très enthousiaste et les participants souhaitent grandement que plus d'ateliers portant sur les SIG prennent place dans les prochaines conférences. Il est encourageant de constater que l'intérêt pour les SIG s'accentue à travers les autres bibliothèques.

Données géospatiales : La plupart de nos membres ont vu l'annonce sur CARTA qui concerne l'initiative du gouvernement manitobain pour l'accès Internet gratuit à leurs données SIG (http://mli.gov.mb.ca/). Il est souhaitable que d'autres provinces emboîtent le pas. Nous commençons d'ailleurs à voir une progression en ce sens au niveau municipal. Suite, en partie, aux efforts déployés par nos membres, nombre de municipalités rendent effectivement leurs données géospatiales accessibles gratuitement à des fins de recherche et d'enseignement.

Programme des services de dépôt pour les cartes : Les procédures de demande de cartes papiers et numériques de la Commission géologique du Canada qui font partie du programme ont maintenant été distribuées. Une ancienne membre de l'ACACC, Karen Lockhead a eu contrat un contrat avec le PSD pour nous aider à finaliser les détails du programme. Elle est maintenant à l'emploi de la Bibliothèque nationale dans un poste contractuel.

Catalogage de cartes : La version revisée de « *Cartographic Materials: A Manual of Interpretation* » a été envoyée à l'éditeur et on s'attend à ce qu'elle soit publiée ce printemps conjointement par l'American Library Association et la Canadian Library Association. Comme vous le savez peut être, l'ACACC a joué un rôle de premier plan lors de la révision de cette publication principalement grâce aux efforts de Velma Parker. J'ai moi-même participé au « Bibliographic Control Committee » en tant que représentante de l'Association. Un atelier sur le catalogage de cartes basé sur les nouvelles révisions AACRII apparaissant dans le manuel révisé sera à l'horaire lors de la conférence conjointe entre ALA et CLA.

Association Cartographique Internationale : L'ACACC a soumis plusieurs de ses vues à vol d'oiseau pour faire partie de l'exposition canadienne de la conférence ACI qui se tiendra en Afrique du Sud en fin d'année. L'Association a également préparé un article synthèse portant sur l'Association et ses activités de 1999 à 2003 pour le numéro spécial de Geomatica. Ce numéro sera publié dans le cadre de la conférence et inclura un rapport quadriennal des activités cartographiques canadiennes.

NEW BOOKS AND ATLASES
NOUVEAUTÉS LIVRES ET ATLAS

Martine Rocheleau

Aharoni, Yohanan, et al. 2002. *Carta Bible Atlas*. Jerusalem, Israel: Carta, The Israel Map & Publishing Company Limited. 224 p. $38.95 USD. ISBN 9652204870.

Atlas of the World. 2002. New York: Oxford University Press. 448 p. $130.00 CDN. ISBN 0195219198.

Ben-Dov, Ben. 2002. *Historical Atlas of Jerusalem*. New York: Continuum International Publishing Group. 400 p. $74.00 CDN. ISBN 082641379X.

Bogataj, Janez. 2001. *National Atlas of Slovenia*. Ljubljana: Rokus Publishing House. 200 p. $112.00 CDN. ISBN 9612092133.

Canada Complete Road Atlas. 2002. Montreal: Readers's Digest Canada. 464 p. $59.95 CDN. ISBN 088850747X.

Cohen, Paul. 2002. *Mapping the West : America's Westward Movement 1524-1890*. New York: Rizzoli International Publications Inc. 208 p. $75.00 CDN. ISBN 0847824926.

Crane, Nicholas. 2003. *Mercator : The Man Who Mapped the Planet*. New York: Henry Holt & Company. 368 p. $39.00 CDN. ISBN 0805066241.

Enterline, James R. 2002. *Erikson, Eskimos and Columbus: Medieval European Knowledge of America*. Baltimore: Johns Hopkins University Press. 362 p. $69.00 CDN. ISBN 080186660X.

Grand atlas géographique et encyclopédique du monde. 2001. Evreux: Atlas. 464 p. $125.00 CDN. ISBN 2723436500.

Harris, Nathaniel. 2002. *Mapping the World: Maps and Their History*. San Diego: Advantage Publishers Group. 304 p. $30.00 CDN. ISBN 1571455760.

Hayes, Derek. 2002. H*istorical Atlas of Canada: Canada's History Illustrated with Original Maps*. Vancouver: Douglas & McIntyre; Seattle: University of Washington Press. 272 p. $75.00 CDN. ISBN 1550549189.

Kline, Naomi Reed. 2001. *Maps of Medieval Thought: The Hereford Paradigm*. Rochester: Boydell and Brewell Press. 288 p. $75.00 CDN. ISBN 0851156029.

Mackay, Richard. 2002. *Penguin Atlas of Endangered Species*. Toronto: Penguin Books Canada. 128 p. $29.00 CDN. ISBN 0142000728.

Magosci, Paul Robert. 2002. *Historical Atlas of Central Europe*. Seattle: University of Washington Press. 288 p. $110.00 CDN. ISBN 0295981938.

McCoy, Jill. 2002. *Using ArcGIS Spatial Analyst*. Redlands, CA: Environmental Systems Research Institute. 232 p. $45.00 CDN. ISBN 1589480058.

Miller, Iris. 2002. *Washington in Maps*. New York: Rizzoli International Publications Inc. 176 p. $75.00 CDN. ISBN 0847824470.

Pritchard, Margaret Beck and Henry G. Taliaferro. 2002. *Degrees of Latitude: Mapping Colonial America*. New York: Harry N. Abrams Inc. 512 p. $140.00 CDN. ISBN 0810935392.

REVIEWS

Tim Ross

Hayes, Derek. *Historical Atlas of Canada: Canada's History Illustrated with Original Maps*. Vancouver: Douglas & McIntyre, 2002. 272 p. $75.00. ISBN 1-5505-4918-9.

Geographer Derek Hayes clearly states, in the introduction to his *Historical Atlas of Canada: Canada's History Illustrated with Original Maps*, the book's purpose: "...to gather together original maps illustrating progressive geographical knowledge of the country and important events in Canadian history". The links between history and geography, as evidenced by this beautiful book, are reinforced most eloquently in cartographic form. Hayes has produced a book to which the reader will return again and again. It is the kind of book readers can (and perhaps should) open at random, while being prepared to allow the exquisite maps reproduced therein to take them on a fascinating journey through time and space.

These maps, as Hayes points out, enable the reader to visualize the accomplishments of surveyors, explorers and cartographers. The themes and maps covered by the atlas were selected on the basis of their historical importance, geographical significance and, of course, the availability of surviving maps. The book contains a vast array of maps from the sixteenth through twentieth centuries. The quality of the reproductions is superb. The reader can almost picture our nation's history unfolding right before her/his eyes. Each one of the chosen maps is remarkable in its own right, and one cannot argue with the choices Hayes has made. As he states in the book's introduction, "The selection is purely personal." No doubt some readers will lament the absence of a favourite map, but those which are included here deserve to be. For lovers of maps (cartophiles?), it is truly exciting to see the nation unfold, from the early days of New France (the 1698 Nicolas de Fer map - the original "Beaver Map" - is simply, as Hayes notes, "stunning"), to the emerging industrial nation's cities. (The bird's eye views of Toronto and Montreal are especially noteworthy.) In some instances, one is reminded of how recent much of our geographic knowledge is.

For example, the 1904 Department of the Interior map entitled "Explorations in Northern Canada" reveals a (perhaps) surprising lack of knowledge regarding the Arctic region.

Derek Hayes has successfully realized his goal of linking Canada's history to its geography. Readers, especially historians and geographers, will revel in the quantity and quality of the maps and their accompanying commentaries. There is, for me, only one shortcoming in this book. I would prefer to see a series of three or four short essays dealing with the "big picture". General essays dealing with the evolving cartographic knowledge and techniques, along with historical themes, could provide an overall framework around which these maps would be viewed. Such essays could be organized by region and time period. For example, a general essay about the maps of New France in the sixteenth and seventeenth centuries would allow the reader to appreciate the broad themes in the history, geography and cartography of this region during that period. Such essays would complement the details contained in the commentaries accompanying individual maps, thereby situating the maps within the context of the broader panorama of Canadian history and geography.

Douglas and McIntyre Press are to be commended for the superb quality of *Historical Atlas of Canada: Canada's History Illustrated with Original Maps*. It is beautiful, and sure to be widely used by geographers and historians. In the promotional literature for the book, the publishers ask, "What better way to explore the nation's history than through historical maps?" Indeed, as this atlas so capably and lavishly demonstrates, there may not be a better way.

Dr. Walter Peace
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McMaster University
Hamilton, Ontario

Morantz, Alan. *Where is Here? Canada's Maps and the Stories They Tell*. Toronto: Penguin Canada, 2002. xv, 256 p. $35.00. ISBN 0143013513.

"They say a picture is worth a thousand words. I would say a map is worth a thousand pictures," once observed Ed Dahl, former Chief of Early Canadian Cartography at the National Archives of Canada, to which author Alan Morantz responds, "...and a thousand stories." The premise that stories can be unearthed by digging under the surface of maps is the engine for Alan Morantz's new book, *Where is Here? Canada's Maps and the Stories They Tell*, released in October 2002.

Drawing his title from Northrop Frye's assertion that Canadians are less perplexed by the question "Who am I ?" than by the riddle "Where is Here?", Morantz has spun the tables and set his focus on Canadian maps themselves in an attempt to illuminate the ways in which maps have shaped us into the nation that we are. The resulting *Where is Here?* is an unusual little book that is both compelling and informative.

The overall objective of the work is actually quite broad. Morantz's intentions vary, from instilling a sense of awe about maps, to demonstrating that quality in maps which stimulates our imagination. At one point in the book he likens the black and red lines that represent roads on maps to the arteries and capillaries that run within our bodies. He examines the social significance of Canadian maps by asking vital questions about their origins, the people who designed them and their purposes. These questions are successful not only in illuminating history and making sense of the subjective uses of maps, but also in bringing maps to life, through the means of resurrecting great stories about the extraordinary people who have explored this country.

More than once while reading this book, I found myself imagining various expeditions being recreated on film. Take, for example, the Bedaux Sub-Arctic expedition, which set out from Edmonton on July 7, 1934 to open up a road in the territory known as the Cassiar. The Bedaux company was a strange coterie of men and women, including Bedaux's wife, her Spanish maid, an Italian countess, a movie cameraman, a gameskeeper, eminent geologists and the skilled mapper Frank Swannell. Morantz animates what Swannell recorded in his journal, including Charles Bedaux's outrageous diverting of an eminent scientific team to act out wacky stunts for his movie camera, as in "In [the] evening, distribution of nine bottles of champagne and another stampede photographed by flares, and another episode of the great forest fire act." The expedition managed to progress 1,400 kilometres before Bedaux gave up. However, the unfinished track which they had cut became the foundation for the Alaska Highway, built eight years later.

Despite the fact that Morantz has taken on quite a broad subject, the book remains surprisingly in focus, thanks to the well thought out framework of the chapters. Each chapter is comprised of stories, arguments, anecdotes and ideas, from which the author has developed some very provocative themes, such as Survival, Identity, Seduction and Pathfinding. His layering of pieces into a collage is an attractive feature.

Morantz has defined maps in a non-traditional sense, thereby making it possible to include the "ayayait", or travel songs of the Inuit, ancient Mariner navigation songs, dances, oral tradition and even the chalk symbol drawings sketched by hoboes. At one point in the introduction, the author states that he wants to present "a soulful picture" of how maps reveal things about us. I found it interesting that he used such a markedly unscientific word, "soulful", to describe what he intended to do, and I was intrigued to learn what he meant by it. It seems to me that he was referring to what embodies maps, including how they are filled with the spirit of past events.

In the final chapter, "Survival Redux", Morantz cynically jokes that the answer to Northrop Frye's question "Where is here?" is "Wherever the GPS says we are." He makes it clear that he is not discounting the value of progress and technology, but wishes to reinforce the value of real contact with the landscape in this age of digital do-it-yourself mapping, designer GPS games and 'sexy' demographic maps that sell, sell, sell.

I used to think of a map as a functional tool for getting from A to B, a neutral, objective document. Think again! This book has helped me to understand the art of interpreting maps. *Where is Here?* is a real eye-opener.

Rachelle Eves
World of Maps, Inc.
Ottawa, Ontario

PRELIMINARY PROGRAM AND SCHEDULE
ACMLA AND CCA CONFERENCE SESSIONS
VICTORIA, BRITISH COLUMBIA
MAY 28 - MAY 31, 2003

Wednesday May 28

8:30-10:00 – Keynote Address

10:30-12:00 – Mountain Cartography (Roger Wheate – convenor)
• The Ice and Climate Project Atlas, Four Decades of Glacier Photography – Martin Gamache
• Mapping the Mountains: Edouard Imhof and the Evocation of Landscape – Harry Steward
• Relief Depiction in the Western Canadian Cordillera in Twentieth Century Maps – Roger Wheate
• DEM Manipulation and 3D Terrain Visualisation: Techniques Used by the U.S. National Park Service – Tom Patterson

12:00-1:30 – ACMLA BCC Committee meeting

1:30-3:00 – Westcoast Mapmakers and Remote Sensing (Lori Sugden – chair)
• The Trials and Tribulations of Mapping Obscure Travel Destinations for Travel – Jack Joyce, ITMB
• Davenport Maps – Michael Lakin
• Triathlon – Susan Muleme

From field work, map making and publishing, to innovative geomatics services, this session will provide a look into the basics and more complicated creation of maps and digital orthophotos.

3:30-5:00 – Westcoast Mapping Projects (Lori Sugden – chair) *[concurrent with session below]*
• Salish Sea Community Mapping Project – Sheila Harrington
• Common Ground Community Mapping – Maeve Lydon
• Mapping with First Nations – Jeff Warwick

Maps are essential tools for communication about a sense of place. These projects range from the Salish Sea works of art, through the Victoria Green Map and community projects at Groundworks Learning Centre, to GIS-based data gathering, analysis and mapping projects with First Nations people.

3:30-5:00 – Conserving Slide Collections (Thomas F. McIlwraith and Gunter H.K. Gad – convenors)

[concurrent with session above]
Panel: Leonard J. Evenden, Gunter H.K. Gad, Thomas F. McIlwraith, Joan M. Schwartz

Thursday May 29

8:30-10:00 – Reference Service Levels for Geospatial Data and GIS (Colleen Beard – convenor) *[concurrent with session below]*
• Colleen Beard
• Richard Pinnell
• Barbara Znamirowski

There is no "one size fits all" with regard to reference service levels for data and GIS in the library. However, as data providers, our concerns and issues are similar. This session is intended to create an open forum to address various issues and share experiences surrounding the provision of geospatial data and GIS services. Hear how other map collections are currently dealing with service standards and expectations; data packaging and delivery; custom mapping; infrastructure; workstation security; GIS support; staff training; promotion of data use; and licensing. Regardless of your service level, we want to hear from everyone!

8:30-10:00 – *[concurrent with session above]*
• Exploring the Spatial-Temporal Pattern of Lodgepole Pine Mortality Caused by Mountain Pine Beetles – Trisalyn Nelson
• Local Measures of Configuration for Categorical Spatial Data – Barry Boots
• Pyramids and (Heterogeneous) Landscapes – Tarmo Remmel
• Point Interpolation Using Recursive Voronoi Diagrams – Rob Feick

10:30-12:00 – Future Trends of Map Libraries (Cathy Moulder – chair) *[concurrent with session below]*
• Map Librarianship, A Fresh Perspective – Marcel Fortin
• A Spatial Discovery Portal for the University Map Library – Jasper Stoodley
• Quebec Geospatial Database Quest and CREPUQ Portal Project – Pierre Roy

The three papers in this session all focus on a common thread: the critical impact of GIS data on libraries, and the essential adaptations which we as librarians must make in order to continue to meet our cherished service mandates. Marcel Fortin's paper will set the stage and identify the "fresh perspective" which he suggests map librarianship must embrace. The other two speakers will describe projects that are attempting to directly address these challenges: Jason Stoodley will describe a spatial data discovery system under development at Simon Fraser University, and Pierre Roy will introduce the Scholar's Portal system which is proposed for university libraries in Quebec.

10:30-12:00 – *[concurrent with session above]*
•   Landscape Heterogeneity, Model Prediction Uncertainty, and All That... – Scott Mitchell
•   Spatial Analysis of Disparate Forest Inventory Data – Ferenc Csillag
•   Remotely Sensed and Spatial Data in the Characterization of Mountain Pine Beetle at the Stand and Landscape Level – Mike Wulder
•   Issues of Multi-scale Spatial Variability in Remotely Sensed Data – Rebecca Handcock

12:00-1:30 –   Canadian National Committee, International Cartographic Association meeting

1:30-3:00 – (Patricia Connor – chair) *[concurrent with session below]*
•   Panning and Zooming with Interactive Maps – Mark Harrower
•   User-Centred Development – Atlas of Canada (6th edition, internet) – Eric Kramers
•   CRD Natural Areas Atlas – Craig Mount

1:30-3:00 – Remote Sensing *[concurrent with session above]*
•   Strategies for Integrating Information from Multiple Spatial Resolutions into Land Use/Cover Classification Routines – DongMei Chen
•   Are Landsat Images Fractals? – Xinxia Jiang
•   Pre-processing for Change Detection: Ensuring Images are on the Same Wavelength – Hannah Wilson
•   An Investigation of Coastal Urbanization Patterns Using Remote Sensing and Spatial Statistics – Andrew Millward

3:30-5:00 – Geospatial Skills (Annie Laponsée – chair) *[concurrent with session below]*
•   2001 Census Mapping – Anna Jasiak
•   GeoSkills Program (Geoconnections) – Annie Laponsée

•   Framework Data: What's New and How Can I Access It? – K. Arsenault, Atlas of Canada

This session focuses on several federal initiatives including the use of Census data in the *National Atlas* and the challenges associated with delivering the information over the web. There will be a discussion how framework data will become more widely available for use in a variety of GIS applications. And a representative from the GeoSkills Network, a GeoConnections program, will discuss how the program promotes training and skills development and promotes geomatics as a career choice for secondary and university level students.

3:30-5:00 – Remote Sensing *[concurrent with session above]*
•   Fusing Multi-satellite Remote Sensing Data for Improving First-year Sea Ice Albedo Estimates – Christopher Caschera
•   Estimation of Aboveground Biomass from Airborne Laser Scanner Data with Canopy-based Quantile Estimators – Kevin Lim
•   Remote Sensing of Primary Productivity around Fish Farms – Aaron Hill

Friday May 30

8:30-10:00 – Atlas Panel (Claire Gosson – convenor) *[concurrent with session below]*
•   Multi Media Atlas Design – John Fowler
•   Translating the Atlas of Saskatchewan from Hardcopy (Millennium Edition) to Multi-media (CD-ROM Edition) – Lawrenz Martz
•   Canadian Portal of Atlases – Jean Carrière
•   Historical Atlas of Canada Online Learning Project – Byron Moldofsky
•   Atlas of Canada, future – Claire Gosson

8:30-10:00 – CAGED (John Newcomb – chair) *[concurrent with session above]*
•   Cartography Comeback: The Necessity of Reintroducing Cartographic Theory and Practice into Post-secondary GIS Programs – Sally Hermansen
•   The Effect of Increase of Women in Higher Education on Powershift in Iran – Zahra Pishgahi Fard
•   Effet de milieu sur le comportement scolaire des jeunes au secondaire: différences entre les milieux urbain, périurbain et rural dans la région de l'Outaouais – Zachary Ouellette Tremblay
10:30-12:00 – Atlas Panel (Claire Gosson – convenor) *[concurrent with session below]*
•   Cybercartography in the New Economy –

Brian Eddy
- • Canadian Geospatial Data Infrastructure (CGDI): Potential Atlas Partnerships and Linkages – Cameron Wilson
- • Panel Discussion
- • The Way forward

10:30-12:00 – Using Data from Statistics Canada to Examine Physical and Human Geography (Marion Smith and Ben Bradshaw – chairs) *[concurrent with session above]*
- • Discovering Canada's Hidden Landscape through E-Stat – Marion Smith
- • CAG student award paper
- • CAG student award – Ben Bradshaw

12:00-1:00 – ACMLA Historical Maps Meeting (Bring your lunch)

1:00-2:30 – Cartography of the Imagination *[concurrent with sessions below]*
- • Creating a Literary Atlas – Robert Summerby-Murray
- • A Place of Mystery: Geographical Concepts in the Novels of Ruth Rendell and Howard Engel – Lisa Kadonaga
- • Futuristic Movies and Geographic Information – Ben Kerr
- • Great Cartographers I Have Known, or How Charles Schultz and His Friends Got into My Classroom – Henry Castner

1:00-2:30 – Fostering Geographic Understanding Among Canadians (Chris Sharpe – convenor) *[concurrent with sessions above and below]*

1:00-2:30 – Canadian Communities Atlas Workshop (CAG Educational Committee: Cheryl Murtland – convenor) *[concurrent with sessions above]*

1:00-2:30 - Bridging Gaps, Visualizing Change and Enabling Public Participation Using Multimedia and Interactive Geomatics Technologies (Jon Corbett, chair)

This session will showcase a number of multimedia and interactive Geomatics projects undertaken in the Department of Geography at UVic. These projects cover a wide range of issues and technologies; from the development of interactive community information systems by indigenous peoples through to the use of a 3-dimensional games level editor to build the UVic campus in a digital environment and use this tool to visualise proposed change. (Jon Corbett, Peter Keller,

Cyrille Medard de Chardon, Patricia Randell, Roger Stephen, Kevin Wade)

2:40-3:15 – Keynote : Tales from the Technoscientific Edge: How Maps Provide Evidence of the Construction of the World (Nick Chrisman)

3:30-5:00 – AGM

Saturday May 31

8:30-10:00 – (Ute Dymon – chair) *[concurrent with session below]*
- • Visual Stability of Horizontal vs. Vertical Line Patterns: Extending the Knowledge Base of the Map Designer – Clifford Wood
- • Mapping Sea Ice in the Atlas of Canada – Patty Zhao
- • L'IDC appliqué à la gestion cartographique canadienne – Paré Elise
- • Mapping for the Visually-impaired User: Where are we? Where are we going? – Monika Rieger
- • Process and Challenges in Producing a Digital Annotation Layer – Paul Heersink

8:30-10:00 – GIS and K-12 (Stuart Semple – chair) *[concurrent with session above]*
- • Bring Cutting Edge Thinking in Geography to the School Classroom – Stuart Semple
- • Searching for GIL: The Current Status of Geographic Information Literacy in K-12 Education – Jason Miller
- • ESRI – Scott Stafford-Veale

10:30-12:00 – (Harry Steward – Convenor) *[concurrent with session below]*
- • The Literary Surveyor – Harry Steward
- • Teaching Maps With Poetry – Adele Haft
- • Throwing Light on the Leutes: Using Computer Animation to Depict Hutterite Colony Expansion in North America 1874-2003 – John Lehr
- • Captain Dick's Creek: A Quest for Treasure Trove and Toponymic Truth – Alun Hughes

This schedule is still preliminary, and reflects only the ACMLA and CCA sessions. There are many CAG sessions of cartographic, historic, geomatic and geographic interest as well. See the conference website for full program details

http://www.geog.uvic.ca/acmla2003acacc/

REPORT ON THE MEETING OF THE CANADIAN COMMITTEE ON CATALOGUING
MARCH, 14, 2003, GATINEAU (HULL), QUEBEC

Velma Parker
National Archives of Canada

Christine Oliver accepted a renewal of her term as chair of the committee. She was warmly thanked for her contribution in that capacity over the past few years.

AACR2

A revision package for AACR2 is expected to be released in July 2003. Of note, it will include a complete revision of the index. For the French edition, ASTED has yet to issue the 2002 revision and has indicated that it will not publish in loose-leaf format.

AACR3

A complete revision of the Anglo-American cataloguing rules is expected in 2006. This means that there is a definite deadline for all of the working groups. The major task underway at the moment is the incorporation of FRBR terminology. Some of the other concerns which are being (or have been) addressed are how to deal with format variations and multipart items, eliminating the rule of three, full revision of chapter 9 (electronic resources), the future of the general material designation, and changes to part two including a broader use of uniform titles.

FRBR (*Functional Requirements for Bibliographic Records*) Terminology

Discussion is still on-going on the incorporation of FRBR terminology ("work," "expression," "manifestation," and "item") [1] into AACR2. Most cataloguing is done at the manifestation level, and it was suggested that "bibliographic resource" (rather than "manifestation") could be used as a substitute for "item" in the rules. This works in most cases, but in some instances the substitution is not appropriate and further work needs to be done to resolve the issue fully.

Uniform titles (Chapter 25)

The Format Working Group has suggested various changes to chapter 25 which will, for example, extend the coverage of the chapter to cover expressions as well as works, and also for revised editions when the title proper varies.

General Material Designation

This is still under discussion and as yet there is no resolution. The proposals range from elimination, to moving it elsewhere, to coming up with a new list. Some attempt was made to come up with lists of form of content (which for us would be 'cartographic material') and mode of expression and mode of publication. Neither proposed lists for the mode of expression (alpha-numeric, musical notation, other notation, sound, still image, moving image, 3-D, tactile) nor mode of publication/ issuance (monograph single part, monograph multi-part, serial, integrating) are particularly useful for inclusion as such in descriptive records for cartographic material. There was no provision for the inclusion of terms to indicate the physical format such as microform or electronic which would let the user know that a machine is needed. Discussions will continue on this issue.

Consistency of Terminology

The American Library Association is working on a project to make sure that terminology is consistent across the chapters in part one for each area of description. Reports with recommendations for areas 2 and 3 have been produced for comment so far.

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1. **Work.** A distinct intellectual or artistic creation. **Expression.** The intellectual or artistic realisation of a work in the form of alpha-numeric, musical or choreographic notation, sound, image, object, movement, etc., or any combination of such forms. **Manifestation.** The physical embodiment of an expression of a work. **Item.** A single exemplar of a manifestation.

REPORT FROM THE CHAIR OF THE CANADIAN NATIONAL COMMITTEE FOR CARTOGRAPHY AND THE CIG TECHNICAL COUNCILLOR FOR CARTOGRAPHY

Spring 2003

Peter Keller

Three things weigh on my mind these days:
1. Canadian participation in ICA Business
2. Preparing for ICA 2003 in Durban
3. Organizing the "On the Edge 2003 Conference"

1. Canadian Participation in ICA Business

If you have not given it thought already, do consider getting involved in International Cartographic Association business. We continue to look for Canadian representation on the various ICA Commissions. Working with the Commissions can be very rewarding and will get you in touch with people worldwide who share an interest with you, be it Education and Training, Visualization, History of Cartography, Planetary Cartography, ... Just in case, below is the list of ICA Commissions again.

- Cartography and Children
- Publications
- Gender and Cartography
- Census Cartography
- Marine Cartography
- Mountain Cartography
- Mapping from Satellite Imagery
- Visualization and Virtual Environments
- Spatial Data Standards
- WG Incremental Updating and Versioning
- Maps and the Internet
- Planetary Cartography
- Map Production
- Maps and Graphics for Blind and Visually Impaired People
- Education and Training
- National and Regional Atlases
- Generalisation
- Theoretical Cartography

Please forward expressions of interest or nominations (self-nominations are perfectly acceptable) to myself at pkeller@uvic.ca or call at 250 721 7333. Deadline for Nominations: "The sooner the better".

2. Preparing for ICA 2003 in Durban

The Durban Conference Organizers have reviewed all abstract submissions and authors should have received notification of their decisions.

Here in Canada we are busy preparing our submissions for the conference.
- Erin Richmond is looking after the Children's Map Competition. You can contact her at erinrich@uvic.ca.
- Diane Lacasse and her team are busy putting the National Map Exhibit together. A copy of the exhibit will be on display at the conference in Victoria. Diane can be reached at Diane.Lacasse@CCRS.NRCan.gc.ca.
- I am getting final submissions for the Four Year Report of Canadian Cartographic Activities: 1999-2003. It will be published in Geomatica's 2003 summer issue. Any questions, email me at pkeller@uvic.ca.

For more information about ICC2003, check out: http://www.icc2003.gov.za/ or contact:
ICC 2003
Private Bag X10
Mowbray
7705
South Africa

Now, if you are one of those people who really likes to plan ahead, start thinking about ICA 2005 scheduled for Coruña, Spain. More information can be found at http://www.icc2005.org.

3. Organizing the "On the Edge 2003 Conference", May 27-31, 2003

A reminder that the Geography Department at the University of Victoria is hosting a joint meeting of the ACMLA, CAG, CCA and CRSA from May 27 to May 31, 2003. Details of the conference continue to build on our conference website. Be sure to check back to keep current.

English:
http://www.geog.uvic.ca/ontheedge2003/index.html

Français:
http://www.geog.uvic.ca/alafinepointe2003/index.html

March 1, 2003, deadline for Oral Paper Abstract Submission, Illustrated Paper Abstract Submission and Poster Abstracts may have passed by the time you read this. Submission details are at http://www.geog.uvic.ca/ontheedge2003/call.html

Today's count (Feb. 24th) tells me that a total of 87 special sessions and/or discussion sessions already are registered. This does not include general sessions. A tentative listing of the organizers and session topics can be accessed at the following address: http://www.mairecorp.com/Forms/sessiondetaill.asp

Check out the field trips, workshops, keynotes and social occasions on our website. We are trying very hard to make this a conference to remember.

And of course, don't forget to register before the early registration deadline passes April 21, 2003, and make sure to include the banquet and orienteering event if you want to have a really good time. Registration is on-line at:
http://www.geog.uvic.ca/ontheedge2003/register.html

Feel free to contact the conference e-mail at 2003@mail.geog.uvic.ca if you have questions.

We look forward to seeing you in Victoria.

Peter Keller
Chair, CNC for Cartography
pkeller@uvic.ca

WELCOME

NEW ACMLA MEMBERS

Ann Smith (Full member)
Academic Librarian
Geospatial, Data & Map Co-ordinator
Vaughan Memorial Library
Acadia University
Wolfville, Nova Scotia
B4P 2R6
E-mail: ann.smith@acadiau.ca

Diane Lacasse (Full member)
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Maxine Tedesco (Full member)
Data, Geography & Government
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University of Lethbridge Library
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Wenonah Fraser (Full member)
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270-18th Street
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Marilyn Andrews (Full member)
Data Librarian
University of Regina
ED/FA Library (ED 208.2)
3737 Wascana Parkway
Regina, Saskatchewan
S4S 0A2
E-mail: Marilyn.Andrews@uregina.ca

on the edge 2003
à la fine pointe

conference details
détails de la conférence

Tuesday, May 27 *to*
Saturday, May 31, 2003
Victoria, British Columbia

Du mardi le 27 mai 2003
au samedi le 31 mai 2003
Victoria, Columbie-Britannique

A joint conference with:
Canadian Association of Geographers (CAG)
Canadian Cartographic Association (CCA)
Association of Canadian Map Libraries
and Archives (ACMLA)

hosted by the Department of Geography, University of Victoria

Une conférence commune avec:
Association canadienne des géographes (ACG)
Association canadienne de cartographie (ACC)
Association des cartothèques et archives
cartographiques du Canada (ACACC)

organisé par le Département de géographie de l'Université de Victoria

All information is available at: / Toute l'information est disponible sous :

www.geog.uvic.ca/acmla2003acacc

• **Program Overview** Vue d'ensemble du programme •
• **Abstract Submission Details** Détails de soumission d'un résumé •
• **Registration Details** Détails d'inscription • **Workshop Details** Détails des ateliers •
• **Fieldtrip Information** Information sur les sorties • **Daycare** Service de garde • **Accommodation** Hébergement •

For questions not answered on the website or for written details please contact:
Pour toutes questions non répondues par le site web ou pour plus de détails, veuillez contacter :

on the edge - á la fine pointe
Department of Geography, University of Victoria
PO BOX 3050, Victoria, BC, Canada V8W 3P5
Fax: 250 721 6216   phone: 250 721 7326
e-mail: 2003@mail.geog.uvic.ca

Deadlines

*Organization of a special session, special
illustrated paper session, or panel discussion –*
February 1st, 2003

*Submission of a paper, illustrated paper or poster
abstract* **March 1st, 2003**

Registration - *Starts* **February 1st, 2003,**
early Registration until **April 21st, 2003**

Accommodation – book as early as possible.
Accommodation at the University residences is
limited. Victoria is a tourism destination and hotels
and B&Bs book up quickly.

Travel Grants? – contact the organizations of which
you are a member.

Dates limites

*Organisation d'une séance spéciale, séance spéciale
de communications illustrées ou panel de discussion
– 1er février 2003*

*Soumission d'une communication, d'une communica-
tion illustrée ou d'un résumé d'affiche* **1er mars 2003**

Inscription – *Débute le 1er* **février 2003.**
pré-inscription jusqu'au **21 avril 2003**

Hébergement – réservez le plus tôt possible. L'hé-
bergement aux résidences de l'université est limité.
Victoria est une destination touristique et les hôtels et
les couettes et café se remplissent rapidement.

Bourse de voyage? – contactez l'organisation dont
vous êtes membre.

We look forward to your submission and to welcoming you to Victoria in May, 2003
Nous attendons avec intérêt votre soumission et à vous accueillir à Victoria en mai 2003

**University
of Victoria**