

VERS LE NORD-OUEST
 Préservé le présent en voyageant vers le futur
CARTO 2013
 UNIVERSITÉ DE L'ALBERTA 11 AU 14 JUIN ACACC/ACC



NORTH BY WEST
 Preserving the present as we journey to the future
CARTO 2013
 UNIVERSITY OF ALBERTA JUNE 11-14 ACMLA/CCA

53° 36" 31' North
West 113° 25" 31'

 **UNIVERSITY OF ALBERTA**

Vers le Nord-Ouest

Préserver le présent en voyageant vers le futur



North by West

Preserving the Present as We Journey to the Future



Tuesday June 11, 2013

**Workshops
Registration**

9:00 - 4:00

Basic Maps Cataloging Workshop: AACR2 and RDA: Paige Andrew

Cameron Classroom, 4-02 Cameron Library

The primary objective of this workshop is to give the participant a basic knowledge level, and the necessary skills, to create accurate, high-quality bibliographic records for sheet maps and/or be able to work successfully with copy. At the very least, the participant will come away with a good understanding of the variability inherent and encountered in individual maps, as well as the confidence to apply cataloging skills and standards to this format of material in an understandable manner. While descriptions of globes and other types of cartographic materials will not be covered, these are easily learned as an extension of knowing and understanding how to catalog a sheet map. Basic skills that will be taught include: (1) how to decide which title to choose when more than one appears on a map; (2) providing access to other forms of a single title; (3) the proper techniques for measuring a map(s) and how to record that and other physical/carrier description information; and (4) recording scale information correctly when provided or by determining a scale when it is not specifically stated. Some *Resource Description and Access* (RDA) changes and additions will also be introduced at points during the workshop. We will also do some hands-on work to reinforce key concepts and/or familiarize one with the use of a given tool. The workshop leader will assume that the participant is already conversant in using the MARC21, AACR2 and OCLC's *Bibliographic Formats* standards; it would be helpful if they are familiar with or have used the RDA Toolkit, but it is not necessary. In addition, participants will receive a set of reference materials that will assist them in the overall process of record creation and/or enhancing existing bibliographic records.

9:00 - 12:00

Creating and Sharing Maps with ArcGIS Online: Paul Heersink

Lab Room 1-30, Cameron Library

Learn how to share your GIS data by creating dynamic Web maps and applications with ArcGIS in this 3 hour workshop. Free online content, applications and ArcGIS viewers are all available to create a rich, interactive experience for your users without access to any software other than a web browser. The workshop will begin by exploring the Esri-hosted Web maps you can create and share on ArcGIS Online. Attendees will learn how to download and make use of Esri's Story Map templates. Emphasis will be placed on how to use the viewer application builders to create rich Web mapping applications without writing any code.

1:00 - 3:00

Making Maps to Support Research Using ArcGIS: Charlene Nielsen

Computer Lab B118, Biological Sciences Building

Using ArcGIS 10, you will learn how to:

- author a publication-quality study area map
- simplify map graphics for presentations
- generate multiple field site maps

Bring your own data or use the samples provided to try some new techniques or brush up on your existing cartography skills in a GIS environment. Suggestions for data include tables of longitude/latitude locations, boundaries and other features for your study area(s), and field plots/locations.

Prerequisite: Basic familiarity with ArcMap (or not afraid of detail-oriented software)

5:30 - 8:00

Icebreaker Reception

Registration

Rutherford South Lobby and Atrium, Rutherford Library

Wednesday June 12, 2013

Registration & Continental Breakfast 8:15 - 9:00

Allard Family Theatre - Room 1-080, Katz Group Centre for Pharmacy and Health Research (KATZ)

9:00 - 9:15	Opening Remarks and Welcome Dr. Martin Ferguson-Pell, Acting Provost and Vice-President (Academic)
9:15 - 10:10	Keynote Address Barbara Belyea: A Map and Nine Makers Aaron Arrowsmith published <i>A Map Exhibiting all the New Discoveries in the Interior Parts of North America</i> (1795), based on maps forwarded to him by the Governor of the Hudson's Bay Company. In the French tradition of Guillaume Delisle and D'Anville, the London cartographer mapped the edges of the known world without leaving town. Nine mapmakers in the field contributed to six states of Arrowsmith's map of North America over the next twenty years. This presentation follows a "thread" in the process by which Arrowsmith's composite map was drawn and updated.
10:10 - 10:30	Break
10:30 - 11:50	Session: Historical Cartography
10:30 - 10:50	Symbol into Fact - History of the Contour Line Dan Duda In this day and age when a general map can be created with a few clicks of the mouse, I wonder if anyone thinks about where the cartographic symbols and standards come from that are built into the software? Arguably, that question can be about any software being used - do we understand and know why those few clicks do what they do? Even before the Digital Age, do we know how cartographic standards were established? In this presentation, I'll be looking at how contour lines became an accepted symbol in depicting elevation or water depth. The story begins around 500 years ago, and the practice of using them was not fully accepted until the end of the 19th century.
10:50 - 11:10	The Series that Canada Lost: the 1:125,000 / Two-mile Maps Roger Wheate Lou Sebert, honorary member of both the ACMLA and CCA, published articles on almost every Canadian topographic map series, but curiously not the 1:125,000 series and its predecessor the two-mile maps (1:126,720). These were started in 1908 and gradually replaced by the metric equivalent after 1960; in some provinces maps were also produced at 1:100,000. Although the series was orphaned by the two adjacent NTS scales, maps continued to be produced by the provinces of British Columbia, Ontario and Quebec almost until the end of the millennium. They were especially popular for forestry and tourism based on their attractive compromise of information and scale. I will show examples of what Lou Sebert describes as the beautifully contoured maps of British Columbia and contend that the information content relative to scale makes this the topographic map series we could and perhaps should have maintained. The number and details of topographic features displayed greatly exceed those at 1:250,000, while covering a more suitable extent of the Canadian landscape than in the 1:50,000 series. Some map sheets incorporated shaded relief, including what may be the quintessential Canadian topographic map sheet.
11:10 - 11:30	Mapping to Highlight the Oregon Country Morgan Hite For an exhibit on the effects of the War of 1812 on the Pacific Northwest, the Osoyoos Museum produced twelve maps documenting changes in the "Oregon Country" from 1792 to 1872. Designed for students and the general public, the maps show the operations of fur trading companies, the routes of the more prominent explorers, international treaties, and changing borders (not to mention the origin of the infamous 54°40' line). Yet the process was not simply one of illustrating widely agreed-upon historical fact: much of what we set out to map was unclear or ambiguous, and choices had to be made about where to draw lines or place points.
11:30 - 11:50	From Paper to Animation: Transforming Historical Maps into Time-animated Presentations Rebecca Bartlett The transformation from paper map to digital can be enhanced by creating temporal spatial animations and this

	<p>presentation will outline two case studies. The first animation will show the visual progression of more than 70 years of transportation infrastructure development on Prince Edward Island, highlighting the years when the roads were paved using National Road Network data supplemented with information from a one-of-a-kind annotated map. The second animation uses a 1917 military map and war diaries to recreate the movement of a small section of the front line during the Battle of Vimy Ridge. For both examples the workflow will be outlined, from scanning and georeferencing to final Google Earth (KML) output.</p>
12:00 - 2:00	ACMLA AGM / lunch
2:00 - 2:40	Session: New Millennium Cartography
2:00 - 2:20	<p>Challenges of Creating a National Topographic Base Map Paul Heersink Esri Canada's Community Maps Program is an initiative that seeks to build a national topographic base map using authoritative data from multiple sources, including federal, provincial and municipal governments. This presentation will highlight the process involved in doing so and will focus on some of the bigger issues faced.</p>
2:20 - 2:40	<p>Map Projections on the Web: Map Scale, Region and Purpose Should Factor into Projection Selection Decisions Glenn Brauen Projections are a fundamental design element of maps. In the making of paper maps, selection of an appropriate projection based on factors such as the intended purpose, scale, and regional focus of the map is among the earliest decisions made. Despite the importance of this concept for the design of paper maps, factoring good projection selection into the design of web maps seems to get much less attention. High profile commercial mapping applications provide only the nearly ubiquitous "Web Mercator" projection and mapping tools that do support projection selection often do so in an overly constrained fashion. This presentation advances the modest argument that projections in web maps should be selected according to the same criteria as when designing paper maps. For interactive maps that enable a user to zoom through a range of scales and pan the map across a selection of regions, this means that defining a map to use a single projection is not adequate. Attempting to move beyond the contemporary design paradigm, this presentation will outline a conceptual framework for a web map that introduces the possibility that projections are selected dynamically as a user zooms and pans the map across the territory and through a range of scales. A prototype multi-projection web map will be demonstrated, design shortcomings of current, paradigmatic web mapping tools will be briefly outlined, and open questions concerning the design and use of such web maps will be discussed.</p>
2:40 - 3:30	Poster Session and Break
3:30 - 4:30	Session: A Case Study in the Reproduction of a 200 Year old Manuscript Map of Northwestern North America for Accessibility and Research in Canada
3:30 - 3:50	<p>Provenance and Significance of the David Thompson Manuscript Map of Northwest North America at The National Archives, UK David Malaher The subject manuscript map by David Thompson around 1826, FO-925-4622, has been in the UK for more than 170 years without drawing much attention by the Foreign Office, explorers and surveyors, or scholars interested in colonial history or cartography. The objective of this presentation is to promote the map measuring 190 x 330 cm to archivists and potential researchers in Canada so that its contents and structure can be considered for future study. The presentation will use the latest in high resolution digital photography to make comparisons with a similar map by Thompson around 1814 held at the Archives of Ontario F-443 which has been used extensively in Canada for studying the state of geographic and cartographic knowledge of that time. The AO map is now withdrawn from general use due to its worn and faded condition whereas fortunately, the TNA map is in superb condition and completely legible. Provenance of the TNA map will be discussed, revealing a complex chain of events and by-product maps involving Thompson, his employers the Hudson's Bay Company, North West Company and British Boundary Commission of 1816. By comparing these factors with the AO map a much deeper appreciation will be gained for the TNA version. Examples will be shown of the extensive, unique notes on the TNA map with their wide ranging content of geology, anthropology, hydrology and botany. A further</p>

	<p>comparison will be made with the well-known John Mitchell map of southeastern North America in 1755. Together with the Thompson TNA map, these two large maps cover more than 60% of the continent. The significance of the Thompson TNA map is that it has new content compared to the older standards, which can open up new fields of knowledge about that period in Canada's past.</p>
<p>3:50 - 4:10</p>	<p>Reconstructing History: the Digital Reproduction of David Thompson's Manuscript Map of Northwest North America at Full Scale Andreas Korsos</p> <p>Housed within The National Archives in Kew, England, exists the most pristine version of David Thompson's map of northwestern North America in existence. The second surviving version of the map was first handed to William McGillivray of the North West Company in 1814; it was eventually handed over to the British Foreign Office (BFO) by Thompson, and although there has been discussion and speculation as to why and when he provided the BFO with his '<i>Map of North America from 84 Degrees West to the Pacific Ocean</i>'; there is no tangible substantiation. Clearly, further research is required to determine the why and when questions that have arisen; however, the map, located in England, has been hidden from view for 170 years. The rediscovery of this remarkable map and the subsequent efforts to create and bring it to the forefront of cartographic historical research in Canada will be discussed. The presentation will confer the planning, processes, challenges and eventual recreation of this significant map, measuring approximately 190 cm x 330 cm, that will also be displayed at the conference. Specifically discussed will be the 176 high resolution images (approx. 70 GB) acquired from The National Archives, and the subsequent piecing together of those same images to one seamless digital file within a contemporary geographic information system.</p>
<p>4:10 - 4:30</p>	<p>Policies in Holding National Archives (UK) Digital Images of David Thompson Maps at a Canadian University Archive Rosemary Malaher</p> <p>It is proposed to have certain digital images of an historic map by David Thompson, now held at The National Archives (TNA) (UK), kept by a Canadian University Archive. The project will be subject to policies of both the TNA and the Canadian host institution. Due to the novelty of the project, all relevant policies have not yet been identified. Normally, it would be the aim of the Canadian university archive to make the digital images freely available. However, in the case of TNA images they could be freely available for viewing online but downloading may be restricted or possibly subject to payment of a fee. The Canadian host may have issues with the digital storage space required due to its policies for backup files, which can multiply the size far beyond the nominal space of 70 GB for the complete set of 176 digital files. The cost of physical storage may be less of a problem than the cost of people needed to maintain the backup system. These are examples of policy issues that are being discussed for the Thompson map project. The audience will be invited to speak on comparable policy matters at their institution.</p>
<p>6:30 - 9:30</p>	<p style="text-align: center;">Orienteering Event Kinsmen Park</p>

Thursday June 13, 2013

Continental Breakfast 8:15 - 9:15

Centennial Centre for Interdisciplinary Science (CCIS) North Lecture Theatres, Room 1 - 440

9:15 - 10:10	Keynote Address Aileen Buckley: The Stories Maps Tell Exploring Online Maps through the Adventures of Canadian Canoe Voyageurs All maps tell a story, and with the latest tools, anyone can make maps to tell their stories. Traditional cartographers are increasingly being joined by "neocartographers" who haven't had any formal training in cartography to populate the web with millions of maps. Neocartographers often map stories that are personal and subjective with little consideration of cartographic quality, and they are sometimes their own audience. They use publically-generated data and open source tools to make the maps they want to make showing things the way they want to. In contrast, traditionally-trained cartographers follow cartographic conventions, use authoritative data sets, master complex software, and always strive for objectivity and accuracy. The tension between the unconventional style of neocartographers and the prescribed methods of traditional cartographers provides fertile ground for exploring maps in today's online environment. Using a combination of neo- and traditional cartographic approaches, I tell the stories of Canadian canoe voyageurs as written by Dr. Gerald Patterson in "Free and Moving" (2013). Dr. Patterson's canoe voyages were inspired by his "fascination with the stories about the 18th-century trading routes in northern Saskatchewan" and the vague tales he had heard about "the vast reaches of Tundra prairies in the Northwest Territories and the great rivers that cut through them on the way to the Arctic Ocean". The online story maps that accompany "Free and Moving" attempt to capture these inspirations and the adventures of Dr. Patterson and his fellow voyageurs.
10:10 - 10:30	Break
10:30 - 11:30	Session: GeoGratis and Open Data
10:30 - 10:50	ESS GeoSpatial Portal: The New GeoGratis Eric Kramers The GeoGratis website began in 1998 as an FTP site with rudimentary web descriptions. In 2002, there were 46 collections for users to access, which grew to 113 with approximately 170,000 metadata records in 2013. Users seeking data products from Natural Resources Canada were required to use multiple portals such as GeoPub, Mirage (Map Image Rendering Database for Geoscience) and GeoGratis. This presentation will showcase the new GeoGratis platform. This new site offers one point of entry to all Earth Sciences Sector's (ESS) geo-products and services, including topographic maps at 1:50 000, digital geoscience maps and Atlas of Canada maps. It gives users and developers alike a consolidated view of ESS geoscience and geospatial digital assets through various services and application programming interfaces (API's).
10:50 - 11:10	New GeoGratis Demonstration Eric Kramers
11:10 - 11:30	Where to go to Find Open Data on the Web Ted Mackinnon There is an abundant amount of Canadian data available these days to generate geospatial products with as we progress further towards open data and online mapping applications. However, with more and more sites popping up all over the web it can still be hard to locate data sometimes. CanadianGIS.com has been following trends in Canadian data for the past few years and provides information on over 70 different data sources of Canadian data. Ted Mackinnon highlights where to find data from coast to coast, including some of the Provincial and Municipal open data sites that have been setting the standards.
12:00 - 2:00	CCA AGM / lunch
2:00 - 3:00	Session: "Old Directions and New Trails": Addressing the Sharing of Space in Canada through Archaeology, Historical Geography and GIS
2:00 - 2:20	"Commencing at a point...": Historical Geography and GIS as Methods of Reconstructing the Boundaries of the Numbered Treaties of the Old Northwest

	<p>Frank Tough</p> <p>In the last several decades, considerable academic and applied research has contributed to better understandings of the so-called Numbered Treaties between First Nations and the Crown. Many aspects of treaty negotiations and implementation have been ascertained. More cogent interpretations have developed. However, treaty boundaries have not been scrutinized. Each treaty provides a written description of the treaty territory. Most readers eyes glaze over when they come to the metes and bounds descriptions of the intended treaty territory. Modern day maps of treaty territories convey a sense of certainty and order to the bounds of treaty territory. In fact, certain segments of the treaty boundaries as explained by the written version of the treaty are difficult to map and some segments introduce errors. None of the existing published maps of the Numbered Treaty boundaries can be relied upon. Despite the fact that the Crown was interested obtaining surrender of Indian title to priority areas, an inherently geographical problem, the geographical and cartographic knowledge at the time of treaty negotiations was limited. While some of the published maps should now be regarded as unreliable representation of the treaty territory or the Crown's intent, the written text of the treaty, the boundaries established by antecedent treaties, early treaty maps, and historical cartographic sources, permit a historical geographical approach to empirical aspects of this spatial problem. GIS tools contribute necessary precision to solve this problem. Not only can this technology be used to map treaty boundaries on current maps, but also certain boundary references such as height of land and sources of watercourses can now be plotted with accuracy and precision, whereas at the time of negotiations, some segments of the boundaries were unknown and thus could only be represented in proximate terms on contemporary maps. Based on the original written text of the treaties, this paper will demonstrate a systematic method for mapping treaty boundaries that produces better results.</p>
<p>2:20 - 2:40</p>	<p>Exploring the Development of Direct-to-digital Mapping Technologies in the Context of First Nations Traditional Land Use Research</p> <p>Steven DeRoy</p> <p>Mapping spatial information to collect indigenous knowledge (IK) and use has almost always involved drawing out information on paper maps. Today, much IK research takes place outside of the university setting, in the context of indigenous rights and resource development projects, and involves multiple actors, including First Nations, academics, consultants, industry, and government. This presentation will describe The Firelight Group's development of a direct-to-digital mapping methodology and how it addresses the changing contexts of IK research. We will pose questions regarding the implications of this method, including notions of accuracy, changes in the interview setting, and the role of geo-spatial technologies in IK research.</p>
<p>2:40 - 3:00</p>	<p>Tracks, Trails and Traces: Mapping Historical Movement of Metis Communities in Alberta</p> <p>Kisha Supernant</p> <p>Historical maps are important sources of data for a variety of disciplines. Recent efforts to translate historical maps into current technologies have reinvigorated the use of these data for analysis. In this paper, I explore how trail systems in Alberta, digitized from township maps, have important implications for understanding movements across the landscape by settler and Aboriginal communities in the historic period. I look specifically at the use of trail systems for understanding the archaeological signature of Metis overwintering sites during the latter half of the nineteenth century. Trails may provide some indication of areas where Metis overwintered but that lack a known archaeological component. Combining historical maps of trail systems with archaeological research has great potential to add to a more complete picture of the full extent of the Metis cultural landscape in the Canadian West.</p>
<p>3:00 - 3:30</p>	<p style="text-align: center;">Break</p>
<p>3:30 - 4:30</p>	<p>Session: The Challenges and Opportunities for Data Collection and Management in the North</p>
<p>3:30 - 3:50</p>	<p>Preserving Northern Research Data: Experiences from the International Polar Year</p> <p>Chuck Humphrey</p> <p>While the International Polar Year (IPY) Data Policy included a fundamental principle of data sharing, Canada did not have research data management infrastructure in place to support this principle. Data Management within the Canadian IPY Federal Program Office addressed this gap through a request for proposals in May 2010 to establish the IPY Data Assembly Centre Network. In July 2010, six institutions were selected to form a collaborative network to ingest, preserve, and make available the data from Canadian-funded International IPY research projects. This cross-sector, multi-institutional collaboration developed a preservation backbone and a</p>

	<p>data discovery and access point through the Polar Data Catalogue. Processes were implemented to ingest and process research data for inclusion in the Network and five of the participating institutions made a longer term commitment to this infrastructure in 2012, becoming the Canadian Polar Data Network (CPDN). These partner members drafted and approved a governance charter in January 2013, making the transition to a more permanent Network. This presentation will review the lessons learned from these experiences and highlight the importance of this collaborative infrastructure for Northern research data.</p>
<p>3:50 - 4:10</p>	<p>Developing Guidelines for the Use of the North American Profile Metadata Standard for Science Data: the Canadian Polar Data Network Experience John Huck</p> <p>Recently, academic libraries have begun to participate in data curation and preservation activities. This is partly a continuation of the open access movement, and partly because of the emergence of e-Science. Observational data is similar to geographic data in a number of ways, and so it is not surprising that relatively mature geospatial metadata standards are being adapted to describe non-geographic data. This presentation describes the experience of the Canadian Polar Data Network in developing a set of implementation guidelines for the North American Profile (NAP) of ISO 19115:2003. The network chose this standard because it has already been adopted by the arctic science community and is gaining traction internationally. A working group developed the guidelines, taking into account existing metadata infrastructure within the network and considering questions such as where the information for the records would come from, whether to use controlled vocabularies, and how to take advantage of NAP's hierarchical structure to aggregate related datasets. The work was challenging, in no small part because the NAP standard itself is complex, but also because decisions about the standard necessarily involved broader discussions of policy around such issues as preservation and access conditions. The paper will provide insights to professionals who may be called upon to participate as geospatial experts in projects of a similar nature.</p>
<p>4:10 - 4:30</p>	<p>Linking Local, National and International Data Collection and Management Efforts Across the North David Hik</p> <p>Data from the circumpolar regions has increasing global importance in the face of the rapid environmental, economic and social change. Observational networks in the North are still sparse, but recent improvements to Earth observation by satellites and ground stations have increased the amount of information available to meet the requirements of local, national and international users. The preservation and utilization of these data is an important issue and there has been increasing attention to both data management and necessary data infrastructure, especially during the recent International Polar Year. These coordination and capacity-building efforts are continuing under the auspices of several international organizations including the Arctic Data Coordination Network (ADCN), the Sustaining Arctic Observing Networks (SAON), the International Arctic Scientific Committee (IASC), the Arctic Council, and the ICSU World Data System. For example, IASC has recently adopted a framework for requiring data management plans describing how the data will be ethically shared and preserved over time. Significantly, there is also increasing interest and investment in these issues at local, regional and national levels. In this presentation, I will discuss some recent developments that address improvements to the allocation of resources supporting the preservation and use of Arctic data.</p>
<p>6:30 - 10:00</p>	<p style="text-align: center;">Banquet Old Timer's Cabin, 9430 99 Street NW (Scona Road)</p>

Friday June 14, 2013

Continental Breakfast 8:15 - 9:00

Alberta School of Business, Stollery Executive Development Centre Room 5-40 B, 5th Floor

9:00 - 10:20	Concurrent Session: Alberta Open Data, Thematic Mapping and Viewers
9:00 - 9:20	Open Government Concepts Mark Diner This brief presentation will cover the concepts of Open Government including transparency through access to data and Information, citizen participation and collaboration. We will look at examples around the world and also highlight how maps are important tools in success with Open Government.
9:20 - 9:40	The New Look of the Alberta Soil Information Viewer David Spiess The redeveloped Alberta Soil information Viewer, based on the Agricultural Region of Alberta Soil Inventory Database (AGRASID), is the next evolution of online tools that Alberta producers have had access to since 1998. In the early 2000s, a project to migrate AGRASID onto the Internet began. The migration project was broken into two parts. The second part was the development of an Internet map viewer to provide the general public with a means to access an essential but limited sample of AGRASID soil landscape information for the agricultural region of Alberta. A reasonably stable production version of the viewer was first deployed on the ARD website in October of 2005 and has accommodated some 3000 visits per month. In 2011 when it was determined that the hardware and software framework needed to be replaced, the existing tools were re-evaluated and enhanced, and additional functionality was added. The redevelopment project started in the early spring of 2012. Project completion is expected prior to March 31, 2013. Some intended uses include: <ul style="list-style-type: none">• Reference for pipeline surveys,• Environmental impact studies• Environmental farm planning and assessment by agricultural producers
9:40 - 10:00	Surficial Geology Mapping using Integrated Remote Sensing and Digital Field Mapping Technologies Steven Pawley The Alberta Geological Survey (AGS) is continuing its regional surficial geology mapping program in northern Alberta. These maps describe the distribution of surface geological materials and associated landforms, providing information to support infrastructure development, mineral exploration, forestry and land-use planning. Traditionally, surficial maps are produced by establishing the composition of landforms through field observations, combined with the manual interpretation of airphotos to classify landform type, distribution and extent. This approach works well in the agricultural white zone in Alberta, where the limited vegetation cover allows an unimpeded view of the landscape. However, these methods have proven ineffective in remote areas of the boreal zone where field access is limited and the dense vegetation cover obscures underlying landforms. To overcome these difficulties, a new approach was developed using high resolution airborne LiDAR (Light Detection and Ranging) data in concert with optical satellite and digital stereoscopic imagery digitization. The integration of remote sensing technologies provides a more complete view of the landscape, enables efficient 'heads-up' digitization, and further enables the use of quantitative, predictive methods for rapid mapping. Map production is also enhanced by digital geological field mapping and data collection using ruggedized tablet PCs. A significant advantage of this technology is that draft versions of field maps can be assembled and continually evaluated in a 3D environment while mapping. In turn, this further enhances the map quality and confidence in the geological interpretations.
10:00 - 10:20	The Agro-Climatic Information Service: Over 50 Years of Alberta Weather and Climate Data at your Fingertips Ralph Wright Over the past decade, Alberta Agriculture and Rural Development (ARD) has installed over 150 all season weather stations across the agricultural areas of the province. These stations report hourly, bringing the total number of Federally and Provincially run stations across Alberta to over 350 in total. ARD has made data from all of these stations available online, with hourly and daily observations at your fingertips brought together into one fun and easy to use interface called the Agro-Climatic Information Service (ACIS). ACIS is home to several viewers. These include a map archive dating back to 1961 that receives more than 40 new maps each week, describing precipitation patterns, soil moisture, temperature, snow packs and more. Also,

	track storm systems using radar overlaid on Google Maps, as of 10 minutes ago. View regional maps showing current temperatures, 24-hour maximums and minimums and other elements. Or, graph and download meteorological data back as far as 2005 through Google map interface. This presentation will explore the ACIS viewers which can be found at: weatherdata.ca
10:20 - 11:00	Break
Friday June 14, 2013 Continental Breakfast 8:15 - 9:00 Alberta School of Business, Stollery Executive Development Centre Room 5-40 A, 5th Floor	
9:00 - 10:20	Concurrent Session: New Millennium Library Research Projects
9:00 - 9:20	Proposal for a Canadian Historical Geographic Information System Marcel Fortin and Byron Moldofsky Historical GIS Projects are gaining in popularity across Canada. Later in 2013 a book will be published by the University of Calgary Press featuring fourteen such projects spanning across the entire country. With this increase in use in historical geospatial data comes the impetus to ensure that nobody is reinventing the wheel, or better yet redigitizing the wheel. Historical census polygons, historical urban street and building data, historical national infrastructure data such as the building of the railway and the highway networks, historical topographic map layers - these are data layers that have been created and recreated by numerous projects. They should not have to be re-created anew every time researchers in a different part of the country start an historical study. Without a set of standards and protocols for creating, sharing, distributing, crediting, and archiving these data however, it is difficult to rationalize this process. We look at some examples which may be useful models for such a system, and hope to inspire debate on potential methods for development and funding.
9:20 - 9:40	“Open Data and Open Learning”: Bringing Web-based GIS into a First Year Environmental Studies Course Andrew Nicholson In recent years, Open Data Initiatives have swept across Canadian municipalities, with cities such as Edmonton and Ottawa now releasing samples of their locally collected geospatial and numeric datasets for public use. With this open availability to data, new and innovative opportunities for GIS education and geo-literacy promotion in schools have also come forth. Utilizing such data and online GIS tools, students can now research and answer many geographically related questions about their local areas. At the University of Toronto Mississauga, the GIS/Data Librarian has been able to take advantage of this “open data” trend and match it with another emerging trend occurring in post-secondary education: “online courses”. Interest in developing online courses in universities has been growing in recent years, particularly with the arrival of MOOCs and services such as Coursera. The University of Toronto has in fact launched several of its own online courses. This presentation will highlight how the GIS/Data Librarian was able to take Mississauga Open Data into one such online course and offer up a “Taste of GIS” exercise to hundreds of first year students in Environmental Studies. With such exposure, it is hoped that many of those students will develop an interest in taking more GIS courses and eventually become practitioners of both GIS technologies and Open Data in their future careers.
9:40 - 10:00	Collection numérique de cartes de la Nouvelle-France / Digital Collection of Maps of New France Jean-François Palomino My paper will present a project actually in progress in Bibliothèque et Archives nationales du Québec (BAnQ), which consists of a catalogue of maps of New France. Elaborated within the context of my activities as a map curator at BAnQ, and with the collaboration of the Bibliothèque nationale de France, this catalogue will gather descriptions and images of maps of French North America drawn before 1800. It has the ambition to virtually gather maps disseminated among various institutions - libraries, archives centers, museums - in Europe and North America. It will bring new cartographical sources to the attention of researchers. It will encourage research on Quebec Province history, and also partnerships between institutions. It will interest a young public to the history and geography of its country. Many collections are concerned by this project, notably the Bibliothèque nationale de France where we can find the collection of the Service hydrographique de la Marine, and also the one of the great mapmaker Bourguignon d’Anville. The presentation will not only show the relevance of this catalogue; it will also be a good pretext to exchange with colleagues, map curators, and researchers on the intellectual and technological challenges of this kind of project.

10:00 - 10:20	ACMLA Roundtable Discussion
10:20 - 11:00	Break
Friday June 14, 2013 Alberta School of Business, Stollery Executive Development Centre Room 5-40 A, 5th Floor	
11:00 - 12:00	Joint Session: Local Projects
11:00 - 11:20	<p>Neogeography of Edmonton's River Valleys Matthew Dance</p> <p>Place can be defined as the meanings that are created at the confluence of location and activity (Relph, 1976). The places that comprise an urban environment are increasingly networked through the ubiquitous disbursement of connected, hand-held, location-aware mobile devices (Castells, 2004). This, coupled with the evolution of the GeoWeb supporting volunteered geographic information (VGI), is defining a key method of citizen engagement with spatial data and information. Specifically, citizens are able to communicate place-based information through these technologies. These emerging phenomena give rise to some pertinent questions: (1) To what extent are GPS systems able to capture users' understanding of location, and (2) How do people contribute spatial information to the GeoWeb? Using a case study method that centered on Edmonton's river valley trail network, 17 informants were interviewed regarding their use of GPS devices in the capture and communication of spatial information, and their corresponding knowledge of place. Our findings indicate that people possess and are able to articulate place knowledge that is deep and personally meaningful, especially in regards to parts of the river valley they use and enjoy most often. However, location-aware mobile devices do not currently provide the tools necessary to communicate users' deep understanding. We conclude that current web based maps that support VGI only allow for a small portion of knowledge to be uploaded. This knowledge is restricted to the structure or form of a place, rather than its meanings or context.</p>
11:20 - 11:40	<p>Economic Topographies: Reading the Edmonton River Valley Kisha Supernant and Erika Luckert</p> <p>Rossdale, a pretty little well-heeled community nestled in the Edmonton river valley, is the oldest continually inhabited spot on this branch of the North Saskatchewan River. It was the site for pre-Treaty 6 Aboriginal settlements, the second Fort Edmonton, the inauguration of the Province of Alberta, a burial ground, an ice house, a fair ground, a ball park, a power plant. In the early twentieth century, it offered working-class housing near the coal seams of the North Saskatchewan; in the early twenty-first century it is characterized by expensive "vinyl Victorians" scenically situated alongside a bike path. Rossdale's historical importance makes it ripe for deep mapping, which is what the digital urbanisms project Edmonton Pipelines www.edmontonpipelines.org aims to do. Grouping historical and present moments according to the themes of Trade, Traffic, Play, Power, Dwell, View, Haunt, and Name, the Rossdale project reads multiple times, and their diverse narrative, inside of a single delineated space. Bringing the past up to the level of the present through the use of creative cartography promotes the discovery of new, interconnected narratives between the past and present. This presentation will showcase one of the digital maps we have made using Open Data from the City of Edmonton. Drawing on tax records from the past 100 years, we have mapped residential property values in Rossdale against the literal topography of the river valley. We are thus able to demonstrate, through a cartographic visualization, changes to the value of riverside properties. These changes align with the transformation of the river itself, from an important site of traffic and trade, to an aesthetic centerpiece for the Capital City Recreation Area.</p>
11:40 - 12:00	<p>Connecting Collections through Place and Space Larry Laliberte</p> <p>Over the past ten years, many historical library collections have been digitized (textual, numerical, photos, maps) and made available online. However, they often exist on standalone platforms isolated from other digital collections. Using the 1913/14 Fire Insurance Plans of Edmonton as an example, this presentation highlights how thinking spatially about local digital collections and combining the power of GIS and geovisualization can open up interesting ways of linking collections.</p>
12:30 - 4:30	Field trip - Fort Edmonton Park



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