



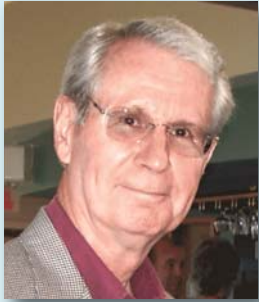
Newsletter of the Canadian Cartographic Association
Bulletin de l'Association canadienne de cartographie

CARTOUCHE

Number 64

Winter 2006/07

President's Message



As the season slowly but surely moves from Fall into Winter I am reminded of how quickly time passes. Our 2006 Annual Meeting in Ottawa is a somewhat distant, pleasant memory, and we now look forward with great anticipation to a wonderful 2007 meeting in Saskatoon (May 29 – June 1), our first time in Saskatchewan. It promises to be a great experience given that we will be together at the University of Saskatchewan with the Canadian Association of Geographers as well as the Congress (Canadian Federation for the Humanities and Social Sciences). We owe a great deal of thanks to Elise Pietroniro, Map Use and Design I.G. Chair, who is the local organizer for the CCA.

Cartographica online. The New Year will usher in online access to the journal. In order to save costs to our members, the CCA has undertaken the maintenance of the membership database for those who want online access to the 2007 issues, plus the 1,138 previously published articles. Penny Hutton, Analytical Cartography/GIS I.G. Chair, will coordinate with the University of Toronto Press by managing user ids and passwords for all CCA members who want electronic access.

It is important to note that members will continue to receive the printed issues as part of their membership. There will, however, be a fee of \$5.00 to access the electronic version. The membership renewal form soon to be in the mail will have a special box that members who want online access will check and then add \$5.00 to their membership fee. Stay tuned for more information as it becomes available.

Membership renewals for 2007. By the time you read this issue of Cartouche, you should have received your CCA membership renewal notice for 2007 from our Treasurer, John Fowler. If you haven't renewed your membership, it is particularly important that you renew now and certainly before the first issue of Cartographica for 2007 is mailed by the University of Toronto Press. I have been informed by Anne Marie Corrigan, Vice-President, Journals, that the U of T Press will no longer mail issues missed by any member whose names were not on the mailing list due to failure to renew before the first issue for 2007 is bulk mailed.

In the past it has been the practice to request the U of T Press to send missed issues to members who renew after the first of the issues has been mailed. However, this practice will cease since the cost of doing so has escalated. It requires the Press to send a person to the warehouse, locate the particular issue, then package and mail it at a significantly higher postage cost than had it been mailed at the bulk rate. In essence, this is a cost-cutting measure undertaken by the Press.

Will members be able to individually request missed issues from the Press? Yes, but at a cost of \$25.00 plus postage. Early membership renewal is the sure way to avoid missing any issues of the journal. I urge you to put a reminder on your calendar and send in your 2007 CCA membership dues as soon as you receive the renewal form. And, if you want the online access, don't forget to add \$5.00 to your membership fees.

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Canadian Cartographic Association

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FROM THE Editors

Happy New Year to all!

It is often said that word-of-mouth is the best way to promote something. While I think that is true, action seems to me to be equally successful. This past fall, "YES Mag, The Science Magazine for Adventurous Minds" did a feature on cartography. This is a magazine is intended for children ages 9 – 14. The CCA's own Ian O'Connell (Education Interest Group Chair) was interviewed for this article. Since we receive this magazine in our home, I was quite excited to see the article and be able to say "I know that guy".

The CCA booth at GeoTEC last June was very successful in promoting the CCA and the field of cartography. Its success was the result of members taking some time out of the busy conference schedule to "man" the booth.

The purpose of Cartouche is to keep the CCA membership up-to-date on all things Cartographic (at least that is what we try to do). Behind the scenes are the actions of the CCA executive, Interest Group Chairs and editors. The contributions (read actions) of these people are what make Cartouche a valuable tool of the CCA. With the "Letters to the Editors" column, we have now added the entire membership to the mix. That is pretty exciting!

Feel free over the year to send tidbits to Cartouche. Send us comments and suggestions. That is action!

Lori King, co-Editor

LETTERS TO THE Editors



We were surprised to see Cartouche republish a couple of articles that appeared in the *Globe and Mail* this past summer without checking to see if there was any substance to them. While we can't respond to every erroneous fact or assumption that appears in a media story, we wanted to take this opportunity to let Cartouche's professional community know about our acquisition program in general, and what happened in the case of the 1562 map in particular.

Since 1872 we have had an active acquisition program to add to the national map collection. We are particularly interested in material not currently held in our collection nor in a public repository elsewhere in Canada. We prefer to add to the collection by donation. In future we will also develop the collection using new legal deposit regulations, to which

published maps in all forms will be subject. Only occasionally do we add to the collection by purchase - budgets are very limited!

Given our restricted acquisition budgets, we necessarily seek external funding for purchases of any size. To do so, we prepare what we call "information packages", illustrated descriptions of material available for sale that we feel is of tremendous interest to Canadians and that may attract a potential sponsor. These "information packages" are usually one or two pages in length, sometimes longer. In the case of the Christie's auction in Paris this past June 9th, we actively circulated a "package" for a 1555 world map, ascribed to the Venetian cartographer Antonio Floriano, among potential sponsors for two weeks before the auction ... with no luck, unfortunately.

It should be noted that with the 1562 map to which the *Globe* articles refer, we never reached the stage of preparing an information package, and certainly never came close to purchasing it. We would prefer to be criticized for what we do, not for what we don't do. It is true that preliminary database queries did not identify the fact that we held this map in our collection, but this was due to a cataloguing incongruity dating from the mid-1980s which has since been corrected. This preliminary research did reveal that we held very similar 1560 and 1566 versions of the map, and so would not be carrying out any further research in preparation for a possible purchase. Such cataloguing incongruities are very familiar to map libraries and archives throughout the world.

We would also like to point out that we are extremely proud of our expertise in early cartography at LAC. Our two senior archivists have over fifty years of experience between them. One has just written a highly acclaimed history of cartography in Canada, published by McGill-Queen's University Press (in English) and *Septentrion* (in French). The other senior archivist has published widely on cartographic subjects internationally. We believe that the expertise currently on staff at LAC is second to none in the national map program's history.

As memory institutions like ours move forward into the 21st century, processes are bound to change, and this applies to our cartographic holdings just as it does to our entire collection. The old model was based on a limited researcher community with the archivist-custodian serving as gatekeeper to the collection. While this may have been a good model for the 1970s, it is not a workable model for today. Our new approach is based on two pillars. The first is that this invaluable collection must be well protected. In 1997, it was moved to the most secure preservation centre in the world. If scholars need access to the originals, we can certainly provide this service - our map experts are regularly in consultation with both our reference staff and with map researchers.

The second pillar of today's program is that the collection is made available to a far greater number of Canadians through the Web, via extensive databases and (progressively more) virtual images. Our aim is to improve continuously our ability to share our splendid collection with as many people as possible. In pursuing this aim, we welcome the suggestions of the CCA community.

I trust this information is helpful.

Robert McIntosh

David Brown

Library and Archives Canada



WELCOME NEW MEMBERS !!

Jennifer Anderson
Glenn Brauen
Yaives Ferland
Graham Reiger

Ottawa, ON
Ottawa, ON
Quebec City, QC
Calgary, AB

Canada
Canada
Canada
Canada



Paul Light of COGS has won the "New Map-maker Award" from the British Cartographic Society for his work entitled The National Parks & Historic Sites of Western Newfoundland and Labrador – Chapter 3 – L'Anse aux Meadows National Historic Site of Canada and UNESCO World Heritage Site.

Congrats!



Paul is a student at the Centre of Geographic Sciences, Nova Scotia Community College. Paul is also the 1st place winner in the À La Carte category of the 2006 CCA President's Prize awarded at the Annual General Meeting in Ottawa. His entry was the same as that for the BCS award.

CONGRATULATIONS, Paul.

Marie Tharp, 1920-2006

Pioneering Mapmaker of the Ocean Floor

WINGS WorldQuest 2004 Women of Discovery Awardee

*Lamont-Doherty Earth Observatory
News, 8/23/2006:*

Marie Tharp, a pathbreaking oceanographic cartographer at the Lamont-Doherty Earth Observatory, co-creator of the first global map of the ocean floor and co-discoverer of the central rift valley that runs through the Mid-Atlantic Ridge died Wednesday August 23 in Nyack Hospital. She was 86. A pioneer of modern oceanography, Tharp was the first to map the unseen



topography of the ocean floor on a global scale. Her observations became crucial to the eventual acceptance of the theories of plate tectonics and continental drift in the earth sciences. Working with pens, ink and rulers, Tharp drew the underwater details, longitude degree by latitude degree, described by thousands of sonar readings taken by Columbia University researchers and others. Her maps have since become modern scientific and popular icons. "I had a blank canvas to fill with extraordinary possibilities, a fascinating jigsaw puzzle to piece together," Tharp said in an oral history interview conducted for the 50th anniversary of Lamont-Doherty in 1999. "It was a once-in-a-lifetime - a once-in-the-history-of-the-world - opportunity for anyone, but especially for a woman in the 1940s." Piecing together maps that they made, she and colleague Bruce Heezen revealed a 40,000-mile underwater ridge girdling the globe. With the discovery, they laid the foundation for later work that showed the sea floor spreads from central ridges and that the continents are in motion with respect to one another - a revolutionary and controversial theory among geologists at the time. "I was so busy making maps I let them argue," Tharp once said of the debates that swirled around her drafting table. "I figured I'd show them a picture of where the rift valley was and where it pulled apart. There's truth to the old cliché that a picture is worth a thousand words and that seeing is believing."

Based in part on the incontrovertible pictures Tharp provided, the concept of plate tectonics moved into the realm of legitimate debate and later into the mainstream of earth science. In 1959, Tharp and Heezen completed their first map of the North Atlantic. In 1961, they completed the South Atlantic and in 1964, the Indian Ocean. In 1959, Tharp and Heezen completed their first map of the North Atlantic. In 1961, they completed the South Atlantic and in 1964, the Indian Ocean. After Heezen died in 1977, Tharp focused her energy on completing a comprehensive view of the world's oceans. The World Ocean Floor map was published later that year by the Office of Naval Research and is still in wide use today.

Only in recent years has Tharp begun to be recognized for the breadth and significance of her contributions to science. In 1998 she was honored during the 100th anniversary of the Library of Congress' Geography and Map Division. The following year, she was recognized by the Woods Hole Oceanographic Institution. In 2001 she was honored by her home institution with the Lamont-Doherty Heritage Award. Today, a fellowship at Lamont-Doherty to promote women in science through the ADVANCE program bears her name.

"The significance of Tharp's achievement and the importance of the maps cannot be overstated," said Mike Purdy, director of Lamont-Doherty. "She was a pioneer in her science, playing a crucial role in the early days of sea-floor spreading research, and she was a pioneer in her profession, succeeding as a woman in a field dominated for decades by men. But most of all she was a wonderful person, a great colleague and a happy friend to so many of us."

Tharp has no family, but is survived by her devoted staff.

(Reprinted from Lamont-Doherty Earth Observatory News, 8/23/2006, Ken Kostel)

Canadian Map Exhibit Committee. Past-President Rick Gray will chair the committee for the Canadian maps that will be sent to Moscow, Russia for the International Map Exhibit at the 14th General Assembly and 23rd International Cartographic Conference (August 4-10, 2007) of the International Cartographic Association. If you have produced or know of maps that should be considered you are encouraged to send the information to Rick. RGRAY@ridgetownc.uguelph.ca

The Barbara Bartz Petchenik Map Competition. Perry Hystad, of the University of Victoria and the CCA Student Representative, will chair the committee that will oversee the organization and collection of children's maps that will be entered from Canada in the Children's Map Competition at the Moscow, Russia meeting of the ICA in August 2007. Our thanks to Perry for undertaking this task.

CCA web site. Good news about our web site. Andrew Millward, our web master at Ryerson University in Toronto has informed me that his university has graciously consented to hosting the CCA web site. Andrew has received the files from the web site previously hosted at NRCan in Ottawa and administered by Anita Muller and Steve Westley. He will now begin the task of updating the information. In addition, the appearance of the web site will undergo some design changes and new applications. Mr. Kevin Simpson of Transformative Web Design, who works with not-for-profit organizations, has been commissioned to "revamp" the web page. Kevin has over 10 years of experience in web design and has recently done work for Canadian Geographic, among others.

Candidates for CCA Prizes. As we near the end of 2006, it is not too early to begin thinking about all the student prizes the CCA supports. Last year we had not a single nominee for the Norman Nicholson Scholarship. Surely those of you in the academic world must have contact with eligible students, so let's see some candidates' names.

Norman Nicholson Scholarship

The Norman Nicholson Scholarship is awarded annually at the discretion of the CCA Awards Committee to a student pursuing advanced studies in cartography. The award consists of a certificate and a cheque for \$500. The purpose of the Norman Nicholson Scholarship is to recognize and encourage exceptional student achievement and ability in any aspect of cartography. The student will be in the final year of a community college or CEGEP program in cartography, or entering the final year of an undergraduate honours program with a concentration in cartography, or be accepted into or enrolled in a graduate program with a concentration in cartography. Applications must be received by March 15, 2007.

Best Student Paper

An award of \$100 is given for the best student paper presented at the CCA annual conference. A paper may be co-authored by a faculty member, but the student must have actively participated in the research and have sole responsibility for delivering the paper. All student papers included in the program at the conference are automatically entered for this competition.

The CCA President's Prize 2007

This prize recognizes excellence in student map design and production and is open to all post-secondary students who have completed and produced a cartographic project in the preceding school year.

The 2007 President's Prize Competition will consist of two prizes of \$100, one for entries from college-level or CEGEP students, and one for entries from university-level undergraduate students in the following category:

A quantitative thematic map on any subject. A quantitative thematic map, also called a special-purpose, single-topic, or statistical map, displays the spatial and structural characteristics of numerical data and usually presents a graphic theme about a single subject. The International Cartographic Association (ICA) defines the thematic map this way: "A map designed to demonstrate particular features or concepts. In conventional use this term excludes topographic maps" (Dent 1999, 8).

Entry Guidelines: The cartographic project will consist of a single map. There are no restrictions on size but the project must have been completed and produced during the school year preceding the competition. Each entry must be accompanied by a clear and succinct statement of design objectives that will weigh heavily in the judges' decision.

Entries will be judged on the basis of creativity and overall effectiveness in communication as well as excellence in compilation, design, and layout.

Entries for 2007 are invited from all Canadian post-secondary students. All entries should be accompanied by an official entry form found on the website of the CCA (www.cca-acc.org), and must be submitted no later than May 15, 2007 to the following address:

CCA President's Prize
c/o Dr. Clifford H. Wood
P.O. Box 225
Ilderton, Ontario N0M 2A0
Canada

Le Prix du Président de l'ACC reconnaît l'excellence dans la conception et la production cartographiques par des étudiants. Tous les étudiants du niveau postsecondaire qui ont terminé et produit un projet cartographique au cours de l'année scolaire précédente sont admissibles. Le concours pour le Prix du Président 2007 décernera deux prix de 100\$, un pour les soumissions de niveau collégial et un pour celles d'étudiants du premier cycle universitaire, dans la catégorie suivante :

Carte thématique quantitative de n'importe quel sujet. Une carte thématique quantitative, aussi appelée carte à sujet unique ou carte statistique, montre les caractéristiques spatiales et structurales de données numériques et présente habituellement un thème graphique d'un sujet unique. L'Association cartographique internationale (ACI) définit une carte thématique comme suit: «Une carte conçue pour démontrer des détails cartographiques ou concepts particuliers. Selon l'usage conventionnel ce terme exclut les cartes topographiques» (Dent 1999, 8).

Critères d'inscription: Les projets cartographiques consisteront d'une seule carte. Il n'y a pas de restriction quant à la taille de la carte mais il faut que le projet ait été terminé et produit au cours de l'année scolaire précédant le concours. Chaque soumission devra être accompagnée d'un énoncé court et clair sur les objectifs de la conception de la carte. Cet énoncé sera crucial pour la décision du jury.

Les soumissions seront jugées selon la créativité et la façon dont le message est présenté ainsi que l'excellence de la préparation, la conception et la présentation du projet.

Le Président de l'ACC invite tous les étudiants canadiens de niveau postsecondaire à soumettre leur projet cartographique. Toutes les soumissions doivent être accompagnées d'un formulaire officiel de participation, disponible sur le site Web de l'ACC (www.cca-acc.org), et faire parvenir le tout, au plus tard le 15 mai 2007, à l'adresse suivante:

Prix du Président de l'ACC
a/s Dr. Clifford H. Wood
Case postale 225
Ilderton (Ontario) N0M 2A0
Canada

Carto-Quebec Prize 2007.

The CCA is pleased to announce the offering of the Carto-Québec Prize, a special annual competition for the best student-authored cartographic product created in French. The award has been established through a gift from the former Association Carto-Québec to promote and recognize excellence in map design. The competition is open to all post-secondary students in Canada who have completed and produced a cartographic project in the preceding school year. The Carto-Québec Prize will consist of two awards of \$500, one for entries from college-level or CEGEP students, and one for entries from university-level undergraduate students.

Entry Guidelines: Cartographic projects will consist of a map or a map series forming a coherent whole and may be submitted in any finished form (on paper or other medium). Entries submitted in electronic media, whether GIS or internet mapping applications, should not require specialized software for viewing. There are no restrictions on the size of the map project or subject but the project must have been completed and produced during the school year preceding the competition. All documents must be in French. Entries will be judged on the basis of creativity and overall effectiveness in communication as well as excellence in compilation, design, and layout.

Entries for 2007 are invited from all Canadian post-secondary students. They should be accompanied by an official entry form, found on the website of the CCA (www.cca-acc.org), and must be submitted no later than 15 May, 2007 to:

Carto-Québec Prize
c/o Dr. Clifford H. Wood
P.O. Box 225
Ilderton, Ontario N0M 2A0
Canada

Prix Carto-Quebec 2007.

L'ACC a le plaisir d'annoncer du Prix Carto-Québec. Ce concours annuel, ouvert aux étudiants postsecondaire à travers le Canada, sera décerné pour le meilleur produit cartographique créé en français. Ce prix a été établi grâce à un don de l'ancienne Association Carto-Québec pour promouvoir et reconnaître l'excellence dans la conception des cartes. Le Prix Carto-Québec comprendra deux prix de 500\$, l'un pour les soumissions de niveau collégial et l'autre pour le niveau du premier cycle universitaire.

Critères d'inscription: Les projets cartographiques comprendront une carte ou une série de cartes formant un ensemble cohérent et pourront être soumis en version imprimée ou autre. Les soumissions électroniques, qu'elles comportent des applications SIG ou de l'Internet, ne doivent pas nécessiter de logiciel spécialisé pour les visualiser. Il n'y a aucune restriction concernant la taille ou le sujet de la carte, mais le projet doit avoir été fait au cours de l'année scolaire précédant le concours. Le projet doit être produit en français. Les soumissions seront jugées selon la créativité et la façon dont le message est présenté, ainsi que l'excellence de la préparation, la conception et la présentation du projet.

Le Président de l'ACC invite tous les étudiants canadiens de niveau postsecondaire à soumettre leur projet cartographique. Toutes les soumissions doivent être accompagnées d'un formulaire officiel de participation, disponible sur le site Web de l'ACC (www.cca-acc.org), et faire parvenir le tout, au plus tard le 15 mai 2007, à l'adresse suivante :

Prix Carto-Québec
a/s Dr. Clifford H. Wood
P. O. Box 225
Ilderton, Ontario N0M 2A0
Canada

Cliff Wood
CCA President

CALL FOR NOMINATIONS

CCA Awards of Distinction for 2007



The CCA Awards of Distinction, first created in 1994, recognize individuals or groups who have made exceptional contributions in the field of Cartography in one of three categories:

1. Exceptional professional contributions to the practice of cartography
2. Exceptional contributions to the Canadian Cartographic Association
3. Exceptional scholarly contributions to cartography.

Nominations are invited from individuals or informal groups of members for Awards of Distinction for 2006. Nominators should be clear as to which category the nomination is for and are asked to provide summary evidence for the nomination to help the Committee judge the nominations

Please send your nominations for any of the Awards to the Chair or any member of the Awards Committee.

Committee members:

Clifford Wood	cliffordwood_91@sympatico.ca
Rick Gray	RGRAY@ridgetownc.uoguelph.ca
James Boxall	jcboxall@dal.ca

We look forward very much to hearing from you.

MISE EN CANDIDATURE

Prix de distinction de l'ACC pour 2007

Les prix de distinction de l'ACC, créés en 1994, reconnaissent les personnes ou les groupes qui ont fait une contribution exceptionnelle dans le domaine de la cartographie selon l'une des trois catégories suivantes :

1. Contribution professionnelle exceptionnelle à la pratique de la cartographie
2. Contribution exceptionnelle à l'Association canadienne de cartographie
3. Contribution exceptionnelle d'érudition à cartographie

Tous les membres sont invités à présenter des mises en candidature pour les Prix de distinction de 2006. Les proposants doivent indiquer clairement la catégorie pour laquelle ils proposent les mises en candidature, ainsi qu'un résumé des raisons de leur proposition afin d'aider le comité de sélection à faire un choix éclairé.

Veuillez, s'il vous plaît, faire parvenir vos nominations à la Présidente du comité de nominations ou à l'un des ses membres.

Les membres du comité sont:

Clifford Wood	cliffordwood_91@sympatico.ca
Rick Gray	RGRAY@ridgetownc.uoguelph.ca
James Boxall	jcboxall@dal.ca

Nous avons hâte de recevoir vos propositions.



Map Production Technology / Technologie de production cartographique:

Lori King
Ontario Ministry of Natural Resources

When you think of internet mapping and Global Positioning System (GPS) technology what comes to mind? Some people may think of mineral exploration for example and some may think of how to get from point A to point B. Well, I have come across a very unique and powerful use of this technology. The following is an excerpt from an article written by Rhett Butler on his website mongabay.com.

"Deep in the most remote jungles of South America, Amazon Indians are using Google Earth, Global Positioning System (GPS) mapping, and other technologies to protect their fast-dwindling home. Tribes in Suriname, Brazil, and Colombia are combining their traditional knowledge of the rainforest with Western technology to conserve forests and maintain ties to their history and cultural traditions, which include profound knowledge of the forest ecosystem and medicinal plants. Helping them is the Amazon Conservation Team (ACT), a nonprofit organization working with indigenous people to conserve biodiversity, health, and culture in South American rainforests.

ACT is active in the Amazon, one of the few places where indigenous populations still live in mostly traditional ways. However, like the Amazon rainforest itself, this is rapidly changing. As forests fall to loggers, miners, and farmers, and the allure of western culture attracts younger generations to cities, extensive knowledge of the forest ecosystem and the secrets of life-saving medicinal plants are forgotten. The combined loss of this knowledge and these forests irretrievably impoverishes the world of cultural and biological diversity.

ACT has pioneered a novel approach to address these problems by enabling Indians to monitor and protect their forest home while passing on their cultural wealth to future generations. ACT is working in partnership with local governments to train Indians in the use of GPS and the Internet to map and catalog their forest home, helping to better manage and protect ancestral rainforests by monitoring deforestation and preventing illegal incursions on their land. At the same time the efforts are strengthening cultural ties between indigenous youths and their parents and grandparents.



Due to the scale of mining operations and the remoteness of the area, illegal mining has been exceedingly difficult to detect. A clandestine airstrip in cleared forest or a series of riverside sluice boxes can be nearly impossible to pinpoint on the ground, given the vastness of the Amazon. But technology is changing the picture. Google Earth and GPS are proving to be key tools in battling deforestation and helping Indians protect their lands.

Indians, who have access to the Internet at the ACT offices in several locations in northern South America, use Google Earth to remotely monitor their lands by checking for signs of miners.

"Google Earth is used primarily for vigilance," Vasco van Roosmalen, ACT's Brazil program director, said in an interview with mongabay.com. "Indians log on to Google Earth and study images, inch by inch, looking to see where new gold mines are popping up or where invasions are

occurring. With the newly updated, high-resolution images of the region, they can see river discoloration which could be the product of sedimentation and pollution from a nearby mine. They are able to use these images to find the smallest gold mine."

Once the Indians pinpoint suspect areas using Google Earth, they note the coordinates, then go on foot patrol to investigate further or mark the spot for future airplane flyovers, where five to six Indians go up with government officials to scout for illegal incursions. Van Roosmalen says that without the aid of satellite imagery, flyovers can be of limited effectiveness due to the extent of the forest.

Beyond the forest-monitoring capabilities, Google Earth and more generally the Internet, is also helping to strengthen bonds between indigenous children, hungry for technology, and their parents, who are interested in protecting their homeland.

"This is the perfect combo of western technology and indigenous custom and know-how," said Plotkin, president of ACT. "We've got guys painted red and nothing else, walking through the jungle with GPS units mapping their land. That's the sweet spot, the best of both worlds."

Two headed invisible jaguars here

"Westerners maps in three dimensions: longitude, latitude, and altitude," explained Plotkin. "Indians think in six: longitude, latitude, altitude, historical context, sacred sites, and spiritual or mythological sites, where invisible creatures mark watersheds and areas of high biodiversity as off-limits to exploitation."



Their maps are also meticulously detailed, including virtually everything associated with a place.

Indians mark where they get materials for houses, bamboo, specific vines, places where they find honey and wood for canoes, anything they eat in terms of palm nuts, brazil nuts, Açaí -- rich palm fruit. For example we're working with the Wayana, a warrior tribe. They have marked two specific parts of the forest where they can find wood hard enough for arrow points. They've marked another point on the other side of the reserve where they get hollow wood to craft the arrow shaft," added van Roosmalen.

The Indians also chart the distribution of medicinal plants -- they use hundreds -- but for security reasons, some highly coveted medicinal plants are not published. In the past there have been problems with biopiracy where outsiders trespass on lands to illegally collect these plants for export. The Indians saw nothing in return.

In addition to plants, the Indians mark all the places they see animals, including game animals and mythological animals that have deep spiritual meaning.

"On one of the maps the Kamayura had drawn a two-headed animal, so I asked the shaman what it was," recalls Plotkin. "'A two-headed invisible jaguar' he told me. So I asked if he'd ever seen one. 'No they are invisible and dangerous so we don't go there,' he said. Later I learned that the area marked with the invisible jaguar was a strict no-hunting zone, which was preserved to ensure a breeding refuge for forest wildlife. This was his way of saying that it was a protected area where hunting was not allowed."

There are good reasons that Indians say certain sites are sacred. Watersheds, which ensure clean drinking water, are off-limits to disturbance as are areas of high biodiversity and places with sacred plants. Indians don't want these places over-exploited.

Besides indicating the location of resources, villages, and geographical features like rivers and creeks, the mapping process has helped reestablish bonds between generations in a society where culture is at risk of extinction.

"The Tumucumaque map has over 2000 Indian names that never before had been registered," said van Roosmalen. "This is extremely important because behind each name is a story that can serve as a tie to the land."

"For example when we did one of the first mapping projects, Indians went out into villages and forests to get the names of the places. When they returned, they said it was taking longer than expected because the elders spent half an hour telling them the story behind the name, before they revealed the name. Well, some of these guys thought this through and asked us for tape recorders so they could record these stories, transcribe them into their language, and make a book with the stories behind the names on the map. Now, for the first time, they have educational material about their culture."

In Brazil, Van Roosmalen says that the maps themselves are helping younger generations better understand the struggles of their parents and grandparents in the 1970s and 1980s to acquire rights to the land.

The elders are dying. The younger generation hadn't been learning about the stories of their ancestors or their ties to the land. There were no materials for the school. The main reason the elders asked for these maps was the huge responsibility to hold on to their lands. Their forefathers fought so very hard for these territories -- not having ways to learn about this history, the younger generation is not interested in the land."

"Just last month a researcher told me, 'I thought this land has always been ours. I didn't know we fought so hard for it. Now I need to do a better job of managing it and protecting it.'"

The maps change all this -- they make culture relevant to the new generation and present an easy way for the old generation to pass on their knowledge. Most importantly, the decision to make the maps was that of the Indians. Van Roosmalen says that ACT just comes in with the methodology, but doesn't tell the Indians what to map.

"They know they are making these maps for themselves. They decide what goes into these maps," he says. "The maps empower them and make them more self-reliant."

The maps also have important legal implications for Indians. Maps can be used to establish land rights. For example, says van Roosmalen, in Suriname where there are no indigenous land rights, the maps serve as a very basic tool to help them get rights to their land. In Brazil, vast quantities of land are set aside for Indians but don't have title, meaning that if there is a change to the constitution, they could lose their land.

"A common question from politicians and developers is 'Why do so few Indians need so much land?'" said van Roosmalen. "When you can illustrate it with these detailed maps -- showing that they are using it for all their various purposes -- it's a much more powerful argument than just having a blank map with a green rectangles drawn on it."



Analytical Cartography & GIS

Cartographie analytique et SIG:

Penny Hutton

Abitibi-Consolidated Company of Canada

The Evolution of GIS at Abitibi-Consolidated Company of Canada. Fort Frances, Ontario

The Fort Frances Woodlands Division of Abitibi-Consolidated Company of Canada (Abitibi) is responsible for managing a chunk of land (approximately 1.6 million hectares) known as the Crossroute Forest under a Sustainable Forest License which is administered by the Ontario Ministry of Natural Resources (OMNR).

Imagine colouring by hand a Renewal, Tending and Eligibility Map for the Crossroute Forest. The map, which displays all forestry operations for the previous 15 years, is three feet wide by five feet long and you have two copies to go. You wonder if your hand is about to fall off and hope that you don't pick up the wrong pencil and have to start over! Personally, I cannot quite fathom such an activity, as I have only been employed by Abitibi for the past five years, but less than 15 years ago, this is how Abitibi's Woodlands staff produced maps to support forest management decisions. Mapping was a painstaking process, errors were often made, and extra maps were simply not available.

These days, things have changed. Computer technology advances have drastically changed how forest management planning processes have evolved in Ontario. A variety of computer-based tools are now used to assist Abitibi's staff throughout the forest management planning cycle as well as in making operational decisions on the Crossroute Forest.

Among the computer-based tools is the Geographic Information System (GIS). The most visible and popular use of the GIS is the quick creation of accurate high quality mapping products. However, for my colleagues, the GIS is not just about maps. The GIS links tabular information about a feature to a real world location and allows the visualization of patterns, relationships, and trends. Typical forestry applications include: determination of eligible harvest stands and allowable harvest area, analysis of wildlife habitat areas, forest fire distribution analysis, location of new roads and water crossings, and tracking and reporting of completed harvest and regeneration operations. Many types of data are managed, including the forest inventory, harvest and silviculture records, values (e.g. nests), base data (e.g. lakes, streams, roads, contours), satellite imagery, GPS data, and aerial photography.

Abitibi's GIS was first acquired in the early 1990's and until just recently used the coverage data model. Spurred on by further advances in computer technology, Abitibi is currently in the process of upgrading the existing GIS to a standardized Enterprise GIS (geodatabase) for all of its Ontario operations, which exist in Fort Frances, Iroquois Falls, Kenora, and Thunder Bay. The new application, known as MARIO (Managing Abitibi's Resources In Ontario), aims to make data more readily available to all Woodlands staff, to reduce duplication of effort, to streamline processes, and to allow GIS specialists to focus on more complex analysis that will provide value-added benefits to the Company.

This is the first in a series of submissions to Cartouche, which aims to provide the reader with a general sense of how GIS is used in forestry. In future submissions, I will address Abitibi's experience in implementing an Enterprise GIS and will describe in more detail the specific tools and functionality that MARIO will provide.



Map Use and Design *Conception et utilisation des cartes:*

Elise Petroniro
University of Saskatchewan

Mosquitoes and Map Design

Good map design begins with knowing the purpose of your map as well as knowing the user. The goal is to successfully convey or communicate this information. At times it is difficult to be objective regarding one's own map design. As a cartography student, I relied on my professor's and instructor's observations, however now, as a professional cartographer, I have to rely on my own judgement. I find myself turning to my colleagues as well from time to time, for opinions and suggestions; it does get easier though, as you gain experience.

Early on in my career, while I was showing one of my maps to a more experienced cartographer, I was asked to point out what I thought was wrong with the map; how could I improve it? Jokingly, I said it was perfect, and I didn't need to change a thing. Although I was being a little facetious, a poor attempt at humour, I was not so arrogant to really believe the map was perfect. In fact, I knew that it was far from it; it had some nice elements, but was certainly nowhere near perfect. However, when asked the question, "What would I change?" being pretty green to the profession I found it difficult to answer specifically. I knew the map could be improved but I couldn't come up with specific suggestions.

These days, I find myself in the role of instructor, and students are looking to me for answers and advice on map design. The geography class that I am teaching this fall is a technical course, at the introductory level. The students become acquainted with many aspects of technical geography, of which a small portion is dedicated specifically to cartography. One of their lab exercises asks them to create a very simple map on any theme they choose, and to use GIS cartographic tools to create a layout. They are taught the basic principles of map design including, as mentioned above, communicating the map's purpose clearly, as well as layout principles which include elements such as visual hierarchy, balance, contrast, scale etc.

One of the students came to me for some consultation. She was having problems with the exercise. She decided to do a map showing locations throughout the province where she found mosquito infestations one summer, over the course of her travels. She drew symbols to point out where they were located and where they were fewer or greater in numbers. The students were also asked to critique their own maps, and describe three things they could do to improve them. This particular student's answer was that the map was perfect; there was nothing she would change (sounds familiar)! I knew she was joking, but the truth was, she was having trouble pointing out what was wrong with the map, and finding ways to improve it, hence the need for the consultation. In truth, she could only come up with one thing, and she didn't even think it was right. As soon as I saw the map, I immediately picked out 2 or 3 things that could be improved. I told her about the ambiguity in her legend, the orientation of her north arrow, and some colour and symbol choices that were confusing. As soon as I made the comments, she saw right away that they were true, and was impressed; "Wow" she said, "You really know this stuff". That inflated my hat size a little, I felt pretty good about myself.

I asked her what she had considered as a possible improvement. She told me that the map design perhaps made it look like mosquitoes were only found in the locations she had marked, when in fact, as anyone who's been to Saskatchewan in the summer knows, there are mosquitoes everywhere! Many of them!!!! (They don't really start until June by the way). She had only been to those particular places, so they were the only locations she could map.

As she spoke the words, it occurred to me this was the most obvious design flaw with the map, and I missed it! I was so focused on the layout and placement of items, that I missed what was most obviously wrong with the design. I told her that her observation was in fact very much correct; the purpose of her map was misleading. This design element was a very important component of her map. I also told her that I couldn't believe I didn't note it myself. This taught me a very important lesson. As I've gained knowledge and confidence in the work I do, I am always humbled at what others can contribute, no matter what level of expertise they may hold. I think my hat size shrunk back immediately after this consultation.



History of Cartography/ *Histoire de la cartographie:*

Edie Punt
ESRI

I'd like to take this opportunity to introduce myself as your new History of Cartography interest group chair. I have a long history of CCA mentors who have inspired me, so I am honoured to now serve on the CCA executive. My appreciation of cartography began back in 1989, as an undergraduate student in Dr Norman Drummond's Introduction to Cartography class at McGill University. He encouraged me to keep working toward my true interest of design cartography, rather than follow the flood toward the then still new-ish technology called GIS. I learned enough from Professor Drummond to know that I wanted to keep learning, so I made my way east to the College of Geographic Sciences (COGS, now the Centre of Geographic Sciences) to study cartography. It was at COGS that David Raymond—your past History of Cartography interest group chair—instilled in me my first sense of wonder and appreciation for historical maps.

Despite my best efforts to avoid GIS in my early years, I soon found myself in California working for ESRI. In the ten years that I have been here south of the border, I've learned that good cartography and GIS do not have to be mutually exclusive, and likewise, neither do historical cartography and technology. This was made most apparent to me when I recently had the opportunity to work with David Rumsey and his remarkable historical map collection, thought to be the largest private map collection in the world. Although it focuses on the cartography of the Americas made in the 18th and 19th centuries, the collection also includes many maps that fall outside these temporal and geographic boundaries. Driven by a desire to share his collection to as broad an audience as possible, David pushed the boundaries of digital technology to capture and preserve his maps, allowing them to be studied and appreciated by anyone with an internet connection. A large (and growing) portion of his collection is freely available for perusal and download at www.davidrumsey.com.

Using a high-resolution, vertical-mount camera scanning process, David was able to maintain an impressive depth of field in the map images. This is most evident on the images of bulkier items in his collection like thick atlases, scroll maps, and even globes which show a full hemisphere in crisp focus. The quality and resolution of the images is so outstanding that you can discern the individual fibres of paper on which the maps were printed. As visually spectacular as this wealth of images is, the true value of Rumsey's digital collection is in how expertly and meticulously he has cataloged it. Every page of every book, including covers and end papers, reside as a separate item in the database. Each image includes a robust metadata record, enabling intelligent searching and comparison.

Having worked with (and played with) the digital collection extensively, I was very intrigued to hear of David's latest collaborative effort, which has resulted in one of the most intriguing blends of historical cartography and technology that we have seen in a long time. On November 13th, in celebration of Geography Awareness Week, sixteen maps from the David Rumsey Historical Map collection were added to the featured content layers in Google Earth 3D Globe (www.earth.google.com). The maps, ranging in publication dates from 1680 to 1892, lie upon the virtual globe, georeferenced to the background imagery and to other data layers. Seeing the maps in stark contrast to the modern satellite imagery, the urge to make comparisons in time and space is irresistible. Google Earth's transparency slider proves to be just the tool to fulfill this desire. Fading the historical map on and off allows you to witness changes that have occurred through history in the landscape, and also to see how impressively accurate the georectification is. Modern vector data such as transportation networks or places of interest can be drawn above the historical content for even further comparison.



The maps cover a wide range of scales. They depict cities, continents, and one—Cassini's 1790 *Globo terrestre*—even covers the entire globe. Cassini's globe was originally drawn as twelve paper gores at 1:35 million scale, which would make a sphere about 34 cm in diameter if assembled. These gores were scanned, digitally merged, georeferenced to the WGS84 coordinate system, and projected to a spherical globe to create a map layer that "wraps" the entire Google Earth globe. Google Earth's navigation tools let you spin Cassini's globe around any axis and look at it from any angle—an entirely different perspective than was obtainable from viewing the series of individual paper gores.



Henry Popple's 1733 *A Map of the British Empire in America with the French and Spanish Settlements adjacent thereto* is another example of a composite image draped over the virtual globe. Made up of twenty individual sheets, the map covers much of the eastern portion of North America, the Caribbean, Central America, and a small part of South America. It was published as both an atlas and as a wall map. The landforms and waterways are drawn in intricate detail. In fact, it was so accurate for its time that it stood the standard map of the region for decades after it was published. The digital composite was made by scanning and merging the twenty sheets, which was then georeferenced to match Google Earth's virtual globe.



Covering a much smaller area is J.H. Colton's 1836 *Topographical Map Of The City and County Of New - York, and the adjacent Country: With Views in the border of the principal Buildings and interesting Scenery of the Island*. The small size of this map makes it easy to get a sense of how it "lays" on the globe, especially when the terrain layer is vertically exaggerated. This map actually "folds" down into the Hudson River, highlighting the accuracy the map's engraved hachuring of the riverbanks.

As intriguingly entertaining as it is to turn these maps on and off, fade them in and out, and "fly" over them with your mouse, I feel strongly that the juxtaposition of satellite imagery and historical maps is more than just novelty. Having been fortunate enough to have seen and touched each of these maps in their tangible form, I know how impressive they are to the senses: they have detail and texture and heft. Physically, they are impressive and awe-inspiring artifacts, yet they stand alone. Introducing these maps to the three dimensional digital realm releases the information held within them, allowing it to interact with other geographic information to form new relationships in a way that spreading them out on a table never could.



Cartographic Education/ *Éducation Cartographique:*

Ian O'Connell
University of Victoria

Boardgames and Maps : A Pedagogic Potential

My previous article for Cartouche dealt with Mozart and Maps and has inspired me to explore more resources for getting students, of any age, interested in Cartography and Spatial Reasoning. I am an avid (read obsessive) collector of many things. As a child, this started with model trains (still with it- even have a real - steam driven model train at 1/76th scale), jigsaws (not so much anymore, although my house does have a framed and hung 5000 piece jigsaw of a 16th Century World Map, DVDs - friends call me IanBuster, and finally, board games (at last count over 50). It is these board games which are the focus of this piece.

The study of Games is an important topic that has concerned ethnographers for many years. Here in Canada, the Elliott Avedon Museum and Archive of Games at The University of Waterloo has an impressive collection of Games and game-related exhibits (<http://www.gamesmuseum.uwaterloo.ca/index.htm>). Many of us, I am sure, have at least played some of the classic board games, for example, Chess, Checkers, Go, Monopoly, Clue, etc.

These are not the type of games I refer to here. The games I am interested in (and collect) are usually referred to, at least on this side of the Atlantic, as "EuroGames" or most accurately German Style Board Games. For a more detailed description of these board games see here (http://en.wikipedia.org/wiki/German-style_board_game).

To the teaching! The key components of these games, in a teaching environment, are based upon their common characteristics:

- Social interactions - not the long silence of a Chess Master,
- Minimal mathematics apart from basic arithmetic,
- Limited player eliminations - everyone plays until the end,
- Conflict based upon resource management issues (very much geography, eh?) rather than combat
- Spatial reasoning an important skill.

(http://en.wikipedia.org/wiki/German-style_board_game).

The key to their teaching in a cartographic environment is that many of these games involve a playing service which is a "Map", and for the most part quite beautiful maps at that. To see examples follows the links.

I'll start with my most favourite game, Transamerica.

(<http://www.riograndegames.com/>, <http://www.boardgamegeek.com/game/2842#images>) The board for this game is a map of the continental United States, with a number of cities that need to be connected by wooden tracks. Not an especially good looking map, but the spatial reasoning component of the game is essentially the traveling vendor problem. However, the game ends when a player's piece falls into the Pacific at Victoria - too close to home for me! There is also another version called Trans Europa - employing a European map with a very weak interpretation of European geography. Another Train themed game, based in Nineteenth Century England is Stephenson's Rocket (<http://www.riograndegames.com>, <http://www.boardgamegeek.com/game/204#images>). Here again, one builds routes. The symbology is fantastically rendered, with rolling hills and industrial towns represented with pleasant drawings.

El Grande (<http://riograndegames.com>, <http://www.boardgamegeek.com/game/93#images>) incorporates a Spanish map, presented in an antique style. This is a great looking map, with fabulous calligraphy and interesting symbology for both coastlines and terrain - much in line with maps drawn for the era in which the game is set (15th Century). It even has intricately drawn sailing ships in the Mediterranean Sea. The map looks like it is drawn upon parchment. Serenissima (<http://www.boardgamegeek.com/game/232#images>) continues this theme although set in the 14th Century. Here the Mediterranean is more accurately rendered spatially - but the focus is again on the visual impact of the map, with typical symbology, a cartouche and a compass Rose. This game does, however, take a significant amount of time to play.

Tigris and Euphrates (<http://www.boardgamegeek.com/game/42#images>) is an example of a game where the location map is a great rendition of the Tigris and Euphrates Rivers of Classical time. A member of an online board game community (BoardGameGeek - www.boardgamegeek.com) has even gone to the trouble of spatially overlaying the board with Google Earth (<http://www.boardgamegeek.com/image/151500>).

The last game I would like to introduce you to is Carcassonne (www.riograndegames.com, <http://www.boardgamegeek.com/game/822>). Here is a tile laying game - where the final product of each game is a Map! The outcome of each game is different map. It teaches both spatial reasoning, resource management and best of all produces a map! This may be perhaps the best game for the spatial sciences? The maps may not be the greatest examples of our cartographic art - but maps they are nonetheless, and maps that the players created together. IT is an easy to learn game (about 5 minutes), fast to play, and produces interesting outputs. This game suits all ages and abilities - seriously fun, interactive, fabulous quality parts and infinite possibilities.

All of the above provide teachers and instructors ample opportunity to introduce maps to students in a fun and informative manner. There is no need to concentrate on the “cartography” but rather to show how useful maps are, and perhaps diffuse the myth that maps just show you where to go or where you are. Maybe maps in games represent a “cooler” image than the road map in the glove compartment of the car. Also these German styled games are very social, and involve decision making, cooperation, and rational management skills - all important to the learning environment. I have yet to try or test any of these games but intend to. As I stated at the beginning of the piece it is just the start of my exploration of differing teaching tools. I will continue to share my experiences and thoughts here in Cartouche.

Note: I have deliberately not included Risk as I have never played a game of it that lasted less than three hours (so not very suited to the classroom environment and does not have the social interactions of the Euro Games- but it does have a great world map with some very bizarre political boundaries!

Links (All Publishers are for the North American versions):

BoardGameGeek www.boardgamegeek.com

Carcassonne, <http://www.boardgamegeek.com/game/822>, Publisher : Rio Grande Games: <http://www.riograndegames.com/>

El Grande, <http://www.boardgamegeek.com/game/93#images>, Publisher: Rio Grande Games: <http://www.riograndegames.com/>

Elliott Avedon Museum and Archive of Games at The University of Waterloo
<http://www.gamesmuseum.uwaterloo.ca/index.htm>

German Style Board Games http://en.wikipedia.org/wiki/German-style_board_game

Serenissima <http://www.boardgamegeek.com/game/232#images>

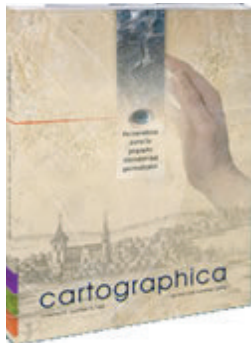
Stephenson's Rocket, <http://www.boardgamegeek.com/game/204#images>, Publisher: Rio Grande Games: <http://www.riograndegames.com/>

Tigris and Euphrates, <http://www.boardgamegeek.com/game/42#images>, Publisher: MayFair Games: <http://www.mayfairgames.com/>

Trans Europa <http://www.boardgamegeek.com/game/16267#images>, Publisher: Rio Grande Games: <http://www.riograndegames.com/>

Transamerica <http://www.boardgamegeek.com/game/2842#images>, Publisher: Rio Grande Games: <http://www.riograndegames.com/>

CARTOGRAPHICA ... WHAT'S COMING IN THE NEXT TWO ISSUES?



Volume 41, Number 4 of the journal will bring a cumulative index of articles, reviews, and Technical Notes and Ephemera for all the issues of the journal starting with Volume 26 (1986) through Volume 41, Number 3 (2006). This issue will mark the end of special index issues. Beginning with Volume 42, Number 4 (2007), the final publication for each year will

contain an index of articles, reviews, and Technical Notes and Ephemera.

The first issue for 2007, Volume 42, Number 1, will contain three articles: “Geographic Information Systems as Media and Society: Does GIS Wear a White or Black Stetson?” by William W. Crumplin, Laurentian University, Sudbury. An excerpt: There has been much debate the last 10 to 15 years that has focused on whether GIS are objective neutral tools or serve as agents of corporate or state interests. Despite the arguments, there has been no clear

and decisive outcome thereby leading some scholars to seek different ways of contextualizing GIS development, use, and research...

The second article is by David Bosse of the Historic Deerfield Library in Deerfield, Massachusetts, and is entitled, “Maps in the Marketplace: Aspects of the Cartographic Trade in Eighteenth-Century America.” An excerpt: Drawing upon sources such as newspaper advertisements, bookseller's catalogues, correspondence, business accounts, this article provides an overview of the American map trade during the period 1700 to 1800.

The third article, “The Face Symbol: Research Issues and Cartographic Potential,” is by Elisabeth Nelson of the University of North Carolina at Greensboro. An excerpt: The face symbol, developed by Chernoff (1973), is possibly the seminal multivariate point symbol. This research reports on symbol variations, explores feature salience and natural correspondence, addresses user environments and tasks, and speculates on future experimental designs that may lead to more effective maps of this symbol.

The Mapmakers' Quest

by: David Buisseret

Review by Gillian Hutchinson
National Maritime Museum
Journal Issue: January 2004

This is a history of early modern cartography, concentrating on the 15th to 17th centuries but looking back to the influence of Greece and Rome and extending forward to 1800. Professor Buisseret's stated purpose is to examine why there were so few maps in 1400 and so many by 1650. He describes the increasing demands for mapping created by social and economic imperatives and interprets map use as a symptom of a major intellectual shift towards a realistic perception of the world.

The author is Professor of History at the University of Texas and former Director of the Smith Centre for the History of Cartography at the Newberry Library, Chicago. His range of source material is correspondingly impressive and he provides a cogent overview and original interpretations which help to open up subjects for debate.

An early chapter discusses what Buisseret identifies as 'The painterly origins of some European mapping, 1420-1650'. 'It was as if painting and mapping were simply different means of rendering the same newly-visions reality.' Citing the locational images created by Da Vinci, Durer and others, Buisseret argues that cartography and art developed together from the early 15th century and separated in the early 17th century. This attractive idea is only fully convincing if prosaic thoughts about the practicalities of the map-making process are set aside and if presentation is privileged over geographic content.

Throughout the book Buisseret reveals a keen aesthetic response to maps. When he writes about map-making he evidently has at the forefront of his mind the execution of fine lines, tinting and imagery rather than the rougher business of surveying. For example the maps of the Dieppe school are credited entirely to the artists who copied down the coastlines and painted the illustrations without acknowledgement that an entirely different group of people had provided the data.

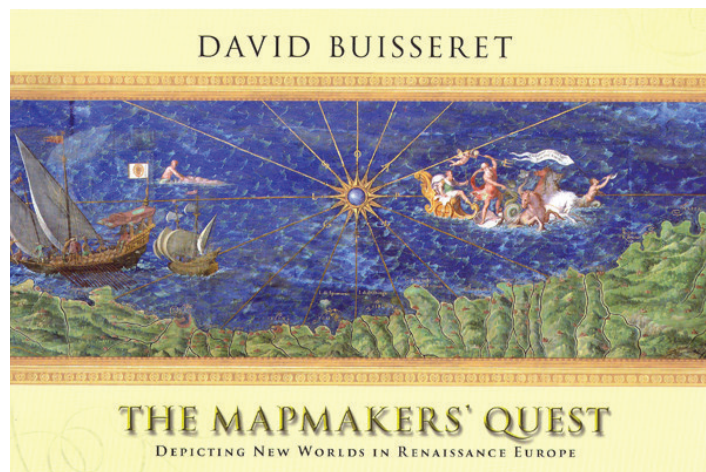
In seeking to explain the rapid increase in mapping between 1400 and 1650, the author chooses to leave the effects of printing and publishing out of the equation on the grounds that 'It is extremely hard to quantify ... it was chiefly a multiplier effect on developments whose origins came long before.' He therefore side-steps some interesting questions about the desirability of maps as status-conferring objects and their relation to art, a subject of considerable relevance to the chapter about 'Cartography among the ruling European elites'. Did the mass-production of maps decrease or enhance the esteem of cartography? Did the involvement of artists in cartography increase with the spread of printing? Durer and Anthonisz for example produced woodcuts and engravings as well as paintings.

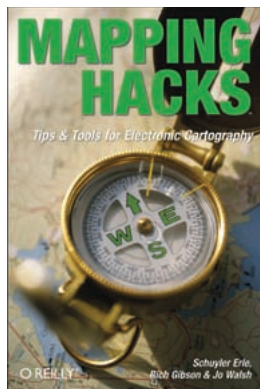
The chapter brings together information about the ways that the Papacy, city states, and kingdoms used maps for government, administration, taxation and trade as well as anecdotal information about individual rulers' interests in cartography.

Buisseret devotes little attention to sea charts as a separate genre. The chapter of most maritime relevance is that on 'Mapping in the expansion of Europe, 1400-1700' in which brief summaries are given of Portuguese, Spanish, French, Low Countries, English and Italian exploration and their cartographic products. Portolans had been briefly introduced and dismissed early in the book, 'their purpose has never been clear... it seems most unlikely that they were used to plot a course'.

A major chapter discusses 'Maps drawn during the military revolution', showing how the increasing requirements of campaigns and defence were met by the developing skills of professional military draughtsmen and engineers. It also shows how maps were used for reportage, mapping the tactical movements of armies and navies. In 'Mapping countryside & town in the new economies' Buisseret demonstrates that the thoroughness or otherwise with which different European countries mapped their countryside reflects differences in land-tenure and land use while city mapping projected images of civic identity and pride.

For all the New Cartographic claims of the preface – the redefinition of maps, the location of mapping in a social and economic framework and a reappraisal of Eurocentricity – this is a thoroughly traditional piece of work. Its organising themes – 'the expansion of Europe', 'the military revolution' and 'the new economies' – have been around long enough to have become contentious concepts in themselves. Buisseret's writing style is accessible, if sometimes curiously idiomatic, as when we read that in 1674 'English navigators were beginning to feel their oats'. Nevertheless, the book is an erudite synthesis, full of interesting information and illustrated with many unusual and well-chosen images.





Mapping Hacks

Tips & Tools for Electronic Cartography

by Schuyler Erle, Rich Gibson, Jo Walsh

First Edition June 2005

Pages: 564

Reviewed by Adena Schutzberg,
Directions Magazine

I was doing some writing for a project recently where I attempted to use the term "hacking." The powers that be vetoed it citing the term's negative connotation and how this project best not be associated with hacking. I suppose they've not been tuned into the new meaning of the term and the series of hacking books published by O'Reilly. The eloquent definition in the preface of the latest book in the series, Mapping Hacks, suits me fine: "Among people who write code, though, the term hack refers to a 'quick-and-dirty' solution to a problem, or a clever way to get something done. And the term hacker is taken very much as a compliment, referring to someone as being creative, having the technical chops to get things done. The Hacks series is an attempt to reclaim the word, document the good ways people are hacking, and pass the hacker ethic of creative participation on to the uninitiated. Seeing how others approach systems and problems is often the quickest way to learn about a new technology."

The book does indeed pass on the ethic. It's a combination of tips and tricks that allow users to better use mapping tools that are already out there, to tweak existing offerings to do more than might be expected and perhaps most importantly for the arm chair reader and "how does it work fan," to understand how all this stuff works. I enjoyed the explanations of why MapQuest got it wrong and how Fundrace was built (by the fellow who built it) as much as any part of the book.

The book includes nine chapters of hacks (a total of 100). Most are free; that is, they take advantage of free or open source offerings for the desktop and the Web. Many are low on the temperature gauge, doable by beginners, while others are "hot" and best left for experienced programmers. I'm pleased to report that even non-programmers can learn quite a bit from the more advanced hacks.

Part of the value of this tome (it's more than 500 pages) is the accessible descriptions of technology. Want to understand how wardriving works? Check page 69. Need to understand projections? That's page 120. The discussions are clear, and personable, as though your best friend were explaining it to you. And, that's nice since in the Foreword, respected geospatial "programmer for hire" Frank Warmerdam admits to wanting to share a copy with his mother, hoping she'll try some hacks.

Dividing the Hacks

The chapters are loosely based on geography (from your life, to your neighborhood, to the world), platforms (the Web, gadgets and the desktop), and other topics (geocoding and basic GIS functions, spatial data infrastructure and modeling). The introduction suggests picking and choosing what's of interest at any moment. I plowed straight on through

and didn't find myself bored at all.

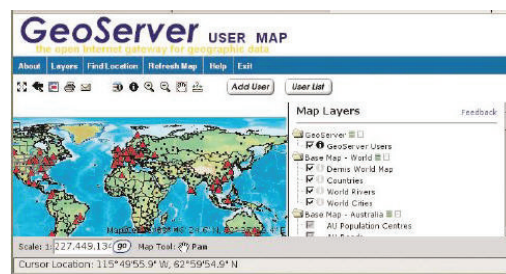
Some hacks are just introductions to websites that map geeks may already visit and use but that others, outside our community, have yet to visit. These include David Rumsey's website, Census' TIGER server and NASA's World Wind. Other chapters introduce online tools for changing decimal degrees to degrees/minutes/seconds, and for the real programmer, the tools to build his or her own app on the desktop using open source PROJ.4.

Tiny Tutorials

Don't expect lots of ESRI and MapInfo hacks in the book. Real hackers play with Manifold, GRASS and QGIS. They dabble in GDAL and Openmap. These mini-tutorials are quite good and walk through processes step by step. While reading them I kept getting ideas for science fair projects. (Teachers take note - this is a fabulous book for your budding programmer from about middle school on up!)

A chapter on building the geospatial Web provides a great introduction to the Open Geospatial Consortium's Web standards including discussions of GeoServer, MapServer, PostGIS and other technologies that implement the specifications.

Geoserver - Open source and open standard offerings are among the hacks offered.



Beyond Mapping

The authors have the good sense to step outside pure mapping hacks if it will help the reader get more use of the available tools. There's a hack discussing how to shorten URLs. Why? Because the URL of maps from MapQuest or Google Maps are terribly long and likely to get split when sent via e-mail, only to confuse the recipient. The book contains some nice critiques of services offered: how Google Local compares to Yahoo Local and what it is about Maporama that makes it far more interesting to amateur GPS orienteers. Want to know what GPS accessories to buy? There's a nice guide. And, yes, there are links to sites describing how to build your cable for your GPS. There's even a hack titled "What to Do if your Government is Hoarding Geographic Data" aimed at those who need data beyond the friendly "free for all" we have in the United States.

Get Creative

The book is as much about sharing what others have learned as it is about enabling new hacks. Just reading the "how to's" will get the creative juices flowing. Ever consider trying to evaluate routes based on trying to avoid getting your child car sick? Ever wonder why your TV reception is so poor? Such questions and answers can only spawn more hacking, which is just what the authors I believe, want to see.

The CCA 2007 conference is being held in conjunction with the CAG (Canadian Association of Geographers) and with Congress (Canadian Federation for the Humanities and Social Sciences).

Call for Papers

Canadian Cartographic Association would like to invite you to electronically submit titles and Abstracts of papers and posters in the field of cartographic research by March 31st, 2007. Persons wishing to organize special sessions with invited speakers or joint sessions with other associations attending Congress 2007 or workshops should contact the local coordinator prior to January 15th, 2007. All participants must meet the abstract deadline.

Abstract Submissions Deadline for Submission - March 30th, 2007

All presenters, paper presentation or poster session, must submit an abstract (in either English or French) of 250 words or less electronically. The abstract should fall under one of the categories or themes provided on the submissions web page. These themes include the following:

- Analytical Cartography/GIS IG
- Cartographic Education
- Map Use and Design
- Map Production Technology
- History of Cartography
- Other

Abstract should include the purpose, methods and conclusions of the research. All Abstracts will be submitted electronically using the online Abstract submission form. The link to this form is located temporarily at the following url: <http://www.eventregistration.usask.ca/abstracts.php?eventid=9>

Authors are responsible for spelling, grammar and typographical errors. The time for each oral presentation is approximately 20 minutes, which includes discussion and questions. Data and overhead projectors will be available. All oral presentations must be in either Microsoft PowerPoint format, or as overhead acetate pages.

The CCA is meeting as part of the CFHSS Congress (The Canadian Federation for the Humanities and Social Sciences). Participants are required to register with the Federation, which will look after university residence accommodation and provide travel and other information in its Congress circular. The Congress 2007 website address is: <http://www.fedcan.ca/congress2007>

Registration Fees

The Federation is run on a cost recovery basis. Registration fees paid to the Federation covers the cost of arranging accommodation for CCA participants, a comprehensive book publishers display, an information package, a reception, cultural events during the meeting, day care services, etc. Proposed Congress fees are \$120 for regular delegates; \$45 for students etc. With late fees assessed after April 1 at \$160 and \$65, respectively. Regular delegates registering on site will be charged \$175, \$70 for Students. The Federation will collect CCA registration and banquet fees as well. Proposed fees for association members at CCA 2007 are as follows:

\$70 Regular delegates registered by March 31st;

\$100 Regular delegates registered as of April 1; \$135 Regular delegates registered on site;

\$40 All Students, retired and unwaged registered by March 31st;

\$55 All Students, retired and unwaged registered as of April 1; \$75 All Students, retired and unwaged registered on site;

\$125 Non-members registered by March 31st

\$155 Non-members registered as of April 1; \$190 Non-members registered on site.

Proposed Schedule

Tuesday, May 29

Registration

Workshop am

Workshop pm

4:00 p.m. Orienteering "Challenge" presented by CCA

7:00 p.m. Icebreaker at Louis' Campus Pub in co-operation with CAG

Wednesday, May 30

Registration

Welcome Keynote Paper and Poster Sessions

Walking Tour of Saskatoon Pubs – Evening Tour

Thursday, May 31

Registration

Paper and Poster Sessions

5:00-7:00 p.m. HSSFC Presidential Reception

Friday, June 1

Registration

Paper and Poster Sessions AGM at Faculty Club

CCA Executive Committee Meeting

Banquet

Saturday, June 2

Registration

Paper and Poster Sessions (CAG)

Tours - There are a number of tours being planned through CAG throughout the week, many of which may be accessible to CCA members.

Check CAG Conference web site. <http://www.usask.ca/geography/cag2007/>



Accommodations

Campus residence will be available to book in January 2007 through the Congress 2007 web site.

<http://www.fedcan.ca/congress2007/>

Congress rates available at many hotels, many rooms have been blocked aside for this conference. Make sure to check for special rates and rooms.

Nearby Hotels:

Park Town Hotel

924 Spadina Crescent East

Saskatoon, SK S7K 3H5

(306) 244-5564

Prime location, just across the bridge from the University

Delta Bessborough

601 Spadina Crescent East

Saskatoon, Saskatchewan S7K 3G8

Tel: 306-244-5521 Fax: 306-653-2458

Toll-Free : 1-877-814-7706

Sheraton Cavalier

612 Spadina Crescent East

Saskatoon, SK S7K 3G9

(309) 652-6770

Laura's Lodge

1026 College Drive

Saskatoon, SK S7N 0W1

(306) 934-7011

Hilton Garden Downtown Saskatoon

90 22nd St E Saskatoon, SK S7K 3X6

(306) 244-2311

Radisson - Saskatoon

405 20th St. E Saskatoon, SK S7K 6X6

(306) 665-3322 Toll Free: (800) 333-3333

Saskatchewan Tourism web page:

<http://www.tourismsaskatoon.com/index.html>

Public Outcry Saves the Day (and the Canada Map Office)

A flood of letters and a bit of good old-fashioned public outcry was what it took to derail the governments' plans to close the Canada Map Office. The previous Liberal government decided to close the map office, which provides large scale topographic maps to regional dealers.

There was a great session on the impending plan to "go digital" at GeoTEC in Ottawa last June which certainly helped me realize the impact this decision would have on Canadians.

According to the CBC, Carleton University map librarian Heather McAdam was one of "many people who cried out against the plan to provide topographic maps over the internet for Canadians to download and print themselves".

Our thanks go out to everyone who banded together to change the outcome of this situation. It just goes to show we can accomplish almost anything when we work together.

Lori King



This mutilated version of the Mont Blanc topo sheet was spotted in a Cambridge art shop window for sale at 1250 UK pounds (about \$2600). If it sells maybe there is money in cartography.

Watch next issue for Roger's Rocky Mountain NTS Y-fronts!

- Roger Wheate

Upcoming Events and Meetings

January 25, 2007 - London Maps and Society Sixteenth Series Programme - Dr David Marsh (Birkbeck, University of London) Maps, Myths, and Gardens: Faithorne and Newcourt's Map of London (1658) - at University of London, Warburg Institute, Woburn Square, London WC1H 0AB, at 5.00 pm. Admission is free and each meeting is followed by refreshments. All are most welcome. This lecture series in the history of cartography is convened by Tony Campbell (formerly Map Library, British Library) and Dr. Catherine Delano Smith (Institute of Historical Research, University of London). The programme has been made possible through the generous sponsorship of The International Map Collectors' Society, Jonathan Potter of Jonathan Potter Ltd., and Laurence Worms of Ash Rare Books. It is supported by Imago Mundi: the International Journal for the History of Cartography. Enquiries to +44 (0) 20 8346 5112 (Catherine Delano Smith) or Tony Campbell.

February 4-7, 2007 - Guatemala The International Map Collectors' Society will hold its 25th international symposium, Geographic Expressions of the New World, hosted by Universidad Francisco Marroquín. There will be a post-symposium tour February 8-10 to the Guatemalan Highlands and another tour February 11-12 to the ancient Maya ruins of Tikal and Yaxhá. Additional information from imcos@ufm.edu.gt.

February 22, 2007 - Oxford The Oxford Seminars in Cartography will have Cyrus Ala'i (Researcher and Author) discuss Mapping Persia. Seminar runs from 5pm to 6.30pm in the Board Room, University of Oxford Centre for the Environment, South Parks Road. For further details contact Nick Millea at 01865 287119. The Oxford Seminars in Cartography are supported by the Friends of TOSCA, ESRI (UK) Ltd, Oxford Cartographers, and the University of Oxford Centre for the Environment.

March 5, 6, 8, 2007 - Cambridge, England Sarah Tyacke, former Chief Executive of The National Archives and previously Director of Special Collections at the British Library, will be delivering the Sandars Lectures. The three lectures will be given at 5pm on Monday, Tuesday and Thursday in Cambridge University Library. The overall title is Conversations with maps: world views in early modern Europe. Further details can be found at the web site or from Anne Taylor, Map Department, Cambridge University Library, West Road, Cambridge CB3 9DR; Tel: 01223-333041, Fax: 01223-333160.

April 17-21, 2007 - San Francisco The Association of American Geographers annual meeting will feature a session devoted to Gender and Cartographic Culture. Cartographic culture, as defined by Matthew Edney is understanding of and attitudes towards maps as representations of spatial knowledge. We conceive of cartographic culture to encompass the spectrum from public to private, from broader public uses in literature and popular media to its use in leisure, self-education, and personal correspondence. We are interested in how maps are utilized, by whom and for what purposes, particularly addressing issues of gender. Recent work in the history of cartography has drawn attention to both the role of women in mapmaking as well as the use of maps by women. This session seeks to advance research on gender and map use, continuing to expand our understanding of the history of map use and the impact of gender. We hope to present a range of papers, historic as well as contemporary studies, including, we hope, on masculinity and cartography. Additional information from Penny Richards or Christina Dando, Assistant Professor, Department of Geography and Geology, 271 Durham Science Center, University of Nebraska at Omaha, Omaha NE 68182-0199; phone (402)554-3134.

May 29 – June 1, 2007 – Saskatoon, Saskatchewan The 32nd annual meeting of the Canadian Cartographic Association will be held in Saskatoon at the University of Saskatchewan in conjunction with the Canadian Association of Geographers and the Congress (Canadian Federation for the Humanities and Social Sciences). The preliminary Congress web site is available at: <http://fedcan.ca/congress2007>

July 8-13, 2007 – Berne, Switzerland. 22nd International Conference on the History of Cartography. Berne, Switzerland. www.ichc2007.ch

August 4-10, 2007 - Moscow The capital of the Russian Federation is selected as a venue of the International Cartographic Association XIV General assembly and XXIII International Cartographic Conference. The General assembly and the International cartographic conference will promote development of a world science in the field of theoretical and practical cartography and GIS-technology. The motto of conference Cartography for everyone and for you is chosen with the purpose to display the value and a place of cartography for a society and a person. Additional information from Technical Secretary; 14, korp.2, Krzhizhanovskogo str. 117997; GSP-7, Moscow, Russia; Tel/Fax: 007 095 124 35 35.

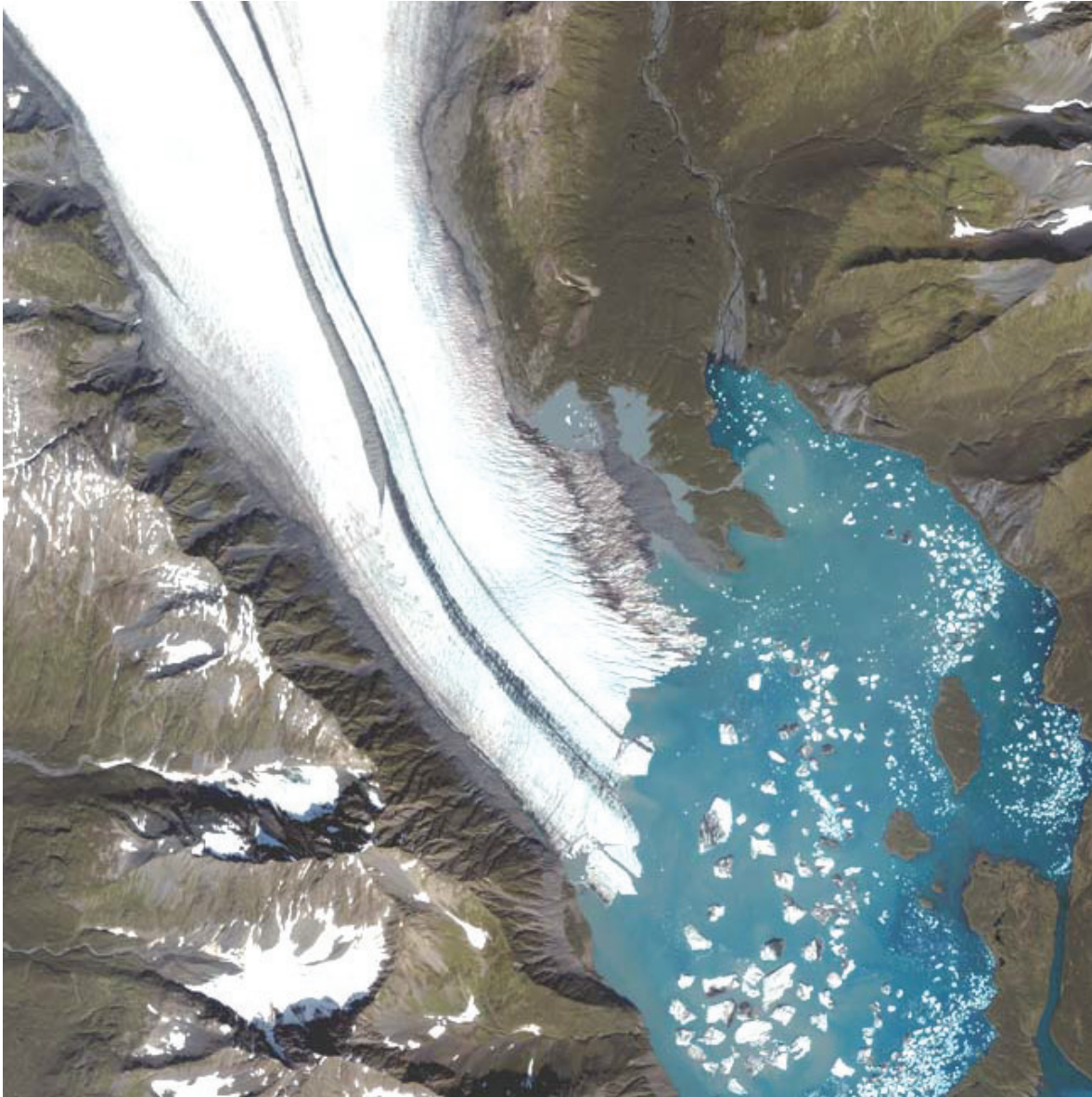
September 28-30, 2007 - Venice The 11th Symposium of the International Coronelli Society for the Study of Globes will take place in Vincenzo Coronelli's native town. In addition to the usual paper presentations, there will be visits to Coronelli's grave at the church Santa Maria Gloriosa die Frari, the Museo Correr and Biblioteca Marciana. Additional information from Ms. Heide Wohlschlager, Dominikanerbastei 21/28, A-1010 Vienna, Austria; fax 43-1-5320824.

For those interested in a comprehensive listing of world-wide, related events and meetings, go to:

John Docktor's list: <http://home.earthlink.net/~docktor/intro.html>
Map History list: <http://www.maphistory.info/confmnu.html>



WHERE is this... what is this?



This image was acquired by the IKONOS satellite on August 8, 2005.

**Where is this,
what is this?**

Send your answers to the co-editors Barb or Lori, (address is on the back page) by **March 2, 2007**.

Credit: IKONOS satellite image courtesy GeoEye

A winner will be drawn at random from all the correct entries and will receive a CCA t-shirt.



Congratulations to Weldon Hiebert for correctly identifying both **Where** and **What** from Issue #63
Answer: Yates Oil Field, Texas, USA.

Weldon wins a CCA t-shirt.





The CCABlog Needs You...

The CCABlog is now approaching 1 1/2 years of age and regularly attracts more than 500 people a day on weekdays. There are many regular readers that provide positive feedback, suggest links and items of interest. To date, it has been pretty much a solo effort, driven by a personal love of maps and an interest in new technologies and developments in the field.

I recently accepted a position with Rand McNally Canada as their Manager of GIS and Cartographic Operations (thanks for the tip, Byron!). As well as taking more of my time and energy than my previous position, it also includes (for the time being) a daily 3 hour commute. As a result I have not been able to dedicate as much time to maintaining the blog as I would like. In addition, some of the items that I would like to blog about would place me in a conflict of interest.

I would very much like to see the blog continue. To that end, I am seeking a person or persons who would be willing to assist me in maintaining the blog. Interested individuals would need to be a member of the Canadian Cartographic Association (this being the CCA's web log - membership is a mere \$90 a year, tax deductible in Canada), have an interest in new developments, a love of all things cartographic, and be willing to spend some time each day searching for items of interest and writing about them. Such a commitment need not be as time consuming as my own; with a number of interested people it might require only 15 or 30 minutes each a day.

If you are interested in seeing this web log continue or would like more information, feel free to contact me at ccablog@yahoo.ca.

In the mean time, I will continue to post as much as possible; just expect a little less in volume, at least for the short term. (And, for those of you who know me and want to know what I will be up to, drop me a note!)

Paul Heersink
ccablog@yahoo.ca

Editors note: Since writing this submission, Paul has been unable to post to the CCA weblog. Please contact Paul if you are able to assist with this valuable resource.

The CCA was founded in 1975 to promote interest and education in maps and cartographic data and to provide for the exchange of ideas and information, at the regional, national and international levels, via meetings and publications. Membership in The Canadian Cartographic Association is open to all individuals, and public and private institutions which have an interest in maps and the aims and objectives of the Association. Membership is available in the following categories at the annual rates listed below (\$CND):

Regular	\$ 90
Student	\$ 45
Institutional	\$ 120
Corporate	\$ 200
Family	\$ 110
Retired	\$ 45

To cover mailing costs, US and overseas residents please add \$10 CDN to the applicable membership category.

Members receive the quarterly journal *Cartographica*, published by the University of Toronto Press and endorsed as the journal of the CCA; four issues of *Cartouche*, the CCA newsletter and the International Cartographic Association Newsletter. The Association also provides an annual conference to promote discourse and access to a range of expertise through interest groups and regional contacts.

For further information about membership qualifications and benefits contact the Secretariat of the CCA or any executive member or visit www.cca-acc.org.

L'ACC a été créé en 1975 pour promouvoir les intérêts et l'enseignement des cartes et de la cartographie ainsi que pour permettre l'échange d'idées, d'informations tant sur les plans régionaux que nationaux et ce via des bulletins et des conférences. L'adhésion à l'Association est ouverte à tous les individus et institutions (privées et publiques) qui Associa-sont intéressés par les cartes et par les buts et objectifs de l'Association. Vous pouvez adhérer dans les catégories suivantes selon les taux indiqués (cdn\$) dans la liste ci-dessous: (\$CND):

Régulier	\$ 90
Étudiant	\$ 45
Institutionnel	\$ 120
Société	\$ 200
Famille	\$ 110
Retraité	\$ 45

Un montant de 10\$ (cdn\$) est ajouté pour couvrir les frais postaux aux membres américains (EU) et de 10\$ (cdn\$) pour les membres outremer.

Les membres reçoivent la monographie trimestrielle *Cartographica*, publiée par le University Toronto Press; 4 numéros du bulletin *Cartouche* et le bulletin l'Association cartographique internationale (ACI). L'Association organise également une rencontre annuelle lors de conférences qui donnent accès à l'expertise issue des groupes d'intérêts et des diverses régions du pays.

Pour plus d'information concernant l'adhésion et les bénéfices de l'Association, contactez le Secrétariat de l'ACC ou, visitez notre site Internet www.cca-acc.org

The Canadian Cartographic Association L'Association canadienne de cartographie

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