Newsletter of the Canadian Cartographic Association
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CARTOUCHE

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President's Message

Could it really be? For many of us who look at this time of year as a celebratory season, this is a well deserved break from the normal pace of life. Did I say "break"? "Normal pace?" I forgot about the fun that comes with shovelling a few feet of snow (after a gorgeous fall!). I forgot how Santa can cause headaches among many adults. And I had a lapse in memory regarding the joy of marking exams and final papers.

Thankfully, I haven't forgotten that the turning of the page of another year is truly a time to not only reflect on what has been done and accomplished, but to look at a new year and the opportunities to challenge ourselves to do more, and to do better, and to do those things which benefit others more than ourselves.

What is part of the pace or normal life right now for the CCA and members like you and me? Do we have reason to celebrate as an association? Are we giving and receiving gifts? Is there a grander message, a universal truth to what we share as those experts who are cartographically minded (or as I tell friends "spatially gifted")? Yes, it is time to celebrate and here are a few reasons.

Firstly, I have been somewhat taken aback – pleasantly - by the number of emails and calls from members who have not only expressed concerns and ideas to improve the work of the CCA, but have expressed their appreciation for what "we" do (I tried to explain that what we do is what all members do).

Members, no matter where they are located or what they do in their professional lives are the core of the CCA. Without the support of members, well beyond membership dues, the CCA would be a shell and unsustainable. It may be trite but I want to give the gift of thanks to all members for their support and the promise that I will do all that I can to support them and continue, along with the support of the executive, to represent their needs. Which brings me to the second reason to celebrate.

The CCA is a very lucky association because members can rely upon those who volunteer to be executive, interest group members and editors. These individuals give up much of their "spare time" to support the CCA and promote the association and its mission to the wider community and the public.

Until recently, I did not fully appreciate the level of commitment and the wealth of knowledge that these members give to the association – I knew this deep inside and subconsciously, but I didn't understand the extent to which I could call upon those colleagues and friends for support and advice. To those I offer my gratitude for their desire and drive to enrich and enliven cartography in Canada.

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Canadian Cartographic Association

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Thirdly, I am thankful for the direction the association is taking relative to other like-minded groups who also wish to ensure that cartography in Canada continues to thrive, and in some ways regains a degree of status that has been (very sadly and in some ways stupidly) lost due to people being enamoured with "new" technologies over the basics and the good inherent in the traditions and methods of true cartography ("true"?, that ought to start a good debate on the CCA list!).

However, I am not ignorant of technology, and I am thankful for how some people, CCA members, have publicly talked about (through the media and even our beloved CBC) the value of new technologies and how we can use those to enrich our history of cartography, which has always seen changes in technology as opportunities to broaden the reach of cartography.

As an example of the above, and a bit of news, the future of topographic mapping and topographic data and access is being discussed with NRCan, ACMLA and CCA. A meeting is being planned for the very near future in Ottawa where representatives will be able to review questions of changes in the nature of the map as well as the way in which maps are compiled, released and archived.

This is not only a chance to shape policy and practice, but an excellent opportunity to deepen existing relationships with government, other associations, and ourselves for the benefit of the wider public who seek and need the highest quality of maps of their country. I will keep you posted on the CCA list.

I also have to give thanks for the gift of special members who take on the most significant challenges – conferences and publications. We are meeting in Vancouver with ACMLA, and the organizers in BC are busy making certain that the event will be superb intellectutally and socially.

The reports I receive lead me to believe that this is one conference not to miss, and the work being done suggests that many, many hours of personal time are being given up for members to enjoy the best event possible. Thanks to those people and to the sponsors who make this possible. I urge you to attend, and I suggest you check the conference web page for updates and information to register and present papers!

And our publications are exceptional and point to the excellence and quality of papers, contributions and editors. This will be a topic I will talk about more in the next edition, and I hope to have a few minutes to point to some questions and to raise a general discussion about the notion of "publications".

This will not be a critique, but to expand support and more fully recognize the work of our editors and publishers and contributors. I am so thankful to receive Cartouche and Cartographica. I get a few journals and newsletters across my desk (I really have to ask Santa for membership dues), and of all that I get, the only "cover-to-cover" reading is what comes through our association.

And note that I have not mentioned names in my thanks. There are too many people to thank, and so many members who have helped the CCA over the past year. To single out any one or group of people would be a good and kind act, and expressing thanks to all at once is one way to prove that the contributions of each and every person is equal to all.

But I do thank each and every person fully and the absence of a name in no way means I have forgotten nor is there any lack of appreciation or gratitude!! And a great gift for me this year has been renewed and new friendships that would not be possible without the CCA.

On a more personal note, I want to wish each and every one of you and those loved ones who are the center of your own map of life the most happy of holidays and the peace that is the message of all faiths not only at this time, but throughout the year. I know that this year is special for me as it is the first holiday with my family and children that became the center of my life this year.

While we face things that many of us deal with – family illness, crises, and the continuing strife and poverty that surrounds us – there are still reasons to look at our gifts. I am deeply and profoundly moved and thankful for the gift that comes with waking up with the children and my wife to celebrate gifts – not Santa, but gifts that last a lifetime. I pray each of you takes those opportunities and holds onto them with care and tenderness. May the New Year bring us all more peace, joy and friends to share the wonders of life, and to "not cease from exploration [a]nd the end of all our exploring will be to arrive where we started and know the place for the first time."

James Boxall

CCA President

Cartography makes the throne speech!!!

Contributed through CARTA by H. McAdam and CCA ListServ by A. Wood

The importance of mapping with respect to claiming sovereignty was acknowledged by the Canadian government in the latest throne speech:

"We will now proceed with the first ever comprehensive mapping of Canada's Arctic sea bed,…"

From the Editors

Greetings to all from snowy northern Ontario. Lately, my thoughts have been filled with images of hibernation as we navigate through our first cold snap and week of snow storms. Christmas preparations are under way and of course another issue of Cartouche needs to be put to bed.

You will find a lot of interesting information in this issue. Your interest group chairpersons and executive have worked hard to provide interesting and informative articles and CCA members have given us leads on tidbits of interest. That's what makes Cartouche a success.

Most everyone feels a bit more generous around this time of year. While we are in that mode, I encourage everyone to ask themselves; what can I do for the Canadian Cartographic Association?

Barb and I will produce our final issue of Cartouche with the last issue of 2008. We are looking for someone or a team of "someone's" to take over as editors of the CCA newsletter. Think you might be interested? Drop us an email and we'll give you the low-down.

It has been a pleasure to serve the CCA in this capacity and Barb and I are committed to providing the CCA with the best possible newsletter over the next year. We would like to take this opportunity to thank each of you for your support and encourage you to contribute to your newsletter.

Have a safe, happy and healthy holiday season!

Barb & Lori

The *Cartouche* Editorial Team.

Canadian Digital Information Strategy

The announcement below recently came out through the CCA ListServ as contributed by T. Lauriault. Some discussion went back and forth regarding the CCA`s potential role in this Strategy. A Canadian Cartographic Information Strategy was suggested. Food for thought…

Annonce bilingue / Bilingual announcement (English follows)

Nous sommes fiers d'annoncer que l'ébauche de la Stratégie canadienne sur l'information numérique a été publiée afin d'être soumise à l'évaluation du public. Cette stratégie est le fruit d'une série de réunions qui ont eu lieu partout au pays en 2005 et en 2006*,* et auxquelles ont participé des représentants gouvernementaux, des producteurs et des utilisateurs de contenu numérique. Au cours des débats, plus de 200 organismes sont intervenus afin de faire valoir leurs idées et leurs commentaires, et près d'une centaine de penseurs parmi les plus influents provenant de tous les domaines du milieu de l'information ont pris part à un sommet national en décembre 2006.

Un comité de 24 membres a puisé dans ces contributions pour élaborer une stratégie nationale. Celle-ci répond à certains enjeux importants liées à accès, à la conservation et à la production de l'information numérique, et elle propose diverses mesures destinées à renforcer le milieu de l'information numérique au Canada.

Le comité recevra les commentaires du public sur l'ébauche de cette stratégie à compter du 23 novembre 2007. Pour télécharger le document de la Stratégie canadienne sur l'information numérique, et pour nous faire part de vos commentaires, veuillez vous rendre à l'adresse suivante: http://www.collectionscanada.gc.ca/scin/index-f.html.

Sean Berrigan, Bibliothèque et Archives Canada Gérard Boismenu, Université de Montréal Coprésidents du comité d'élaboration de la Stratégie canadienne sur l'information numérique

We are pleased to announce that the draft version of the Canadian Digital Information Strategy has been released for public comment. The Strategy results from a series of meetings that took place across the country in 2005 and 2006 to gather views from content producers, users and government officials. In the course of the deliberations, more than 200 stakeholder organizations offered ideas or commentary, and nearly 100 of Canada's leading thinkers from across the information environment participated in a national summit in December, 2006.

Building on this rich set of input, the strategy has been drafted by a 24 member development committee. It addresses some of the critical issues in digital information production, preservation and access, and proposes a range of actions to strengthen the Canadian digital information environment.

The Committee welcomes public comment on the draft strategy by November 23rd 2007. Please visit http://www.collectionscanada.gc.ca/cdis/index-e.html to download the strategy document and to provide comments.

Sean Berrigan, Library and Archives Canada Gérard Boismenu, Université de Montréal Co-chairs, Canadian Digital Information Strategy Development Committee

Cartographic Education
Éducation cartographique:

Karen Vankerkoerle
University of Western Ontario

Ministry of Education's Thematic Map gets an 'F'

By profession, I would consider my expertise to fall more into the realm of map design than education but the education chair position needed filling and I am happily doing so for the year.

I recently observed my niece, who is in grade five, completing a Social Studies project that consisted of colouring and labeling the continents on a map of the world. This is a common assignment that Canadian students will inevitably complete at some point in their academic pursuits. As I looked over her map I noticed that Europe was missing a good portion of its eastern component and pointed this out to my niece. I had cause for concern when I was told that the error was in fact the teacher's doing. For this reason, I decided to take a look at what mapping resources are made available to teachers, from the Ministry of Education, to aid them in teaching the cartographic aspects of geography.

The Ontario education system has been going through an adjustment period due to the demise of grade 13, or the OAC year as it was known. To compensate for the removal of an entire year of education the Ministry needed a curriculum overhaul on all levels to cover the required content. To aid teachers in developing new lesson plans which adhere to the new curriculum the Ministry has provided, on their web site, exemplars that can be used.

In the grade 8 geography section there is an example of a migration project. Within this exemplar there is a series of four thematic maps that the students are asked to discuss, examine and analyse. The lesson itself is well organized and has students addressing a number of different sources, both primary and secondary, to find the answers to the questions posed. The problem with the lesson is in the maps the Ministry provides (figure 1). They are not the worst maps I have ever seen but they are also not what I would consider shining cartographic examples of thematic maps. I would use these as an example, but only to show students what not to do when creating a thematic map.

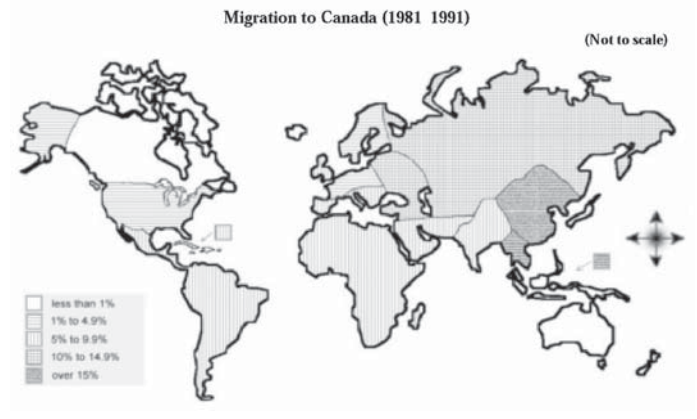


Figure 1. There is no need to adjust your eyes, this is the quality provided. This is one of the maps in a series of four, but all have the same design. Source: http://www.edu.gov.on.ca/eng/curriculum/elementary/sstudies78ex/g8tea.pdf

The legend is so blurry that the divisions in the data are barely legible. If a logical colour/pattern choice were made the students could still understand the general pattern on the maps but as you can see this is not the case. The exercise is calling for students to use the maps as analytical tools, yet the reproduction and design of the maps is so poor it is very difficult to extract the information needed to complete the task. The fact that this is also for grade eight is cause for concern. This is a regression from what students learn in earlier grades about what constitutes a good map.

The current system is set up in a way that teachers will not necessarily have a background in geography but still end up teaching it. According to the Ontario College of Teachers web site to teach at the elementary school level you only need to have specialized in one or two subjects from the elementary school curriculum (i.e. English, Science, Geography, etc.) in university. At this level teachers need to be flexible and be prepared teach where the need exists. To teach grades seven to ten you need to qualify as an expert in one subject and to teach grades eleven and twelve you must be qualified as an expert in two subjects. The reality of teaching a course that you are not familiar with can be daunting, and having quality resources at your disposal is a necessity.

It is important to give constructive criticism but it is just as important to give alternatives or possible solutions to the problem. There are a number of resources available online that teachers can use in their lessons to enhance them rather than detract from the main objective.

National Atlas of Canada - http://atlas.nrcan.gc.ca
The National Atlas of Canada has a wonderful web site that offers complete lesson plans for teachers, including an evaluation rubric. When you enter the site you will notice on the left column there is a "Learning Resources" section with Lesson Plans, Facts about Canada and an All Resources option. Under the latter there is a link to "Map Making" which gives a breakdown of what constitutes good mapping practices.

National Geographic -
http://www.nationalgeographic.com/xpeditions/lessons/
National Geographic's site is not geared solely for the Canadian curriculum but there are a number of lesson plans that cover a wide variety of topics. This site also has quality maps for teachers to use. The lesson plans are broken down into grade levels and each plan outlines, the time it takes, materials required, the objectives of the assignment, the geographic skills acquired and a list of links related to the topic.

Ontario Association for Geographic & Environmental Education - http://www.oagee.org/Files/statscan/stats_can_lessons.m
This is a great site for high school teachers to use because it provides lesson plans developed at Queen's University that use Statistics Canada. Once again the suggested grade level, expected time, objectives and additional resources are given.

I have only mentioned three sites here but there are a number of resources on the web that can be useful aids for teachers. It's not enough to throw your hands up in the air and complain about the state of current education system, without offering viable options to make improvements. So, even though I was initially struck by the poor quality of maps provided by the ministry I was pleased to discover some excellent alternatives available on the web.

Map Use and Design

Conception et utilisation des cartes:

Elise Pietroniro
University of Saskatchewan

Art and Cartography

I thought for this issue I would write about art and cartography, in light of the Symposium being held in Vienna next February, in conjunction with ICA. As a fine arts graduate, I believe art plays a vital role in Cartography. The word 'art' itself is in C'art'ography. By definition, cartography is the art and science or technique of making maps. Historically, maps have been used as works of art[1]. There are many parallels between the two disciplines. For instance, colour theory, figure ground relationships, perspective, all relate to both the production of visual artwork and the production of maps.

Cartographers are simply creating an abstraction of the real world when designing a map, and attempting to communicate information. Artists generally do the same, whether it is in a painting or an installation. Perhaps not all forms of fine arts can be compared, however most will align to a similar paradigm. The real world is expressed through some sort of abstraction and expression of what is true. In a statement on the web page for the Vienna symposium, Alberto Eco's text on the impossibility of drawing the Empire State building on a map at a 1:1 scale is referenced; some distortion must always occur therefore no map is a true map; alluding to the conclusion that scientific cartography is not any different than artistic cartography[2]. In fact, most works of art, like maps, are an abstraction of some real world object, thought or idea. Abstraction exists from the surrealistic art of Dali to the cubism of Picasso; even photorealistic paintings where mostly scale is distorted from reality can be considered an abstraction, and tangibly, these paintings are never a duplication of the true object.

Like the art of photorealism, there is often a push to recreate a more realistic impression of the world through cartography. This is seen in innovations like the development of multimedia cartography. These innovations may include developments in 3D mapping or virtual reality; the aim however is at enhancing communication. Regardless of the methods and innovations cartographers use to produce maps, or whether or not cartographers consider themselves artists, there is an inherent artistic value in the products they create.

(Footnotes)

[1] Woodward, D. 1987. page 3 "Introduction". In, Art and Cartography: Six Historical Essays. Chicago: University of Chicago Press.

[2] http://cartography.tuwien.ac.at/artandcartography/index.php?Art_and_Cartography:Statements

Analytical Cartography & GIS

Cartographie analytique et SIG:

Penny Hutton
Abitibi-Consolidated Company of Canada

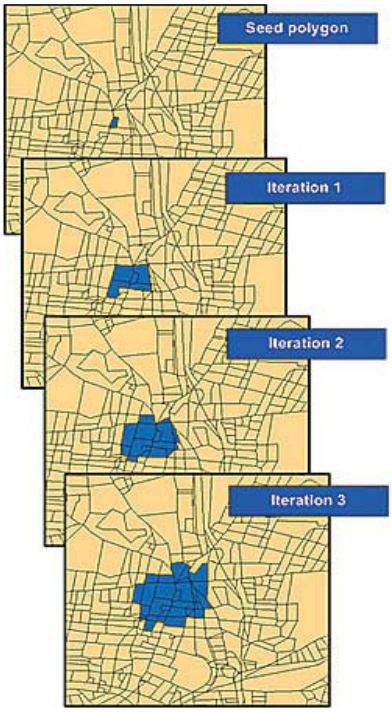
More Ways to Increase Productivity

By Jason Pardy, ESRI Product Engineer

Take Advantage of Iteration in ModelBuilder

ArcGIS 9.2 has improved user productivity in many ways. ModelBuilder, an application in ArcGIS that is used to create, edit, and manage models, now includes iteration functionality. Also called looping, iteration means repeating a process using different input parameters each time until a result is achieved. ModelBuilder can streamline geoprocessing tasks by iterating an entire model or individual process. This article describes the iteration methods available in ModelBuilder. Those methods are Count, Feedback, Series, Boolean Condition.

As the model iterates, the selected set of features expands.



Iteration Using a Count

One of the easiest ways to instruct a model to iterate is by setting the count. With this method, the user specifies how many times the model will execute. In Figure 1, the model samples elevations from a digital elevation model (DEM), randomly creates points covering the extent of the DEM, and extracts the values of the DEM to points. The iteration count is set to 5 using the Model Properties dialog box. Because the model produces one output dataset for each iteration, it is important to have a unique output name for each iteration. The current model iteration is represented by %n% where the first iteration is zero. The value of the Output variable is SamplePoints_%n%.shp. The five output datasets would be:

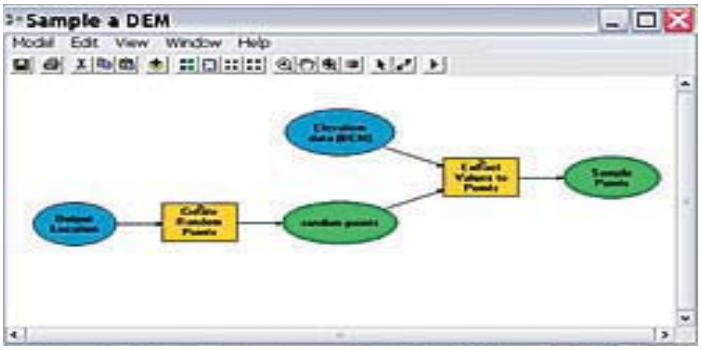


Figure 1: A model to sample a DEM

```
C:\Outputs\SamplePoints_0.shp
C:\Outputs\SamplePoints_1.shp
C:\Outputs\SamplePoints_2.shp
C:\Outputs\SamplePoints_3.shp
C:\Outputs\SamplePoints_4.shp
```

Using a Variable to Set the Iteration Count

Instead of typing a fixed value in the Model Properties dialog box, a model variable can be used to get the iteration count. In Figure 2, the model from the previous example was modified to contain a new variable, named Number of Times to Iterate, that has a Long data type. This variable has been made a model parameter so that a user of the model can input the iteration value using the tool's dialog box. From the Iteration tab in the Model Properties dialog box, a variable in the model can be selected to set the iteration count.

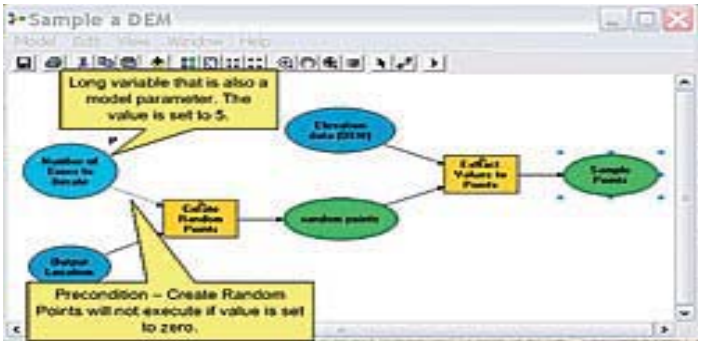


Figure 2: Using a model variable to set the iteration count

Iteration Using Feedback

In ModelBuilder, the output of one process can be used as the input to an earlier process using feedback iteration. As shown in Figure 3, the model created to sample a DEM was expanded to perform further analysis and illustrates how error on the source DEM might affect delineating a viewshed from an observation point. This model uses feedback and an iteration count to combine different viewsheds into a probability viewshed. The output raster will contain cell values ranging from zero to the iteration count set by the user. For example, if the iteration count is set to 100, each cell value in the final output raster will range from zero to 99. If a cell value is 50, this means the cell was visible 50 times out of 100. Declare a variable as feedback by opening the Model Properties dialog box for the input variable and selecting the output variable that will be fed back into the model as input.

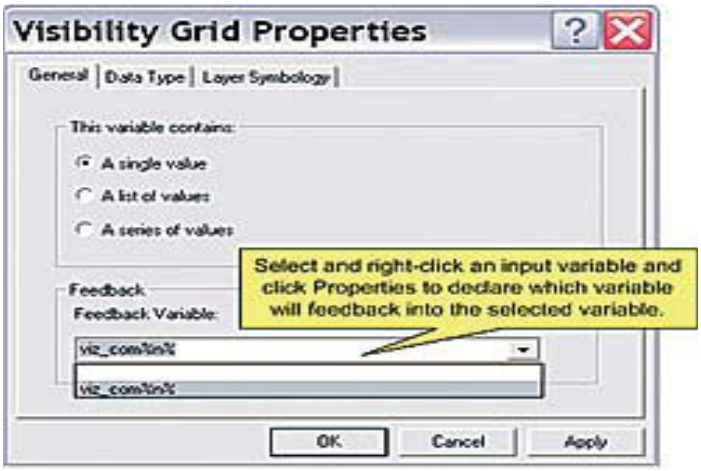


Figure 3: A viewshed probability model using feedback

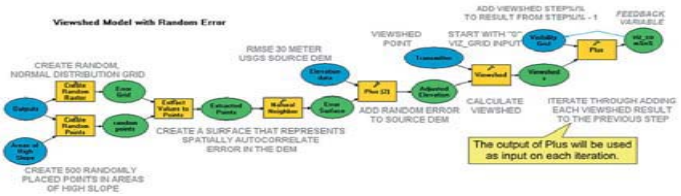


Figure 4: The Visibility Grid variable properties

Iteration Using Series

Often, it is necessary to execute a model on a series of inputs. In this situation, the entire model is executed once for each value in the series. Figure 4 illustrates the use of a series for model iteration. This model reclassifies groundwater yield by geology into different yield classes. For example, groundwater with 0 to 10 liters per minute is classified as 1. The completed model is shown in Figure 4. Figure 4a shows Expressions—Well Yields, a series variable. Opening this variable displays a series of yield class expressions. The model will execute once for each expression. The Expression parameter for Calculate Field is set to the iteration (%n%). The last step is to set its iteration variable by opening the Model Properties dialog box and selecting the variable Expressions—Well Yields as the iteration variable. When a variable is selected for iteration, the iteration count value is ignored and the model will iterate once for each value in the series variable.

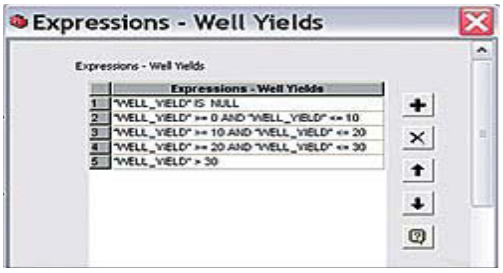
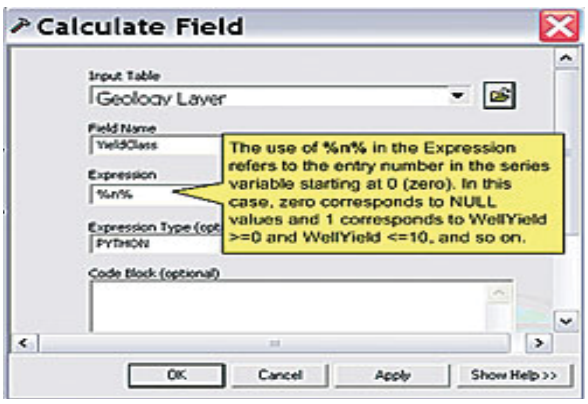


Figure 4a. A model to reclassify values using a series.

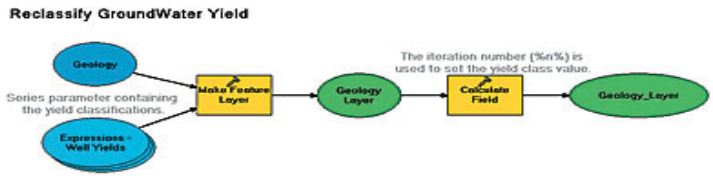
Iteration Using a Boolean Condition

A different scenario was used to demonstrate iteration using a Boolean condition. The basic model shown in Figure 5 constructs a sales territory. In the BlockGroups feature class, a field named NCustomers contains the number of customers per polygon. The seed polygon contains the central office location of the sales territory. Beginning with the office location, the model gathers contiguous groups of polygons until the total number of customers crosses a threshold such as 350 total customers.

The model begins by selecting polygons by location. The output of the Select Layer By Location tool is input to the Summary Statistics tool to calculate the sum of the NCustomers field for all selected records. The Summary Statistics tool outputs a table (BlockGroups_Statistics) containing one row with a field containing the total number of customers. The field name is automatically named SUM_NCustomers by the Summary Statistics tool. The Make Table View tool selects all records from SUM_NCustomers that are less than the value found in the MaxCustomers variable. MaxCustomers is a stand-alone value variable of type Long, created by right-clicking the ModelBuilder window and clicking New Variable. MaxCustomers is used in the Make Table View tool dialog box as a stand-alone variable. In-line variable substitution is used in the Expression parameter by placing the percent signs around the variable name (MaxCustomers).



With a series variable, expressions can be added, removed, or modified.

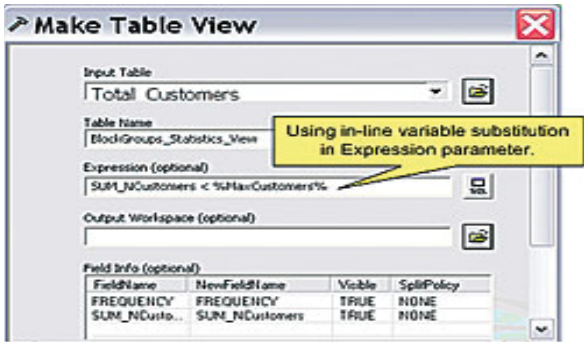


The iteration system variable %n% is used to set the expression.

In this model, MaxCustomers has been made a precondition to the Make Table View tool. This precondition is not necessary but is added as a visual aid to make it clear that the Make Table View tool uses the variable for in-line variable substitution. The Expression parameter on the Make Table View tool dialog box selects all records where the sum of all customers is less than the value of MaxCustomers. There will be one record selected from the table if SUM_NCustomers is less than MaxCustomers and zero records selected if SUM_NCustomers is greater than MaxCustomers. If zero records are selected, the total number of customers exceeds MaxCustomers.

The final piece of the puzzle is the Get Count tool. The Get Count tool simply returns the number of selected rows in the input table. The output variable, Row Count, is a Long, not a Boolean variable, but ModelBuilder can use it as a Boolean because any value greater than zero is considered true. If the Make Table View tool doesn't select any records (because the threshold of MaxCustomers has been crossed), the value of Row Count will be zero and it will evaluate to false. Otherwise, it will evaluate to true. The Row Count variable can be used to control iteration. In the Model Properties dialog box, iteration is set by choosing to Run the Model until This Variable is False and the maximum number of iterations is 99.

The Make Table View tool properties



The model will iterate until the value of the Row Count variable is less than or equal to zero or until the maximum number of iterations, set at 99 in this example, is reached. The maximum number of iterations acts as a safety valve so that if the model ends up selecting all features without meeting the threshold of MaxCustomers, it will stop after 99 iterations.

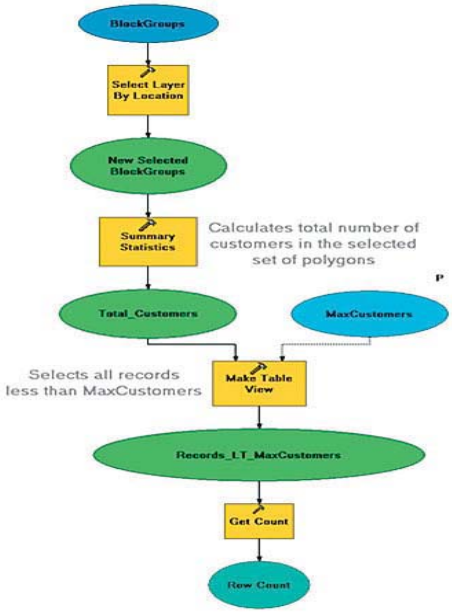


Figure 5: The model selects the adjacent blocks and sums the number of customers. When the number of customers exceeds the maximum number of customers, the model stops.

Additional Resources

Iterations in ModelBuilder help automate geoprocessing tasks. For more information, see the following resources:

- **Viewshed probability model download** (http://support.esri.com/index.cfm?fa=downloads.geoprocessing.models)
- **Model iteration** (http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=An_overview_of_model_iteration)
- **Model variable substitution** (http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=In-line_variable_substitution)
- **Dynamic modeling** (http://webhelp.esri.com/arcgisdesktop/9.2/index.cfm?TopicName=An_overview_of_advance_modeling_through_simulations)

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http://www.esri.com/news/arcuser/0807/iteration.html

History of Cartography/
Histoire de la cartographie:

Edie Punt
ESRI

Canadian cartography inspired by the Fourth International Polar Year

2007 marks the beginning of the Fourth International Polar year, an international, multidisciplinary survey of the North and South Poles. The Polar Regions are unique in that they are managed collaboratively by a collection of nations, and are indisputably important to the climate of the entire globe. They are also notoriously difficult and expensive places to research. A coordinated approach to the study of these areas is clearly an advantageous method to better understanding the climatic processes affecting the Earth.

The First International Polar Year began in 1881 and continued through early 1884. It stretched more than a single calendar year to cover a full winter and full summer season at each Pole. It marked the first series of coordinated Polar expeditions undertaken for purely research purposes. The idea for such a collaborative effort came from the Austrian explorer Carl Weyprecht who was seeking holistic answers to fundamental questions of global meteorology. The event included twelve expeditions to the Arctic and three to the Antarctic. Twelve nations participated: the Austro-Hungarian Empire, Canada, Denmark, Finland, France, Germany, the Netherlands, Norway, Russia, Sweden, the United Kingdom, and the United States.

Although a wealth of data was collected, the analysis and dissemination of that data proved more difficult than expected. Each nation published its data independently, making comparisons and conclusions cumbersome. Because of this, the entire endeavour was considered an intriguing, yet somewhat ineffective experiment scientifically. Diplomatically, though, it set a precedent for collaborative international scientific cooperation. Interestingly, now over a century later, the value of that early data is being recognized. The data from the first International Polar Year now often stand as a baseline of Polar conditions before the significant human-induced climate impact of the twentieth century. Visit www.arctic.noaa.gov/aro/ipy-1 to access this data, as well as a rich collection of images of the research stations established during the study.

The Second International Polar Year took place fifty years later beginning in 1932, this time with 40 nations involved, again including Canada. At this time, Canada's participation was fueled by a desire to learn more about that notoriously remote part of the country which held valuable natural resources (and also how best to retain sovereignty there), in addition to pure scientific curiosity. Twenty-five years later, the Third International Polar Year (1957-58) expanded the areas of research beyond the Polar Regions and was therefore named the International Geophysical Year. It was characterized by the use of American and Russian artificial satellites to help collect data from all parts of the globe.

The Fourth International Polar Year is the most extensive endeavour yet. Spanning two full annual cycles from March 2007 to March 2009, it includes hundreds of projects carried out by thousands of scientists from over 60 nations studying and array of physical, biological and social questions. While 44 distinct projects are being funded directly by the Government of Canada in recognition of the International Polar Year, a wealth of related research is currently taking place across the country. Visit www.ipy-api.ca to learn more about Canada's contribution to the Fourth International Polar Year. Among other advances, this fourth venture now reflects the Canadian understanding that the Arctic region not simply a remote, desolate expanse of land, but home to millions of citizens.

It is in the spirit of this acknowledgement that one of the most intriguing recent advances in Canadian cartography is being undertaken. The Nunavut Interactive Atlas is being created by Claudio Aporta of Carleton University in Ottawa, the Geomatics and Cartographic Research Centre at Carleton University, and several organizations and communities in Nunavut, with the financial support of the Government of Nunavut. Its goal is to create educational material with Inuit content and to make diverse geographic and GIS-related initiatives developed in Nunavut available to the public.

The Nunavut Interactive Atlas is an experiment in cybercartography. The concept of cybercartography, proposed and developed by Professor D. R. Fraser Taylor (also of Carleton University), is defined as "the organization, presentation, analysis and communication of spatially referenced information on a wide variety of topics of interest and use to society in an interactive, dynamic, multimedia, multisensory and multidisciplinary format." The assumption is that maps and associated media can go beyond simple spatial description to help to communicate integrated information about people, places, space and society.

The Nunavut Interactive Atlas is powered by the Cybercartographic Atlas Framework, a collection of open source geospatial tools and a custom-built application with a web-based user interface. The framework supports the development of dynamic, interactive geographic narratives by providing a means of capturing and linking disparate geographical information in various forms including images, text, audio, and video. An integral part of the Cybercartographic Atlas Framework is Geomatics and Cartographic Research Centre's new open source software, called Nunaliit (named for

an Inuktitut word meaning “community”.) This software has been launched at: http://nunaliit.org/developers.html

What is unique about the Nunavut Interactive Atlas is that it relies on technology to create a cartographic medium that is better suited to communicate the Inuit culture and spatial understanding of the North than traditional static, tactile maps and atlases are. Inuit culture is based on a strong oral tradition, where spatial knowledge and way-finding information is disseminated from one generation to another through story-telling and recounting. As the name suggests, this atlas will be interactive, relying on a web-based framework that allows Northern communities to develop their own relevant atlas modules and later update that information. The atlas will be built successively and collaboratively by the people whose world it describes, and the content of it can be continually modified to best reflect each community’s understanding of its locale and environment. Perhaps most importantly, it can serve as a diverse record of Northern history by capturing knowledge and memories from the North’s oldest inhabitants in a way that is not limited to the normal confines of written historical accounts. This is in stark contrast to a traditional static atlas that describes a place through the cartographic interpretation of a single map-maker; someone who may have never traveled there.

Map Production Technology

Technologie de production cartographique

Lori King
Ontario Ministry of Natural Resources

Map production technology… I am currently in the midst of using a new technology at work. It is exciting and sometimes a bit frustrating. I thought I would write about my experience this issue, but have decided that I need to put it away for a while. So, stay tuned…

With internet technology, anyone can make a map. I thought I would have a look at how the average “surfer” can make a map. I googled “make your own map” and got over 100 million possibilities. Egads! Now, not all of those hits were specifically map making sites, but there were several in the first forty. What follows is a brief look at some of the map making possibilities on the internet.

Online Map Creation uses Generic Map Tools to create simple maps. One user commented that they use this site to track the progress of their college student on the Semester at Sea program.

MapLoco lets the user create a map to use on a web site showing where visitors to a page are coming from.

Welcome to MyWorld66 is the map component of World66.com travel guide. Non-member user’s can make maps of countries, US States or Canadian provinces that you have visited. It provides html code to include the map on your website.

National Geographic MapMachine is a great resource for students. It is similar in look and feel to Google maps and the thematic map gallery is fairly extensive.

Land Information Ontario (LIO) allows the user to create a topographic map of any part of Ontario. The data used to make these maps is largely from the Ontario Ministry of Natural Resources and Natural Resource Canada, and represents most visible features in the landscape suitable for display at scales from 1:10,000 to 1:250,000.

The US governments National Atlas site allows the user to customize maps using Map Maker. Here is another good resource for students studying the United States.

Google Maps allows the user to customize their Google Maps experience! Information such as photos, weather and public transit maps can be used as overlays. You can share your maps with friends and family and even edit them at a later time.

Almost everyone is familiar with MapQuest and has used it to plot out a trip.

MSN has a mapping component. It is similar to MapQuest, where you can get driving directions when planning a trip. You can locate places and add your own information about a place.

There are endless mapping opportunities on the internet. The questions remains, are these quality cartographic products? Not likely. Why write about mapping tools that create substandard map products? In no way am I endorsing any of these sites (haven’t even included the URL’s). Honestly, while waiting on my computer that was “processing” I decided to google “make your own map”.

CaGIS announces its 35th Annual Map Design Competition for professionals and students in Canada and the United States!

The purpose of the competition is to promote interest in map design and recognize signi◎cant design advances in cartography. Noted cartographers judge the entries based on: color, overall design and impression, craftsmanship, and typography. Entries are displayed at a number of national and international functions and then become part of the permanent collection of the U.S. Library of Congress.

Deadline is **January 15th, 2008** for maps completed in calendar year 2007.

Details and the entry form are provided in the attachment and on the CaGIS website at: www.cartogis.org.

CALL FOR PAPERS, PRESENTATIONS, WORKSHOPS

CARTO 2008

CCA/ACC & ACMLA/ACACC
Annual Conference

Monday, May 12th to Friday, May 16th
University of British Columbia
Vancouver, BC

Papers based on original research on any of the listed topics are welcome.

All presenters, paper presentation or poster session, must submit an abstract electronically (in either English or French) of 250 words or less. The abstract should fall under one of the conference themes which include:

Analytical Cartography
History of Cartography
Map Production Technology
Cartographic Education
Map Use and Design
Political Aspects of Cartography
GIS/GPS
Teaching Cartography in academia
Mapping Health Data
Public Cartography (google earth, maps, etc)
Mountain Cartography
Other aspects of cartography
Cartographic Archives & Libraries
Metadata
Cartographic Material Cataloguing
Statistical Data and Maps
Open Source software
Geospatial Data Providers
Geospatial Data Services
Digitization Projects
Status of Topographic Mapping
Community Projects
Other aspects of map librarianship and archiving

Persons wishing to organize special sessions with invited speakers or joint sessions with ACMLA/ACACC or workshops should contact the local coordinator.
All participants must meet the abstract deadline.

Send your proposals to: Susan McKee (smckee@ucalgary.ca)
by: February 1, 2008 for first consideration

Authors are responsible for spelling, grammar, and typographical errors. The merit of each proposal will be assessed individually. The time for each oral presentation will be approximately 20 minutes, which includes discussion and questions.

Invitation à présenter des communications et des ateliers

CARTO 2008

Du mardi 13 mai au vendredi 16 mai 2008
Vancouver, C.-B.
University of British Columbia

Toutes communications basées sur des recherches originales sur l'un des sujets mentionnés dans la liste ci-dessous sont les bienvenues.

Tous les conférenciers doivent soumettre électroniquement un résumé (en anglais ou en français) de 250 mots ou moins dont le sujet s'applique à l'un des thèmes de la conférence suivants :

Cartographie analytique
Histoire de la cartographie
Technologie de production cartographique
Éducation cartographique
Conception et utilisation des cartes
Aspects politiques de la cartographie
SIG/GPS
Enseignement de la cartographie à l'université
Cartographie de données sur la santé
Cartographie publique (Google Earth, Maps, etc)
Cartographie des montagnes
Autres aspects de la cartographie
Archives cartographiques et bibliothèques
Métadonnées
Catalogage de matériel cartographique
Données statistiques et cartes
Logiciels d'exploitation libre
Fournisseurs de données géospatiales
Services de données géospatiales
Projets de numérisation
L'état de la cartographie topographique
Projets communautaires
Autres aspects reliés aux cartothèques et aux archives cartographiques

Ceux qui désirent organiser une session spéciale avec des conférenciers invités, ou une session conjointe avec l'ACMLA/ACACC, ou un atelier doivent contacter un coordonnateur local.
Tous les conférenciers doivent respecter la date d'échéance pour la soumission d'un résumé.

Faites parvenir votre résumé à : Susan McKee (smckee@ucalgary.ca)
Avant le 1er février 2008 pour première étude

Les auteurs seront responsables des fautes d'orthographe, de grammaire et de typographie.
La valeur de chaque proposition sera évaluée individuellement.
Le temps alloué pour chaque présentation sera d'environ 20 minutes, incluant les questions et les discussions.

Program Committee / Comité organisateur:

Dan Duda,
Susan McKee
Roger Wheate
Alberta Auringer Wood
Clifford H. Wood

Local Arrangements / Coordonnateurs locaux:

Sally Hermansen
Dawn Mooney
Walter Piovesan
Tim Ross

Tentative Time Table

Time	Tuesday May 13	Wednesday May 14	Thursday May 15	Friday May 16	Saturday May 17
9:00 – 10:30 (90 mins)	ACMLA Executive Mtg./ Workshops	Plenary Session Keynote	Sessions	Sessions	ACMLA Executive Mtg.
10:30 – 11:00 (30 mins)	Break	Break	Break	Break	Break
11:00 – 12:00 (60 mins)	ACMLA Executive Mtg./ Workshops	Sessions	CNC meeting/ Sessions	Sessions	ACMLA Executive Mtg.
12:00 – 1:30 (90 mins)	Lunch	Lunch ACMLA AGM	Lunch CCA AGM	Lunch	Lunch
1:30 – 3:00 (90 mins)	Workshops	Sessions	Sessions	Optional Field Trip	ACMLA Executive Mtg.
3:00 – 3:30 (30 mins)	Break	Break	Break	Break	Break
3:30 – 5:00 (90 mins)	CCA Executive Committee Mtg./ Workshops	Sessions	Sessions/CCA 2nd Executive meeting	Optional Field trip	ACMLA Executive Mtg.
5:00 – 6:00	Free time	Orienteering	Free time	Free time	
6:00 -	Ice Breaker	Orienteering	Banquet	Free time	

Heures	Mardi 13 mai	Mercredi 14 mai	Jeudi 15 mai	Vendredi 16 mai	Samedi 17 mai
9:00 – 10:30 (90 min.)	ACACC Réunion de l'exécutif. / Ateliers	Session plénière Discours	Sessions	Sessions	ACACC Réunion de l'exécutif
10:30 – 11:00 (30 min.)	Pause	Pause	Pause	Pause	Pause
11:00 – 12:00 (60 min.)	ACACC Réunion de l'exécutif. / Ateliers	Sessions	CNC réunion/ Sessions	Sessions	ACACC Réunion de l'exécutif.
12:00 – 1:30 (90 min.)	Dîner	Dîner AG ACACC	Dîner AG ACC	Dîner	Dîner
1:30 – 3:00 (90 min.)	Ateliers	Sessions	Sessions	Excursion optionelle	ACACC Réunion de l'exécutif.
3:00 – 3:30 (30 min.)	Pause	Pause	Pause	v	Pause
3:30 – 5:00 (90 min.)	ACC Réunion de l'exécutif. / Ateliers	Sessions	Sessions/ACC 2ième réunion de l'exécutif	Excursion optionelle	ACACC Réunion de l'exécutif..
5:00 – 6:00	Temps libre	Course d'orientation	Temps libre	Temps libre	
6:00 -	Cocktail d'accueil	Course d'orientation	Banquet	Temps libre	

Report on Membership Renewal Efforts

Alberta Auringer Wood

In May of this year, 81 individuals or institutions who had been a member in 2006, but who had not renewed for 2007, were contacted by email or regular mail. As a result, 13 of them renewed their membership.

In August as a follow up, an email survey was sent to 61 people who had not renewed at that point in an attempt to determine why they did not renew. Responses were received from 18 people. Ten of them answered the survey questions while eight of them stated reasons why they had not instead. The questions and the tabulation of answers is below:

Question	Yes	No	No Response
1. Membership was not renewed because you are no longer in the field?	3	7	
2. Membership was not renewed due to lack of funds?	4	6	
3. Membership was not renewed because you do not find the publications of value?	3	6	1
4. Membership was not renewed as the conferences were not of use to you?	3	6	1
5. Membership was not renewed as other organizations are of more interest? If yes, please name them -- NACIS, AAG / CAGIS; funds directed to more practical training; NACIS	3	7	
6. Membership was not renewed as you have other means of access to the publications?	3	7	
7. Any other comments regarding why you did not renew?		2	

Eight people who filled in the survey did add comments as to why they did not renew. These ranged from "just too expensive compared to other organizations" to "I thought I was a member of CCA - in good standing". In the latter case, the person had renewed Cartographica directly with the University of Toronto Press thinking that this also renewed the CCA membership which it does not, unfortunately, as well as costing more. Other reasons included getting most cartographic information from blogs and lamenting the demise of the CCA blog, being of no immediate use in the day to day life for someone no longer working in the field, no longer living in Canada, or not being interested in an academic journal. However, this last statement was accompanied by this one: "I appreciate the efforts of CCA in keeping the cartographic discipline afloat in a sea of GIS."

The eight people who did not fill in the survey form, but responded with why they did not renew included mostly being too busy or being prevented by personal circumstances. One person was reported as being deceased.

Putting Canada on the map

Father of digitized mapping recounts how a stroke of luck led him to develop the world's first geographic information system.

LYNN GREINER

Globe and Mail

December 17, 2007 at 8:47 AM EST

It seems perfectly normal now to access maps through our computers. In fact, it's hard to imagine where we would be without MapQuest and Google Maps and their ilk.

Probably lost.

Yet had it not been for a soft-spoken young geographer doing work for the Canadian Department of External Affairs more than forty years ago, we might still be fighting fan-folds whenever we wanted to figure out how to get from A to B.

It was all a matter of survival, says Roger Tomlinson as he shared memories of the birth of the geographic information system (GIS), the enabler of our modern computer mapping and global positioning systems.

In the early 60s, Canadian Roger Tomlinson looked for a way to digitally overlay data onto maps.

"The early days of GIS were very lonely," Dr. Tomlinson mused. "No-one knew what it meant. My work has certainly been missionary work of the hardest kind." Even in 1970, a decade after the first maps were computerized, there were only about 40 people in the world using the technology.

Upon his return to Canada from Kenya in the early 1960s, he was asked to apply his knowledge of the African country to determine a good location for planting trees to feed a planned paper mill. The plantation would have to be on a suitable slope, on appropriate land, in a location affected by the right weather conditions and with access to transportation for workers. And being in Africa, the location would have to be free of monkeys, which eat young trees, and safely away from elephant migration routes.

All that meant referring to and manually overlaying data from many different maps, and when Dr. Tomlinson priced out the project, the cost of the labour involved in correlating all of those maps was too high for the potential client.

He could see his career as a geographer in aerial survey fading away, and began to think of ways to corral those costs. One notion that came to him was that if he could put maps into a computer and get "a bunch of numbers," those numbers could be combined with those from other maps to produce compete information. So, for example, he could plot elephant migration routes on maps that also showed soil composition and weather patterns to locate a pachyderm-free plantation plot.

He hastens to add that his idea wasn't entirely new — the president of the Royal Geographical Society figured out how to digitize lines in 1870 so he could transmit shapes by telegraph. What was new was the idea of putting many maps into a computer and linking them with statistical data. He approached several computer companies for support in developing the idea.

They all said no.

That would have been that, but for a chance meeting on an airplane in 1961 with Lee Pratt, recently named head of the Canada Land Inventory.

Pratt's mandate was to develop a land use map of about one million square miles of Canada's inhabited and productive land, showing things like agricultural land, forests, wildlife, land suitable for tourism, and other uses. It would have taken 536 trained geographers working full-time for three years to accomplish the task.

There was just one tiny problem: there were only about 60 trained geographers in the country. Dr. Tomlinson told Pratt about his idea of computerizing the overlays, and three months later Pratt called to commission a technical and economic feasibility study.

The project estimate for doing the job manually was about $8-million; Dr. Tomlinson thought it could be done for $3-million on a computer. "We eventually did it for about $10-million, but that's the way programming goes," he chuckled.

In November 1962, Dr. Tomlinson published the study, and was asked to join the government and develop the system, making Canada the first country in the world to have a computerized GIS.

"Lee Pratt was a young civil servant. He didn't have to put his career on the line with unproven technology," Dr. Tomlinson said. "He was the courageous one. My work was purely self-preservation — you do things because you have to."

Now, of course, computerized GIS has become almost commonplace, and Dr. Tomlinson has received many awards, including the Order of Canada, for his work as the Father of GIS. But to him, GIS is just the beginning.

"GPS came along and put the teeth into GIS," he enthused. "A map is one thing, but knowing exactly where you are on a map is another. Except, our maps aren't good enough. I want to get to the people who made the maps and get them to change them."

"There are three legs to the stool of future development: technology, people and data," he went on. "The availability of accurate data is crucial."

For example, he said, the maps we seen on TV showing the effects of a hurricane on the land in real time can be used to determine what resources are needed in each location, how to prioritize relief aid and reconstruction, and what key points in the transportation network are broken. For pandemics of any kind, knowing where it started is vital.

"All this you can get from maps, but if they're on paper, we don't have a chance of responding in time. (With GIS technology) we now have the essential capability, and it's being used for every damned thing you can think of! The greatest block to the uptake of the technology is the lack of people — we are at least 3000 people short each year of people trained in GIS."

It's not for lack of trying. Every school in Ontario has a free GIS software package, with data supplied by DMTI Spatial, a Markham, Ontario company specializing in the business application of GIS, but the subject often doesn't get taught because of a shortage of trained teachers. "One day of GIS training in Ontario makes you a specialist," Dr. Tomlinson grumbled. "That's abominable!"

Despite the lack of people trained in GIS, he thinks the benefits of the technology, such as making it possible to market products in likely areas with pinpoint accuracy, will make it irresistible to businesses. "Within five years, if you go into a company and it's not using GIS, it will be considered a little old-fashioned," he said. "That's what our kids are going out into."

And the Father of GIS wants them to be ready.

Festival of Maps - Chicago - November 2007

By David L. Jones with contributions from Alberta Auringer Wood

November 2007 was truly map time in Chicago. The City was hosting the Festival of Maps (www.festivalofmaps.com) a cartographic extravaganza, a 'citywide collaboration of more then 30 cultural and scientific organizations unified with the theme of Exploration, Discovery, and Mapping' [1] running from November 2007 through most of 2008. Included in the exhibitions and programs were institutions such as the Adler Planetarium, Chicago Architectural Foundation, Art Institute of Chicago, the Field Museum, the Newberry Library, Encyclopedia Britannica, University of Chicago Oriental Institute, and many more. Special events scheduled for this period included the Sixteenth Kenneth Nebenzahl, Jr., Lectures on the History of Cartography (Nov 8 - 10, 2007) and the 46th Annual Meeting of the Society for the History of Discoveries (Nov. 11 - 13, 2007).

The major exhibit, ***Maps: Finding Our Place in the World,*** jointly organized by the Field Museum and the Newberry Library and hosted by the Field Museum offered an overview of the role of mapmakers in human culture and history from ancient times to the present day as well as into the future: http://www.fieldmuseum.org/maps/highlights.asp This is a collection of over 100 of the world's greatest maps, brought together from an international array of collections. From Babylon, Egypt and Rome through the Islamic Empire to the Renaissance, with Ptolemaic maps right up to the present, and including examples from or of all the continents and even of imaginary places.

A companion book: **Maps: Finding Our Place in the World** by James R. Ackerman and Robert W. Karrow was produced to accompany the exhibit at the Field Museum.[2] The list of exhibited maps is found on the exhibition website (above).

The Newberry Library also contributed two exhibitions. Relatively modern maps were featured in ***Mapping Manifest Destiny: Chicago and the American West*** (http://www.newberry.org/exhibits/west.html) examines the role of maps in envisioning the American West — documenting its terrain, fixing its boundaries, exploiting its natural resources, and developing its land. The exhibition, featuring more than 60 historic maps and views from the 16th through the 20th centuries, explored the range of motivations for creating, distributing, and using maps of the American West. [3] Truly ancient maps were the subject in the other exhibit of ***Ptolemy's Geography and Renaissance Mapmakers*** (http://www.newberry.org/exhibits/ptolemy.html). This exhibition drew on the Library's internationally renowned collection of printed editions of Ptolemy's Geography. The 37 original historic maps and texts on display showed how Renaissance scholars, artists, and craftsmen transformed Ptolemy's work from an authoritative ancient treatise, to a proto-modern atlas, and finally to a revered historical source.[4]

The Sixteenth Kenneth Nebenzahl, Jr., Lectures on the History of Cartography and the ***48th Annual Meeting of the Society for the History of Discoveries*** were both hosted by the Newberry Library and attended by about 150 scholars and cartophiles, Although not everyone attended both meetings, about half did. It was an interesting and eclectic group of scholars, map collectors, dealers, librarians, curators, etc.

The Nebenzahl Lectures' theme this year was **Ancient Perspectives: Maps and their Place in Mesopotamia, Egypt, Greece and Rome** (http://www.newberry.org/programs/CartographyF07.html#nebenzahl) a program organized by Richard Talber of the University of North Carolina at Chapel Hill. Seven papers examined topics ranging from urban to cosmological mapping and recent trends in the study of the mapmaking by the ancient cultures ringing the Mediterranean Sea. A pervasive theme was the need to question earlier 'sources' and critically assess the purposes and bias that may lie in early cartography. The topics of the individual papers included: an analysis by Alexander Jones (University of Toronto) of Ptolemy's scientific/analytical method that he applied to many other fields of study as well as geography; papers by Francesca Rochberg (University of California – Berkeley) and David O'Connor (New York University) on terrestrial and celestial imagery in Mesopotamia and Egypt respectively; a report by Michael Lewis (University of Hull, UK) on Greek and Roman surveying methods and instruments and the recreation and testing of the efficacy of these instruments and methods; an up-date by Richard Talbert on the research on the Forma urbis romae (of which some fragments are in the exhibit at the Field Museum) and the Peutinger map; and a paper by Benet Salway (University College, London) on the analysis of geographic names in Roman textual geographic material. A special paper by Tony Campbell (former Map Librarian, British Library) titled Holding the History of Cartography Together: Words, People and Resources closed the Lectures with reflections on the current state of the history of cartography and served as a transition to the SHD.

The 48th Annual meeting of the Society for the History of Discoveries followed the Nebenzahl Lectures. (http://www.sochistdisc.org/annual_meetings/annual_2007/annual_meeting_2007.htm). Again about 150 people attended, but a slightly different mix, with more collectors, dealers, and independent researchers. This was a two-day program of presentations focusing on the history of discoveries and exploration and in particular related to mapping. Abstracts of the papers are available at:

http://www.sochistdisc.org/annualmeetings/annual2007/annual_meeting_2007abstracts.htm.

Presentations ranged from: biographical research on lesser known explorers, e.g. Rev. Thomas Wakefield (19th C Kenya); social interaction on exploration ships amongst sailors and between them and Polynesians; evolution of imagery of cannibalism on maps of the new world; reporting expectations and requirements of journals by sponsors of exploratory ventures; examination

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The Newberry Library also contributed two exhibitions. Relatively modern maps were featured in ***Mapping Manifest Destiny: Chicago and the American West*** (http://www.newberry.org/exhibits/west.html) examines the role of maps in envisioning the American West — documenting its terrain, fixing its boundaries, exploiting its natural resources, and developing its land. The exhibition, featuring more than 60 historic maps and views from the 16th through the 20th centuries, explored the range of motivations for creating, distributing, and using maps of the American West. [3] Truly ancient maps were the subject in the other exhibit of ***Ptolemy's Geography and Renaissance Mapmakers*** (http://www.newberry.org/exhibits/ptolemy.html). This exhibition drew on the Library's internationally renowned collection of printed editions of Ptolemy's Geography. The 37 original historic maps and texts on display showed how Renaissance scholars, artists, and craftsmen transformed Ptolemy's work from an authoritative ancient treatise, to a proto-modern atlas, and finally to a revered historical source.[4]

The Sixteenth Kenneth Nebenzahl, Jr., Lectures on the History of Cartography and the ***48th Annual Meeting of the Society for the History of Discoveries*** were both hosted by the Newberry Library and attended by about 150 scholars and cartophiles, Although not everyone attended both meetings, about half did. It was an interesting and eclectic group of scholars, map collectors, dealers, librarians, curators, etc.

The Nebenzahl Lectures' theme this year was **Ancient Perspectives: Maps and their Place in Mesopotamia, Egypt, Greece and Rome** (http://www.newberry.org/programs/CartographyF07.html#nebenzahl) a program organized by Richard Talber of the University of North Carolina at Chapel Hill. Seven papers examined topics ranging from urban to cosmological mapping and recent trends in the study of the mapmaking by the ancient cultures ringing the Mediterranean Sea. A pervasive theme was the need to question earlier 'sources' and critically assess the purposes and bias that may lie in early cartography. The topics of the individual papers included: an analysis by Alexander Jones (University of Toronto) of Ptolemy's scientific/analytical method that he applied to many other fields of study as well as geography; papers by Francesca Rochberg (University of California – Berkeley) and David O'Connor (New York University) on terrestrial and celestial imagery in Mesopotamia and Egypt respectively; a report by Michael Lewis (University of Hull, UK) on Greek and Roman surveying methods and instruments and the recreation and testing of the efficacy of these instruments and methods; an up-date by Richard Talbert on the research on the Forma urbis romae (of which some fragments are in the exhibit at the Field Museum) and the Peutinger map; and a paper by Benet Salway (University College, London) on the analysis of geographic names in Roman textual geographic material. A special paper by Tony Campbell (former Map Librarian, British Library) titled Holding the History of Cartography Together: Words, People and Resources closed the Lectures with reflections on the current state of the history of cartography and served as a transition to the SHD.

The 48th Annual meeting of the Society for the History of Discoveries followed the Nebenzahl Lectures. (http://www.sochistdisc.org/annual_meetings/annual_2007/annual_meeting_2007.htm). Again about 150 people attended, but a slightly different mix, with more collectors, dealers, and independent researchers. This was a two-day program of presentations focusing on the history of discoveries and exploration and in particular related to mapping. Abstracts of the papers are available at:

http://www.sochistdisc.org/annualmeetings/annual2007/annual_meeting_2007abstracts.htm.

Presentations ranged from: biographical research on lesser known explorers, e.g. Rev. Thomas Wakefield (19th C Kenya); social interaction on exploration ships amongst sailors and between them and Polynesians; evolution of imagery of cannibalism on maps of the new world; reporting expectations and requirements of journals by sponsors of exploratory ventures; examination

of the projections used on portolan charts; relationships between early 16th C maps of Waldseemuller and Ruysch; to name but a few. Sarah Tyacke (former head of the UK National Archives and past President of the Hakluyt Society) was the keynote speaker expounding on "Discovering maps and texts anew: the world before Empire". Among the special presentations was that by St. John's native Antony Adler on "Uncharted Seas: European Polynesian Encounters in the Age of Discoveries". This was the prize winner of the 2007 SHD essay contest. Tony Campbell also gave the Distinguished Speaker Presentation as part of this meeting discussing the discovering of maps unexpectedly in interesting places.

The Society for the History of Discoveries (http://www.sochistdisc.org/) is an interesting and lively group with broad interests, - well worth checking out. Their next meeting will be October 5 - 7, 2008 in Arlington, Texas, in conjunction with the Virginia Garrett Lectures on the History of Cartography and a joint meeting of the Philip Lee Philips Society and the Texas Map Society. Among the members of its Council are two Canadians: Joyce Lorimer (Wilfred Laurier University) and Alberta Auringer Wood (Memorial University of Newfoundland - retired).

These meetings had international participation with U.S.A., Canada, U.K., Switzerland, Italy, Portugal, and Guatemala all being represented. The Canadian contingent included Antony Adler (now a student at the University of Washington), Ed Dahl, Richard Davis, Donald & Mary Hogarth, Anthony Jones, David Jones, Joyce Lorimer; Mary Murphy, and Cliff & Alberta Wood.

The combination of these presentations and the many map exhibits made this a unique week for anyone interested in the history of cartography, discoveries, and ancient and unique maps.

1.http://www.festivalofmaps.com/index.aspx#page=about

2. Akerman, James R. and Robert W. Karrow, Jr., editors Maps: Finding Our Place in the World. Foreword by John McCarter. Co-published with the Field Museum. 36 p., 198 color plates. 8-1/2 x 11 2007. Cloth $55.00 ISBN: 978-0-226-01075-5 (ISBN-10: 0-226-01075-9) Fall 2007

3.http://www.newberry.org/exhibits/west.html

4. http://www.newberry.org/exhibits/ptolemy.html

November 19, 2007

* Submitted to ACMLA Bulletin, Cartographica, and Cartouche

Survey on PayPal

Sent to CCA list on October 5 and had 54 responses by October 18.

Questions and Results were:

Would you use the PayPal service to pay your membership dues for the CCA if it were available?
Yes 12 or No 39 No response 2 Not sure 1

Do you feel that payment options already offered are sufficient (Cheque, Visa, Mastercard)?
Yes 50 or No 3 No response 1

Are other methods of payment needed?
Yes 6 or No 45 No response 3

If Yes, specify method --

- an online payment method would be easier and faster for many
- some type of on-line payment method would be good It doesn't necessarily have to be PayPal.
- Yes, they are sufficient, but more flexibility would be great.
- I suspect an online option would be useful for many people even though I find the current method works ok for me.
- "needed" might be a bit strong, but . . . I'd really appreciate DiscoverCard as an option.
- Could be enhanced by PayPal, if it isn't prohibitively expensive

As a result of the responses to this survey, the CCA Executive decided not to initiate using PayPal, but will investigate whether paying via credit card is a viable option for the association to use.

Alberta Auringer Wood
CCA Secretary

Cartography and Art - Art and Cartography

Symposium in Vienna, Austria

January 31 to February 2, 2008

University of Technology, Academy of Fine Arts, and Kunsthalle Wien

Registration forms and Preliminary Program can be found at the following website:

http://cartography.tuwien.ac.at/artandcartography

SDH 2008 - The 13th International Symposium on Spatial Data Handling

23rd to 25th June, 2008 - Montpellier, France

CONFERENCE WEB SITE: http://sdh-sageo.teledetection.fr

The International Symposium on Spatial Data Handling (SDH) is the premier international research forum for Geographic Information Science. It commenced in 1984, in Zurich, Switzerland, organized by the International Geographical Union Commission. The conference is run biannually and is coming to Montpellier (South of France) in 2008.

Any researcher interested in presenting a paper is invited to submit a full text paper (~ 5000 words) before the 15th January 2008. All papers will be subject to full review by the International Programme Committee, and, if accepted, published in the conference proceedings (see http://sdh-sageo.teledetection.fr for accurate submission information).

DEADLINES :

- Submission of Full Text Papers : 15th January 2008
- Notification of Acceptance and Revisions : 22nd February 2008
- Submission of Final Manuscript : 14th March 2008
- Conference : 23rd – 25th June 2008

TOPICS :

Papers can be in any area of Geographical Information Science, which is to say in the theoretical areas that address the working of and work with Geographical Information Systems. Papers might be related to a large range of topics, of which the following list is illustrative not prescriptive, including:

-Uncertainty in spatial information: How it is conceptualised, Described, Modelled, and Propagated.

-User interfaces: Usability testing, Interface design, and Visual languages.

-Scale issues of geographical information: Problems with scale, Exploiting scale, Multiscale analysis and description.

-Databases: Extending Geographical database structures, Data Models, Data fusion, Data base description and ontology, Interoperability.

-Dissemination of Geographical Data: Spatial Data Infrastructures, Web Access, Watermarking

-Visualisation: New and traditional approaches to visualisation and mapping, Generalisation, Symbolisation,

-Terrain and surface modelling: Interpolation, Modelling, Analysing, and Extracting Features

-Spatial Modelling: The use of spatial data in urban, regional, transport and environmental modelling

-Remote Sensing: The conversion of RS data to information, Novel algorithms, and Integration and Fusion of data.

-Spatial Cognition: Human understanding of space, Models of space, Wayfinding,

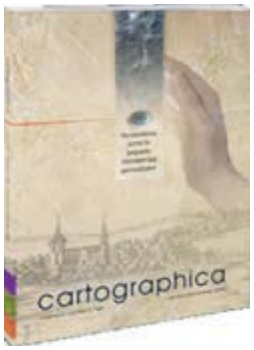
-Social issues of GIScience theory and GISystem use

-Critical approaches to and evaluations of the use of GISystems in applications

-Social, Economic, Legal and Policy issues of Geodata and GISystems use

CONFERENCE WEB SITE: http://sdh-sageo.teledetection.fr

Cartographica What's coming in the next issue?



Volume 43, Number 1 of the journal has four articles that many readers will find interesting. In no particular order, they are:

Étienne Rivard. "Colonial Cartography of Canadian Margins: Cultural Encounters and the Idea of Métissage." This article presents an interesting historical perspective on new cultural spaces created between Aboriginal and European societies as portrayed on historical Canadian maps.

Wen Lin and Rina Ghose. "Complexities in Sustainable Provision of GIS for Urban Grassroots Organizations." Lin and Ghose discuss the Data Center program in Milwaukee, WI in which public participation GIS has increased to advance more equitable access to, and more inclusive use of, GIS among resource poor and traditionally marginalized community-based organizations.

David Brosset, Christophe Claramunt, and Eric Saux. "Wayfinding in Natural and Urban Environments: A Comparative Study." The research presented in this paper introduces an ontological and verbal-based modeling of human navigation in a natural context. The approach is experimental and applied to a foot orienteering race which has the advantage of being semantically rich and combined with cartographic support.

Daniel Sui and James B. Holt. "Visualizing and Analyzing Public Health Data Using Value-by-Area Cartograms: Toward to New Synthetic Framework." Although the first use of cartograms for visualizing public health data can be traced back to the late 1920s, there still exists no systematic study on the effectiveness of this non-conventional cartographic technique in public health. Situated in the literature of three dominating paradigms regarding the nature of maps, this paper develops a comprehensive framework for a better understanding of cartograms in public health.

And, last but not least, you will meet the new Editor of Cartographica, Dr. Jeremy Crampton, who sets out his approach for taking the journal forward.

Digital magnetic map goes global

Contributed through CCA ListServ by G.Stark

(Excerpted from www.news.bbc.co.uk)

The first global map of magnetic peculiarities - or anomalies - on Earth has been assembled by an international team of researchers. Magnetic anomalies are caused by differences in the magnetization of the rocks in the Earth's crust.

As well as revealing ore deposits, magnetic anomalies can also show areas of ground water and sea weakness zones. It is a useful tool for geologists and geophysics, as well as a teaching resource. Many years of negotiation were required to obtain confidential data from governments and institutes.

Scientists hope to use the map to learn more about the geological composition of our planet.

The World Digital Magnetic Anomaly Map (WDMAM) is available through the Commission for the Geological Map of the World.

Visit http://ccgm.free.fr/index_gb.html for more information.

Top Ten Classic Articles in Cartographica now Free Online

Jeremy W. Crampton
Editor, Cartographica

The top ten most-cited articles in the history of Cartographica are now freely available online at http://utpjournals.metapress.com/content/120327/. Also available by subscription is the complete back file of articles going back to issue 1:1, when Cartographica was known as The Cartographer. To register for a free trial of Cartographica Online, contact journals@utpress.utoronto.ca.

The papers represent a wide range of cartographic interests, and include work by many influential writers. The most-cited article is a well known piece by Brian Harley, often credited with changing the way we think about maps. Harley also has an entry at the number 8 position on maps and ethics. Other notable authors include Mark Monmonier in a piece which helped establish the analysis of interactive and animated mapping, and G. Langran and Nik Chrisman's article on temporal data.

Several authors including Mark Kumler and James Carter focus on the representation of elevation data, presciently foreshadowing today's interest in virtual globes and terrain representation. The deep ties between cartography and GIS are also clear in work by David Mark and Donna Peuquet.

The listing was created using Elsevier's Scopus database, and is current as of December 2007.

In order of citation these classic articles are:

1. Harley, J.B. 1989. Deconstructing the Map. Cartographica 26(2), pp. 1-20.
   URL: http://utpjournals.metapress.com/content/e635782717579t53/
   DOI: http://dx.doi.org/10.3138/E635-7827-1757-9T53

2. Mark, D.M. 1984. Automated Detection of Drainage Networks From Digital Elevation Models. Cartographica 21 (2-3), pp. 168-178.
   URL: http://utpjournals.metapress.com/content/10lm44356310251r/
   DOI: http://dx.doi.org/10.3138/10LM-4435-6310-251R

3. Langran, G., and Chrisman, N.R. 1988. A Framework for Temporal Geographic Information. Cartographica, 25(3), pp. 1-14.
   URL: http://utpjournals.metapress.com/content/k877727322385q6v/
   DOI: http://dx.doi.org/10.3138/K877-7273-2238-5Q6V

4. Peuquet, D.J. 1984. A Conceptual Framework and Comparison of Spatial Data Models. Cartographica, 21(4), pp. 66-113.
   URL: http://utpjournals.metapress.com/content/d794n214221r23r5/
   DOI: http://dx.doi.org/10.3138/D794-N214-221R-23R5

5. Mark, D.M. and Csillag, F. 1989. The Nature of Boundaries on "Area Class" Maps. Cartographica, 26(1), pp. 65-78.
   URL: http://utpjournals.metapress.com/content/d2353262062x4472/
   DOI: http://dx.doi.org/10.3138/D235-3262-062X-4472

6. Monmonier, M. 1990. Strategies for the Visualization of Geographic Time-Series Data. Cartographica, 27(1), pp. 30-45.
   URL: http://utpjournals.metapress.com/content/u558h73765778u31/
   DOI: http://dx.doi.org/10.3138/U558-H737-6577-8U31

7. Blakemore, M. 1984. Generalization and Error in Spatial Data Bases. Cartographica, 21 (2-3), pp. 131-139.
   URL: http://utpjournals.metapress.com/content/100513mg26272552/
   DOI: http://dx.doi.org/10.3138/1005-13MG-2627-2552

8. Harley, J.B. 1990. Cartography, Ethics and Social Theory. Cartographica, 27(2), pp. 1-23.
   URL: http://utpjournals.metapress.com/content/c21115120603xj14/
   DOI: http://dx.doi.org/10.3138/C211-1512-0603-XJ14

9. Carter, J.R. 1992. The Effect of Spatial Precision on the Calculation of Slope and Aspect Using Gridded DEMs. Cartographica, 29(1), pp. 22-34.
   URL: http://utpjournals.metapress.com/content/aj3534h3524k0685/
   DOI: http://dx.doi.org/10.3138/AJ35-34H3-524K-0685

10. Kumler, M.P. 1994. An Intensive Comparison of Triangulated Irregular Networks (TINs) and Digital Elevation Models (DEMs). Cartographica, 31(2), pp. 1-99.
    URL: http://utpjournals.metapress.com/content/tm5674k7qh1t8575/
    DOI: http://dx.doi.org/10.3138/TM56-74K7-QH1T-8575

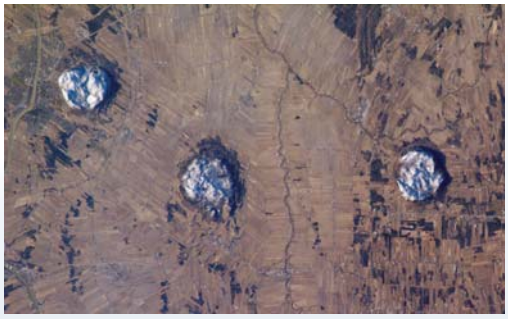
Where is this... what is this?

Where is this? What is this?

Send your answers to the co-editors Barb or Lori (address is on the back page)

by **March 14th, 2008.**

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



Congratulations to Morgan Hite (Smithers, BC) for correctly identifying both Where and What from Issue #67.

Answer: Montregian Hills (Mont Saint Hilaire, Mont Rougemont, and Mont Yamaska), east of Montreal, Quebec.

Morgan wins a CCA t-shirt.

Congratulations... that was a tough one!

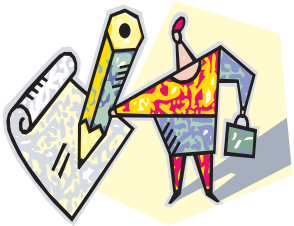
Upcoming Events and Meetings

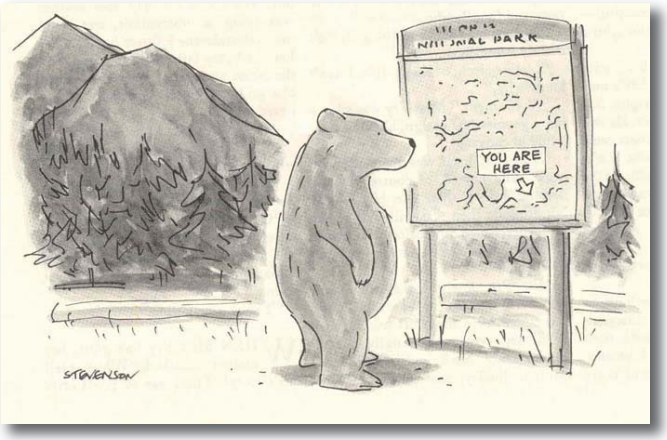
February 15-17, 2008 - Fernie, BC 1st Conference of Spatial Knowledge and Information Canada. Spatial Knowledge and Information Canada brings together researchers of geo-spatial information who live and work in Canada. More information, abstract submission, and registration can be found at http://rose.geog.mcgill.ca/ski

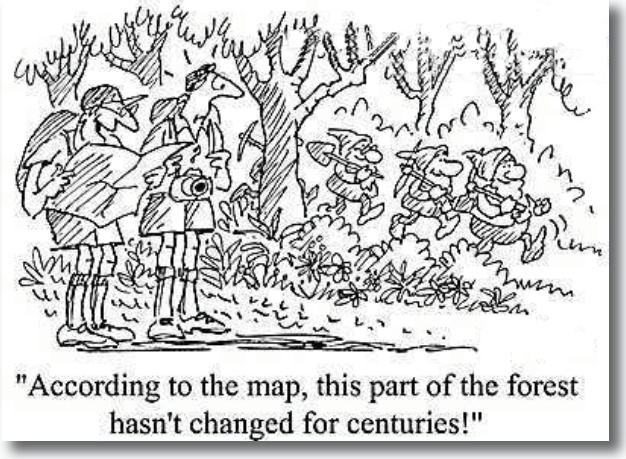
May 4 - 7, 2008 - Victoria, BC 3rd Community-University Exposition (CUexpo 2008). CUexpo 2008 follows CUexpo 2003, which took place in Saskatoon and CUexpo 2005, hosted by Winnipeg. Full details of presentation options and the full scope of the exposition can be found at the CUexpo 2008 website: www.cuexpo08.ca/index.html

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







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 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 intéresés 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$) est ajouté pour couvrir les frais postaux aux membres américains (ÉU) et de 10$ (cdn$) pour les membres outremers.

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

visit us on the web at:
www.cca-acc.org

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CARTOUCHE est publié trimestriellement par l'Association canadienne de cartographie. Tous les membres peuvent soumettre des articles à l'éditeur du bulletin (voir coordonnées ci-dessous). Les articles et annonces soumis sont sujets à l'approbation de la rédaction. L'éditeur du bulletin ne peut être tenu responsable pour des erreurs de compilation ou la perte d'article. Des efforts particuliers sont déployés pour éviter de tels problèmes. Les opinions exprimées dans le cadre des éditoriaux, des articles et des lettres publiés dans le bulletin, ne reflètent pas nécessairement celles de l'Association canadienne de cartographie. L'Association canadienne de cartographie remercie particulièrement le Conseil de recherches en sciences humaines du Canada pour son apport financier.

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