ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES
BULLETIN

ACMLA NEWS

CARTO 2019 McMaster University, Hamilton: June 11-14, 2019

Bonjour/Hello ACMLA members, friends and colleagues,

On behalf of the ACMLA Executive, we are pleased to announce that McMaster University will host the 53rd annual CARTO conference of the Association of Canadian Map Libraries and Archives (ACMLA) in Hamilton, Ontario from **June 11-14, 2019.**

Long known as one of Canada's industrial powerhouses, the City of Hamilton has transformed over the past few decades to become a centre of remarkable natural and cultural diversity.

Straddling the Niagara Escarpment (a UNESCO World Biosphere Reserve), Hamilton is home to expansive conservation areas, recreational trails, and over 100 waterfalls within its limits.

Bounded by these natural areas is an urban environment with flourishing art, music, and food scenes that offer something for everyone.

Nestled against Cootes Paradise and the conservation lands of the Royal Botanical Gardens, McMaster University exemplifies Hamilton's balance of urban and natural environments.

As the home of ACMLA hall of famers Kate Donkin and Cathy Moulder, the McMaster University Library has a long history of involvement with ACMLA and the CARTO Conference.

We're very excited to bring CARTO to McMaster for the first time--a long overdue event.

We will need folks to be on the **Local Arrangements Committee**, (please contact Jay Brodeur brodeujj@mcmaster.ca if you can work on the local arrangements) and a **Program Committee** to work together to plan the theme, sessions and guest speakers for the event (contact daniel Brendle-Moczuk danielbm@uvic.ca if interested)

Community participation in planning committees is critical to the success of the conference, so please consider being a part of one of the committees.

Chers membres de l'ACACC, amis et collègues,

Au nom de l'Exécutif de l'ACACC, nous sommes heureux d'annoncer le 53e CARTO congrèsannuel de l'Association des cartothèques et archives cartographiques du Canada (ACACC) organisé par l'Université McMaster, du **11 au 14 juin 2019**, à Hamilton en Ontario.

Nous vous invitons à participer au processus de la planification du congrès en devenant un membre du comité de programmation ou du comité d'organisation locale.

Les membres du comité de programmation travailleront ensemble pour planifier le thème, les sessions et les conférenciers invités, et les membres du comité d'organisation organiseront les logistiques et les préparations locales.

Les deux comités travailleront en collaboration afin de faire de cet événement un succès.

La participation de la communauté aux comités de planification est essentielle au succès de la conférence, donc veuillez considérer faire partie d'un de ces comités.

Pour d'information se joindre **comité d'organisation locale**, veuillez communiquer avec Jay Brodeur brodeujj@mcmaster.ca. Pour d'information se joindre **comité de programmation**, veuillez communiquer avec daniel Brendle-Moczuk danielbm@uvic.ca

Au nom de l'Exécutif de l'ACACC / On behalf of the ACMLA Executive,

daniel Brendle-Moczuk, ACACC/ACMLA Président 2018-2019

ACMLA/ACACC - Annual General Meeting - May 30th, 2018

Time: 12:15 – 13:45

Location: Concordia University, **Molson Building 3.435**

Attendance

Sign-in sheet: https://goo.gl/D3abyn

Additional attendees not recorded in sign-in sheet:

- Rebecca Bartlett
- daniel Brendle-Moczuk
- Jay Brodeur
- Marcel Fortin

Opening Remarks (MF)

- Questions/comments welcome in either official language

Approval of Agenda

- Proposal to revise agenda to discuss
  - Budget
  - Association and names task force
  - Nominations committee
  - Discussion on the future of the ACMLA-ACACC

Business Arising

- Introductions around the room

Treasurer's Report

2017/2018 financial report

- Conference - small profit
- Organization memberships ended in 2017 with conversion to online publication
  - Publishing expenses decreased, as well
- Continued loss of funds on an annual basis

2018 Interim Financial Report & Projected 2018 budget

- Budget looks promising at this point. Projecting a small loss by end of year

Name Change Committee, Nominations, Future of the ACMLA-ACACC

Positive response to Name Change Committee's work--appetite for exploring a name change

- Conversations moved to those surrounding the structure/operation of the association

Call for Executive nominations - Nomination committee

- DY: Decided to put out a call to the community--no cajoling or targeted recruiting. No volunteers came forward for any position.
- DB-M: Could nominate at the meeting, but is this just perpetuating the same process
- MF: Not an Exec decision to determine what the Association looks like going forward. It's a conversation for the entire community
    - There are many other associations that our members belong to. What's ACMLA-ACACC's place in this?
    - What are our membership fees covering? Currently, much of it goes to sustaining the membership management software

RB gave overview of main expenses going forward

- Member ($1500) and honoraria for publishing & web
- MF: Money exists in accounts — how/where to use this money?
    - Can we create a new Association that is more flexible/nimble, in order to better facilitate conversation?
    - Association that is built around the conference?
    - Call on members to form a group to look at bylaws and consider options for restructuring
- DY: Potential options that have been discussed
    - RB: Code4Lib / Access: meetings/conferences are run (and paid for) by the hosting institution--these groups are thinking of becoming an official organization for financial purposes.
- DB-M: It appears folks strongly support and value the Association, but the administration of the organization feels like a burden.
    - DY: Core issue is that people don't participate on executive
    - MF: Lack of participation not necessarily an indicator of lack of interest/potential value of the Association. Lots of relevant activity on lists such as DLI / IASSIST.
    - MF: Fear that Association doesn't work the way that it should.
- JJ (WAML): Similar conversations within WAML.
    - Membership has shrunk over time, as people's' job responsibilities have shifted. But still seem to have strong engagement in the community.
    - In WAML: When structure gets in the way, they ignore them and focus on projects that they want to tackle
    - DB-M: WAML's membership money used to fund scholarships (diversity + up-and-coming) — nurturing future generation

- SS-P: A lot of restructuring and reformulation of people's positions, which leaves them burdened. Difficult to add more onto her plate (e.g. providing translation).
- SB: Is participating in Executive something that can go on a CV as part of a permanent record?
    - At Francophone Universities, it doesn't count b/c of Socio-Economic delays
- BZ: When she joined, much of membership was from governments and other organizations
    - BZ: Members of the public have the perception that we're for academic libraries / librarians only — perception problem
    - MF: People in LAC has expressed interest in re-joining
- CB: As new member, enjoys the information in *Bulletin*, in conference; would like to see more discussion on the list.
    - Who are we? Who is this community? We're people who are helping people use geospatial data.
    - DY: data/geospatial data/GIS is a big mish-mash.
    - MF: Working in the confluence of maps, (geospatial) data, GIS
    - RO: Library assistants/technicians think they cannot join.
    - MF: If they do join, what do they think they get out of membership?
    - RO: Possible to have more professional development opportunities - webinars
        - LT - but this has been something we've wanted to do but have difficulty getting it to happen
    - MF: Difficulty is that the current model puts all the pressure on the Executive to execute and sustain. Why not spread that out to the membership?
    - DJ: Minimum requirements for Exec: Manage money, chair, incoming chair
    - LT: Probably not technically difficult to knock extra positions from the bylaws
    - MF: Exec could get rid of the entire nomination process
    - FB: Would be willing to participate in initiatives, but unsure about being a member of the Exec and the responsibilities it would involve.
    - DJ: Without a name change, it's difficult to engage new audiences
    - MF: Are we ready to be so flexible that awards are given when the Exec decides to do so / recruiting be done without official call for nominations?
    - DY: Consider ourselves within a broader community of data professionals (including IASSIST/DLI, etc.).
    - SH: Careful of using DLI as an exemplar--it's supported behind the scenes by $$, people, political will.
    - LT: Keep focus on (geospatial) data professionals/users, with focus on data and not on software, etc.
        - MF: If we changed our name would individuals from broader community come?

    - FB: run the risk of competing with IASSIST if we broaden too much, safer to stick to GIS
    - SB: Agrees with Francine, but take away the word libraries might be a better way of seeing the broadening. It's about information facilitators
    - MF: many presentations at this conference combine both data & maps so there is already overlap
    - CB: Sounds as though we want to keep a community. Why don't we look at the structure and make it less formal, and also continue with the name change. We do need a name and a face to negotiate with government (e.g. for the map digitization project). Having a professional affiliation is helpful with professional reporting at home institution.
    - SB: changing the name would help attract members.
    - SH: joined as a library assistant and was a member for 10-15 years before becoming a librarian - was told it was important to be a part of it.
    - DJ: Imagine a world where there are no more dues to belong. Could add some to the conference to support operations--CARTO is still a very high value conference, so some costs can be included.
    - DBM: Giving free membership to those new in the profession might encourage growth
    - Proposed Budget
- RB: Membership software still included — incurred late-Dec / early-Jan. Could end subscription and potentially membership dues before that time.
- Honoraria fees are noticeably large--could look to reduce those to save costs.

Next Steps

- Name change committee to bring forward a vote
  Call for volunteers to help restructure:
    - Francine Berish; Siobhan Hanratty;
- Send a note to the list to summarize developments and next steps.

Meeting adjourned at 13:40

Relevant Documents:

https://acmla-acacc.ca/francais/docs/ACACC_reglement_administratif.pdf (fr)

https://acmla-acacc.ca/bylaws.php (en)

https://acmla-acacc.ca/docs/ACMLA_rules_of_procedure.pdf (en)

https://acmla-acacc.ca/francais/docs/ACACC_regles_procedure.pdf (fr)

Association of Canadian Map Libraries and Archives Awards

The ACMLA Awards Committee is responsible for three awards given by the Association. We invite nominations for these awards and encourage members to participate in the selection of the awards for outstanding accomplishments in our field.

ACMLA Honours Award

The Awards Committee invites nominations for the ACMLA Honours Award. According to the guidelines for the award, the nominee should be a person who has made an outstanding contribution in the field of map/GIS librarianship. The contribution may either be for a specific activity or for general services and contributions such as continued membership in the Association with active participation either as an executive officer, committee chairperson, or committee member. Normally, membership in ACMLA is a prerequisite; however, that does not preclude considering outstanding non-members.
Deadline : 30 April 2019

ACMLA Cathy Moulder Paper Award

To be eligible for the Paper Award, which carries a $200 monetary prize, a feature article of at least three pages in length, by one or more authors, must have appeared the ACMLA Bulletin during 2018. We are looking for articles that make a solid contribution to map librarianship, including carto bibliographies. Originality, uniqueness of subject matter and depth of research will be taken into consideration.
Deadline : 30 April 2019

ACMLA Student Paper Award

As a reminder, the ACMLA Awards Committee would like you to encourage students to submit their papers for the Student Paper Award. The Association of Canadian Map Libraries and Archives encourages and supports activities which further the awareness, use and understanding of geographic information by Canadians. To this end, post- secondary students are encouraged to submit a paper for the ACMLA Student Paper Award competition.

The Student Paper Award will consist of a prize of $250 and free membership in the Association for one year. The award includes an invitation to present the winning paper at the Annual Conference. The Association will waive registration fees and provide a travel stipend of up to $250. The award will normally be given on an annual basis to a student from Canada or studying in Canada currently enrolled in a post-secondary institution (college or university). The essay will be original and unpublished and of no more than 3000 words. Primary consideration for the award will be given to the essay's originality and its contribution to new knowledge and insight. Other considerations include the author's demonstration of the relevance of the subject, the quality of the presentation and documentation, and the literary merits of the essay.
Deadline : 30 April 2019

For more complete details regarding the awards, please see the ACMLA Awards web page <http://acmla-acacc.ca/awards.php> or contact: Marcel Fortin, ACMLA Awards Committee, past-president@acmla-acacc.ca.

Prix de l'ACACC

Le Comité des prix et mérites ACACC est responsable de trois prix décernés par l'Association. Nous invitons les nominations pour ces prix et encourager les membres à participer à la sélection des prix pour réalisations exceptionnelles dans notre domaine.

Prix d'excellence de l'ACACC

Le comité des prix et mérites invite les membres de l'ACACC à soumettre la candidature du membre qui, à leurs avis, est admissible au Prix d'excellence. Selon les régles du concours, l'heureux(se) élu(e) sera toute personne dont le nom a été retenue en vertu de sa participation considerable au développement de la profession de cartothécaire. Sa contribution peut se quantifier de différentes façons: activités particulières ou générales, participation soutenue au sein de l'Association en tant que membre d'autres comités. Bien que ce concours s'adresse surtout et avant tout aux adhérents de l'Association, cependant, non-adhérent exceptionneles peuvent être considéré pour le prix.
Date limite pour soumettre votre rédaction : le 30 avril 2019

Cathy Moulder ACMLA Prix d'essai

Selon les règles du concours, l'heureux(se) élu(e), qui recevra une bourse de 200 $, devra avoir publié un article d'au moins trois pages au sein d'une édition du Bulletin de l'ACACC en 2018. Le comité recherché principalement les articles ou les carto-bibliographies, qui alimentent et soutiennent le développement de la discipline Les articles seront jugés selon les critères d'originalité du thème choisi et du niveau de recherche.
Date limite pour soumettre votre rédaction : le 30 avril 2019

Prix annuel de l'ACACC pour article étudiant

Le comité des prix et mérites de l'ACACC tenons à vous pour encourager les étudiants à participer dans le Prix annuel de l'ACACC pour article étudiant. Le concours est admissible à toute personne originaire du Canada ou qui étudie au Canada et qui est présentement inscrite à un etablissement post-secondaire (collège ou université). Les articles doivent être rédigés durant l'année scolaire en cours.

Le prix annuel de l'ACACC pour article étudiant et se composera d'un montant de 250.00 $ et les droits d'adhésion à l'Association pour une année. Le prix inclus également une invitation présenter la communication lors de la conférence annuelle de l'ACACC tenue à la fin mai ou au début juin. Si le récipiendaire répond à cette invitation, il sera dispensé des frais d'inscription au congrès et l'Association lui allouera un montant jusqu' à 250.00$, avec recettes, pour couvrir les frais de voyage. L'article doit être original et ne jamais avoir été publié. Il doit comporter moins de 3 000 mots. Les juges porteront l'attention en premier lieu sur l'originalité du sujet et sur son apport en nouvelles connaissances et idées novatrices. L'article sera également jugé sur la façon don't l'auteur démontre la pertinence du sujet, sur la qualité générale de la présentation et de la documentation ainsi que sur la qualité littéraire du texte.
Date limite pour soumettre votre rédaction : le 30 avril 2019

Pour obtenir des détails complets sur les prix vous pouvez consulter les lignes directrices (en anglais) sur notre site web : http://www.acmla-acacc.ca/awards_committee.php ou contactez Marcel Fortin, Comité des prix et mérites de l'ACACC past-president@acmla-acacc.ca

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES
BULLETIN

Book Reviews

Edited by Sarah Simpkin

Books Reviewed in this Issue:

Historical Atlas of Early Railways
by Derek Hayes
Reviewed by Martin Chandler

Singapore's Permanent Territorial Revolution: Fifty Years in Fifty Maps
by Rodolphe De Koninck , Pham Thanh Hai, and Marc Girard
Reviewed by Virginia Pow

Historical Atlas of Early Railways

Martin Chandler
Brock University

Hayes, Derek. ***Historical Atlas of Early Railways.*** Madeira Park, BC: Douglas and McIntyre, Ltd., 2017. 320p. $49.95 CDN. ISBN 978-1-77162-175-5.

Derek Hayes' ***Historical Atlas of Early Railways*** is a bold tome, taking on a subject that has received similar attention in the past (see Brian Hollingsworth's *Atlas of the World's Railways*; O.S. Nock's *World Atlas of Railways*; and John Westwood's *Historical Atlas of World Railroads*; among others). However, Hayes' book has a fresh look, offering an overview of the history of rail travel beginning not with the Liverpool & Manchester Railway in 1830, but with wagons on rails dating back to the 15th century and earlier, including wooden and stone railways, as well as basic rutted tracks that served the same purpose: to keep a vehicle on a single track as it moved between destinations.

If this expanded idea of a railway makes you pause, Hayes will change your mind. Using historical maps coupled with contemporary art and images, as well as modern day photographs, he demonstrates the railways that were in use, the innovations that were used to overcome specific obstacles, and the development of the rail system into its modern form. While much of the focus is on Great Britain, Hayes' history spans from Mumbai (then Bombay), India to Pictou, Nova Scotia, and the work certainly presents as definitive a history of early railways as is possible at this moment.

As a text, Hayes' work walks the fine line between academic and popular non-fiction reading. It works, then, both for research purposes, offering historical insights into early railway use, as well

as for the avid railway reader looking to learn more. Hayes' writing is clear and concise, and remains interesting, even while discussing issues such as the taxation of horses in Wales or lime quarries at Ticknall. While it could not be called engrossing, it makes for a thoughtful and enlightening read, and I never found myself bored; any moments that could have been tedious were alleviated by the fine images included.

Derek Hayes brings a wealth of knowledge to the subject matter. His website (derekhayes.ca) notes that he trained as a geographer in England and British Columbia, and worked as a city planner with the Vancouver City Planning Department. He is an accomplished author of several related books, including *Historical Atlas of the Pacific Northwest, Historical Atlas of Canada, and Historical Atlas of the North America Railroad*.

The majority of the maps in the ***Historical Atlas of Early Railways*** are reproductions of historical maps. Each railway discussed also includes a small outline map with a single point showing the location. This is a simple and highly effective way to highlight the area being discussed, and each piece works together to strengthen the whole of the text.

The ***Historical Atlas of Early Railways*** is, overall, a beautifully-produced book with interesting, well-researched subject matter. It will appeal to many readers, and would make a fine addition to any map library.

Singapore's Permanent Territorial Revolution: Fifty Years in Fifty Maps

Virginia Pow
University of Alberta

De Koninck, Rodolphe, Pham Thanh Hai, and Marc Girard. ***Singapore's Permanent Territorial Revolution: Fifty Years in Fifty Maps***. Singapore: NUS Press, 2017. 168p. 130 colour maps, 33 b/w images, 16 b/w maps. $50 CND. ISBN 978-981-4722-35-3.

Telling the story of Singapore since it became a nation in 1965 has been done brilliantly through words, pictures and cartography in the work ***Singapore's Permanent Territorial Revolution: Fifty Years in Fifty Maps***. Often when maps are included into a work, they are used as an addition or an afterthought. This is not the case here, as the cartography has been wonderfully woven into the well-researched and written work and the maps create a beautiful visual impact on the pages. The book focuses on how Singapore has undergone a huge physical and social change over the last fifty years, with maps highlighting the changes in the relief and the hydrology of the island. As well, the maps show urban and rural areas, emphasizing that the changes have been vast and impactful across the island nation. The fifty very well done maps highlight such areas as the planning history of Singapore, geopolitics, ecology, demography, economics, social dynamics, and physical geography. One of my favorite maps was Map 6 - 'Stretching the Land' which highlights the extending coastline that has been reclaimed over a number of years. These changes can seem very small year to year, but are huge when highlighted over 50 years.

Singapore's Permanent Territorial Revolution: Fifty Years in Fifty Maps is also an amazing collaboration both internationally between Canada and Vietnam, but also between the cartographers Pham Thanh Hai (Cartographer and GIS Specialist at the Institute of Geological Sciences, Vietnam Academy of Science and Technology) and Marc Girard (Cartographer and GIS Specialist in the Department of Geography at the Université de Montreal) and Rodolphe De Koninck, a recently-retired Professor of Geography and Canada Chair of Asian Research at the Université de Montreal). The synthesis between the writing and the cartography is wonderfully done. I would recommend this book to all academic institutions, but would place a high need for it to be a part of cartography, Asian studies, urban planning and human geography collections.

From the Book Reviews Editor:

Thanks to those who submitted book reviews and to all who have expressed interest in reviewing! I'll continue to request review copies from publishers - but please let me know if you have read a book of interest to the ACMLA and would like to submit a review, and if you have any suggestions for titles/sources. Here are the review guidelines:

Review Format

1. Bibliographic Citation
This should include: author, title, edition, place of publication, publisher, date, number of pages, price (if known) and ISBN. Example:

Bussey, Ben and Spudis, Paul D. The Clementine Atlas of the Moon. Cambridge: Cambridge University Press, 2004. 316p. $80.00 US. ISBN 0-521-81528-2.

2. Content
The review should describe and critically evaluate the work. Typical review elements include: scope, purpose and content of the work; intended audience; writing style; background and authority of the author; how the work compares with other titles on the same subject; its usefulness as a research tool; any unique features; and its suitability for library collections.

The length of the review is at the reviewer's discretion, but should normally reflect the importance of the work. A typical review is about 500 words.

3. Your name, title, institutional affiliation, city and province/state

Editorial Policy

Opinions expressed in reviews are those of the reviewer, not of the ACMLA. The Reviews Editor may make minor edits, without communicating with the reviewer. Should the Editor determine that a major revision is required, she will contact the reviewer for discussion.

Sarah Simpkin
Reviews Editor

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES

BULLETIN

New Cartographic Resources

Cheryl Woods

MAPS

Belarus
Reise Know-How
2018
ISBN: 9783831774135

Tierra del Fuego
SIG Patagon
2018
ISBN: 9789563588491

Bangladesh-India: North-East – Bhutan
Nelles Verlag
2018
ISBN: 9783865742742

Bolivia - Paraguay
Nelles Verlag
2018
ISBN: 9783865740885

Cambodia - Angkor
Nelles Verlag
2018
ISBN: 9783865744814

Central Asia - Turkmenistan. Uzbekistan. Tajikistan. Kyrgyzstan. North Eastern Iran
Nelles Verlag
2018
ISBN: 9783865742988

Malaysia-East, Brunei - Indonesia: Kalimantan
Nelles Verlag
2018
ISBN: 9783865742827

Iran
Nelles Verlag
2018
ISBN: 9783865740489

Namibia – Botswana
Nelles Verlag
2018
ISBN: 9783865745217

Thailand
Nelles Verlag
2018
ISBN: 9783865741301

Slovenia
Reise Know-How
2018
ISBN: 9783831773480

Czech Republic
Reise Know-How
2018
ISBN: 9783831774111

Slovakia
Reise Know-How
2018
ISBN: 9783831774104

ATLASES

The Atlas Of Disease: Mapping Deadly Epidemics And Contagion From The Plague To The Zika Virus
White Lion Publishing
2018
ISBN: 9781781317907

Atlas of the European Campaign:1944-45
Osprey Publishing
2018
ISBN: 9781472826978

The Writer's Map: An Atlas of Imaginary Lands
University of Chicago Press
2018
ISBN: 9780226596631

Historical Atlas of Central Europe (3rd ed)
University of Toronto Press
2018
ISBN: 9781487523312
ISBN: 9781487530068 (eBook)

The Times Comprehensive Atlas of the World (15th ed)
Times Books
2018
ISBN: 9780008293383

Österreich, Straßen-Atlas 1:200.000
Freytag & Berndt
2018
ISBN: 9783707990706

Straßenatlas Deutschland 2019
GeoMap
2018
ISBN: 9783959650076

Historical Atlas of Hasidism
Princeton University Press
2018
ISBN: 9780691174013

GLOBE

Jupiter (18")
Real World Globes

BOOKS

Service-Oriented Mapping: Changing Paradigm in Map Production and Geoinformation Management
Döllner, Jürgen; Jobst, Markus; Schmitz, Peter (Eds.)
2019
ISBN: 9783319724331

Hyperspectral Remote Sensing
Kumar, Senthil, G.R.
2018
ISBN: 9789386546401

Geomatics in Natural Disasters
Ramasamy, S.M.; Kumanan, C.J.; Muthukumar, M. (Eds.)
2018
ISBN: 9788131609736

Mapping South Asian Diaspora : Recent Responses and Ruminations
Chaubey, Ajay; De, Asis (Eds.)
2018
ISBN: 9788131609019

GIS in Sustainable Urban Planning and Management: A Global Perspective
van Maarseveen, Martin; Martinez, Javier; Flacke, Johannes (Eds.)
2018
ISBN: 9781138505551

Geospatial Applications for Climate Adaptation Planning
Mitsova, Diana; Esnard, Ann-Margaret
2018
ISBN: 9781498755481

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES
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Regional News

Edited by Marilyn Andrews

Alberta

Edmonton Map Society
David Jones

Visualizing Birth Outcomes | Modeling in Archaeology | EMS new website

The Edmonton Map Society's Fall 2018 meeting was held on November 8th. Charlene Nielsen and Katherine Gadd gave interesting presentations on recently completed research which used spatial data and GIS analysis.

Charlene C. Nielsen, PhD, Postdoctoral Fellow, Pediatrics – University of Alberta
http://www.arcgis.com/apps/MapSeries/index.html?appid=c9c6f67f948c4ded8fda0a8aa8c71cc0, Academic Liaison, URISA Alberta https://www.urisab.org/

Visualizing Birth Outcomes and Air Pollution – Charlene explained her recently completed interdisciplinary PhD research on the relationships of small for gestational age (SGA) newborns and shared environmental exposures on pregnant women. Time-series and three-dimensional mapping displayed how she found associations between hot spots of SGA and surrounding land use, area-level socioeconomic status, and industrial emission in the greater Edmonton area.

Catherine Gadd, Department of Anthropology, University of Alberta.

Expanding Horizons: Heritage Potential Modeling in Urban Archaeology – In June 2017, the City of Edmonton signed an annexation agreement with Leduc County for the land between the south edge of the current city limits and the north edge of the airport, between the North Saskatchewan River and Highway 2. This project aimed to use heritage potential modeling techniques applied to GIS to determine where areas of high potential of previously unrecorded archaeological remains might be, before intensive urban developments begin. Using freely available data from Natural Resources Canada, a model was created that can be used as a first step to evaluate its usefulness to future Indigenous consultation, expanded inputs and improved techniques.

GIS Day 2018: Nov. 16, 2018. Our guest speaker was Dr. Schulze from Purdue University. We also had presentations by two students from [U of A] Earth & Atmospheric Sciences and Pediatrics and, of course, the always informative Esri Canada.

University of Lethbridge
Rhys Stevens

Newly Digitized Aerial Photographs

The University of Lethbridge recently released a new locally-digitized resource entitled *Southern Alberta Aerial Photographs* https://digitallibrary.uleth.ca/digital/collection/p22022coll2/custom/sa_aerial_map. It contains descriptions of 4,600 historical aerial photographs (2,600 of which contain high resolution images) selected from a collection acquired last year from the Department of Geography. The majority of photos included were originally produced in the 1960s and 1970s for either Government of Alberta or federal aerial surveys. The collection homepage provides options for users to search photo descriptions by keyword and to browse a map that visually depicts photo centepoints and photo "footprints". Rhys acknowledges and thanks the map library colleagues from across Canada who provided advice on the development of this project.

Ontario

Brock University
Martin Chandler

Music to the Ears for this New Librarian – Welcome Martin!

On September 1st, I began a year-long contract as the Geospatial/GIS Services Librarian with Brock University, filling Colleen Beard's shoes while she is on sabbatical. My route to this position was circuitous – I completed a Bachelor of Music. at Mount Allison University, followed by a Bachelor of Education from Acadia University, and was a music and history teacher before undertaking an MLIS. Much credit must be given to Rosa Orlandini for her promotion of the ACMLA at an event for professional associations, as without her, I would not now be where I am. From there, it was a simple matter of petitioning the university to offer a course in GIS librarianship, promoting it to ensure adequate student enrollment, suggesting alternative instructors following the cancellation of the course, promoting it to students again, and finally engaging in the course under the direction of Eva Dodsworth. Further credit goes to the librarians at University of Toronto's Map and Data Library, for hiring me to work as a student library assistant. I'm happy to say it has all paid off, and I now find myself in this exciting world.

University of Ottawa

Joël Rivard

Collaboration Works Well! | Festive GIS Day celebration!

On November 14 2018, the Royal Canadian Geographical Society (RCGS), the University of Ottawa, Carleton University, the Canadian Association of Geographers, and Natural Resources

Canada partnered to organize a special evening in celebration of Geography Awareness Week under the theme: Why Geography? The event, which was hosted at RCGSs new home at 50 Sussex, included a bilingual panel discussion as well a social hour and breakout discussions.

On November 15, 2018, the University of Ottawa also hosted its annual GIS Day festivities, which included presentations from graduate students in the library's new Tinkering Lab (includes a 4k video wall). The presentations were well received by participants that attended the event.

University of Waterloo
Geospatial Centre
Eva Dodsworth

Digitize, Digitize, Digitize! | Another Great GIS Day Celebration

The Geospatial Centre continues to digitize and analyze historical maps. After georeferencing all the local Fire Insurance Plans, we have created building and street shapefiles. We are also finishing up a project where we have created historical street files of Kitchener for every 10 years starting from 1858. There appears to be a lot of interest in historical streets, buildings, and building uses, so we decided to move forward with a very large project entailing geocoding the city directories from 1900-1990. This project will provide residential, public, and business information based on street addresses. It will help answer questions about early settlement, business types, re-purposing of buildings, brownfield studies, occupations, and overall evolution and development of our local communities. We have access to digitized directories, and will be converting the text to a database which will ultimately be presented in an ArcGIS Online environment. I am currently working on a grant to obtain funding for staff, but in the mean time we are picking away at it any chance we get.

November 14th was GIS Day, and the Geospatial Centre worked with the Faculty of Environment in hosting a productive afternoon of Lighting Talks, an open house, and of course, GIS Day cake. For lighting talks and pictures, please visit our GIS Day page. https://uwaterloo.ca/environment-computing/gis-day

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES
BULLETIN

Geospatial Data and Software Reviews

Tomasz Mrozewski

Canadian Forest Fire Data

In this installment of the Software and Datasets column we review sources of Canadian forest fire data. 2018 was a particularly active year for forest fires in Canada. As of the end of August, British Columbia had set a new record for square kilometers burned, surpassing the previous record set in 2017 and burning 50% more than the 3rd most incendiary season since record keeping began[1]. Ontario saw almost twice as many individual fires and more than double the area burned relative to the 10-year average[2]. As climate change intensifies and if it does lead, as many predict it will, to a worsening of natural disasters such as forest fires, we can expect increased interest in Canadian forest fire data from various quarters.

The **Canadian Wildland Fire Information System (CWFIS)** is "a computer-based fire management information system that monitors fire danger conditions across Canada"[3]. The CWFIS is administered by the Canadian Forest Service (CFS), part of Natural Resources Canada (NRCAN). The CWFIS has two chief activities: monitoring current fire activity and providing historical fire data.

The CWFIS provides data on current conditions largely through remote sensing of hotspot data using the Fire M3 (Monitoring, Mapping, and Modeling System) to interpret satellite imagery, supplemented by meteorological data, local observation, and data shared by local fire agencies. The CWFIS website also provides both summary and detailed background information on the various indices and modeling systems it uses to provide current fire conditions[4].

The CWFIS website provides daily, static on several topics, including Fire Weather, Fire Behavior (sic), and Fire M3 Hotspots. The combination of weather, behaviour, and hotspot data allows the CWFIS to forecast fire danger on a 6-point scale, also available as a map on the website. There is also an Interactive Map[5] built on the NRCAN Web Mapping Service which may be familiar to users of other Government of Canada websites. Both the static and interactive maps feature multiple layers which may be toggled and allow users to retrieve maps for specific dates. The static maps may be downloaded by right-clicking and save the image files, although this is not possible with the Interactive Map and there is no direct download for the GIS data underlying each map.

[1] https://www.cbc.ca/news/canada/british-columbia/state-emergency-bc-wildfires-1.4803546 All links retrieved November 14, 2018.
[2] https://www.ontario.ca/page/forest-fires
[3] http://cwfis.cfs.nrcan.gc.ca/home
[4] http://cwfis.cfs.nrcan.gc.ca/background
[5] http://cwfis.cfs.nrcan.gc.ca/interactive-map

Historical fire data takes two forms: a series of static maps and the CWFIS Datamart of downloadable GIS datasets[6]. The Canadian National Fire Database (CNFDB) point and polygon datasets are the most significant GIS datasets available: they consist of shapefiles aggregated and harmonized from data provided by provincial and territorial fire agencies (except Nunavut and PEI) and Parks Canada. The CNFDB does not include Fire M3 data or other observations from the CFWIS.

The most recent CNFDB polygon dataset[7] includes 55,094 objects dating from 1917 to 2017 harvested from a variety of sources; as one might expect, coverage for the early dates is sporadic and only data for BC is available for the first several decades. The shapefile attributes include size/area (often both calculated and reported), providing agency, date, cause, data source, and some additional information; however, not all attributes are available for all fires. The most recently point dataset[8] includes 386,355 objects dating from 1930 to 2017. Attributes are comparable to those for the polygon dataset except for the lack of data source information.

The CWFIS Datamart also includes the National Burned Area Composite (NBAC) database which "tracks forest fires for annual estimates of carbon emissions and to help identify National Forest Inventory plots that may have been disturbed by fire"[9]. NBAC shapefiles are available for each year from 1986 to 2017[10]; unlike the CNFDB files, the NBAC files are no cumulative. Attributes include source of detection, method of data capture, fire cause, dates of first and last detection, dates for fire start and end, and area burned. Unlike the CNFDB files, users will need the data dictionary to interpret the NBAC files; the data dictionary is available through the metadata page.

There are three types of historical, static map: outputs from the CNFDB, Fire Weather Normals, and Fire Behaviour Normals. The CNFDB maps page also includes a comparison to statistics from the Canadian Council of Forest Ministers' National Forestry Database (NFD)[11]. The NFD[12] also collects information on area burned and number of fires from local agencies, although these statistics are reported as bottom line figures to the NFD and are not directly calculated from maps of fires, hence the discrepancy with the statistics calculated by the CNFDB from the more granular data about individual fires. Consequently, there is no GIS data corresponding to the NFD's statistics.

While the CWFIS does provide current condition data, this data is mostly generated from remote sensing. As a result, current season CWFIS data will vary from the data generated by local fire agencies. For the most recent and detailed information about current fire conditions, users should consult with their provincial/territorial fire agencies and/or Parks Canada. There is no standard practice for generating, describing, or disseminating forest fire data. Data availability and richness will vary from agency to agency, as we will see in this brief sample of some agencies' practices.

[6] http://cwfis.cfs.nrcan.gc.ca/datamart
[7] Dated July 26, 2018.
[8] Dated September 25, 2018.
[9] http://cwfis.cfs.nrcan.gc.ca/datamart/metadata/nbac
[10] As of November 14, 2018.
[11] http://cwfis.cfs.nrcan.gc.ca/ha/nfdb
[12] http://nfdp.ccfm.org/en/index.php

In Ontario, forest fires fall under the jurisdiction of the Ministry of Natural Resources and Forestry (MNRF). The MNRF maintains two chief resources for current season fire activity: a static web page with textual information on current fires[13] and an interactive Forest Fire Info Map built on the Land Information Ontario (LIO) mapping platform[14]. The Forest Fire Info Map draws from the internal computer program used by the MNRF to track fires and updates in real time. When reports of new fires are called into the MNRF, the Ministry investigates the report and, if confirmed, the fire is entered into the database. The map shows only current year fires, whether active or extinguished - as of November, 2018 the map provides information on 1372 fires. As of 2018, perimeters are provided for fires above 40 hectares in size. Current year data cannot be downloaded from the mapping tool; however, data is archived in and available in shapefile format through the LIO's data warehouse as the Fire Disturbance Area and Fire Disturbance PT datasets. The datasets available at time of writing had been updated at the end of February, 2018 to include 2017 fire data.

In other provinces, BC and Alberta follow similar practices, including static information pages as well as interactive maps of current fire activity. Alberta Wildfire[15], a branch of the ministry of Agriculture and Forestry (AAF), uses an ArcGIS Online-based interactive application to map current fires[16] and generates daily static maps for fire danger and forecasts[17]. Historical Alberta wildfire data is also available as a shapefile[18]. The BC Wildfire Service[19] likewise uses an ArcGIS Online-based system for viewing current fire status[20] and provides access to historical data as well[21].

To find out about fire management and forest fire data available for other provinces/territories and for Parks Canada, users may consult the list of links to Canada's forest fire agencies are available through the website of the the Canadian Interagency Forest Fire Centre (CIFFC, pronounced "siffs")[22].

Although the CWFIS harmonizes data from provincial/territorial fire agencies and Parks Canada, there is currently no data standard for sharing forest fire data among agencies. As a result, provincial data may be altered and some additional information lost when it is harmonized and incorporated into the CNFDB; some agencies do not collect or provide some attributes included in the CNFDB. However, there is a data integration and standardization project to facilitate the exchange and dissemination of data underway through CIFFC. As a result, we may see more consistent forest fire data produced across the country in the coming years.

Thanks to John Little, Spatial Data Analyst for the CWFIS, and to Shayne McCool, Fire Information Officer for the MNRF, for providing supplemental information for this article.

[13] https://www.ontario.ca/page/forest-fires
[14] http://www.gisapplication.lrc.gov.on.ca/ForestFireInformationMap/index.html?site=AFFES_ONLine&viewer=AFFES_ONLINE
[15] http://wildfire.alberta.ca/default.aspx
[16] http://wildfire.alberta.ca/wildfire-status/status-map.aspx
[17] http://wildfire.alberta.ca/wildfire-status/danger-forecast.aspx
[18] http://wildfire.alberta.ca/resources/historical-data/spatial-wildfire-data.aspx
[19] https://www2.gov.bc.ca/gov/content/safety/wildfire-status
[20] https://governmentofbc.maps.arcgis.com/apps/MapSeries/index.html?appid=ef6f11c8c36b42c29e103f65dbcd7538
[21] https://catalogue.data.gov.bc.ca/organization/9165d2c2-37f8-4750-a980-8d735bcd091b?license_id=2
[22] http://www.ciffc.ca/index.php?option=com_content&task=view&id=42&Itemid=79

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GIS Trends

Edited by Barbara Znamirowski

Editor's Introduction

Discussion of GIS methodologies with students and colleagues often creates rewarding opportunities for problem solving. In my unit new solutions for analyzing large amounts of data or fixing problems in existing spatial projects increasingly take advantage of powerful toolbox options for running repetitive processes that are available within software. In this article, Geoff Andrews discusses his experiences with applying automated workflows in a variety of contexts.

Empowered Workflows: Automation for Everyone

Geoff Andrews

In any workforce, there are a variety of sources for motivation: an interesting idea, a push in the right direction, or a need to solve a problem. Achieving goals requires effective solutions which will continue to work moving forward. In the geospatial community work challenges increasingly involve automating workflows and processes to produce meaningful results. In my experience, I've been assigned projects involving different programming languages and using an array of different software, and urged to develop automated processes to complete tasks. Examining different approaches often leads to growth and discovery of new methodologies to common problems. This article will explore some options available to the academic community for increasing productivity through the use of automated workflows.

New options are often found when old solutions will no longer suffice. For example, recently I've had a positive experience in automating the integration of large amounts of data using Feature Manipulation Engine (FME). FME was suggested as an alternative to creating new workflows or procedures, effectively moving away from standard software and solutions using relational database management systems. FME allows users to be as technical in their knowledge of the internal workings as they want or need to be. It has some similarities to Esri's Model Builder in terms of the interface, and can perform a multitude of tasks, once you grasp the naming conventions. As with all technologies there is a learning curve, but it is less steep than learning a new programming language. The underlying theories are familiar to the spatial community, and how we fit the pieces together will differ from user to user. In using FME, I had the opportunity to work on a pilot project to integrate one million records (with over one hundred tabular fields) from different sources and perform automated Quality Assurance and Quality Control measures to ensure the data output was up to a certain level of confidence. This was a daunting task, made even more challenging by an unfamiliar working environment. After several versions of a solution, the order of operations was sorted out. Upon successful completion of the pilot, I was able to

recommend FME solutions to programmers and non-programmers alike demonstrating the power of this software to turn ideas into repeatable and transferable solutions.

Safe Software has produced great products in FME for Desktop and Server which can be used to benefit any spatial or tabular work. They also host a great annual user conference in the FME World Tour, where I had the opportunity to present at this past year in Ottawa. Automated solutions are not necessarily up to expert programmers anymore, with this type of software. Seeing this shift reassured me that I was on the right path in this particular venture. In my current position, I will be able to seek out and explore the usability of this type of software or interface to aid our day to day operations as well as pass this knowledge on to students seeking assistance with large spatial processing requirements. With some instruction, the base knowledge acquired using one software can be applied successfully to other software and automated models.

Another example of automating workflows, which also came about as an assigned project, was the use of Procedural SQL in the PostgreSQL/PostGIS environment to calculate suitable habitat. An automated process needed to be run on a scheduled basis. The development built upon the bits and pieces of SQL learned through working with Selections in ArcGIS or querying Access databases. The real reward for this example came in demonstrating the spatial functions created to work with the data and observing the understanding of non-programmer users as the broken down functions were quite simple in nature, but strung together in a way that could be overwhelming. This need to dig into the large, complex problems and break them out into pieces that are understandable and accessible to all users is something that can be overlooked when viewing work at a higher level. If we can work on the little pieces of the bigger problems and have them ready to share, the results will be that much more accessible for everyone.

Promoting growth in these aspects of working with spatial and tabular data has made all difference in advancing my geospatial career thus far, and I plan to convey that fact as more of the "little things" get done in an automated capacity. I have had the opportunity to discuss students' project work and have found uses for several smaller Python Script tools. The tools were passed along with a focus on explaining the inner workings of what's being performed as opposed to simply supplying the tools for them to move forward. This also tends to spark conversation about what is being done and how we can help each other solve common issues. These issues may be different in the big picture, but the small, repetitive steps usually have some overlap. Encouraging the users to design solutions in a longer term, testable and repeatable way should become part of our focus. Constantly drawing back on models and sections of models has been the most useful tool moving forward with every new solution.

The trend toward opening automated workflows to everyone is one that can't be highlighted enough in the work we do. Constant re-creation of the same methodologies or workflows can be cumbersome and time consuming. Using the tools offered to the academic world can make all the difference in the daily spatial grind.

About the Author

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GIS Trends: Note from the Editor
Submissions and Feedback

GIS Trends is a place to share ideas, observations and discoveries in the area of GIS and other spatial technologies. If you have something you would like to share please write to me. We also welcome feedback on GIS Trends articles. Proposals for articles and feedback should be sent to: bznamirowski@trentu.ca

Thanks for reading and contributing!
Barbara Znamirowski,
Editor, GIS Trends