How Did Kenow Mountain Get its Name?

Rhys Stevens University of Lethbridge Library

Abstract

This brief article identifies the federal and provincial organizations in Canada responsible for authorizing official place names (toponyms). Included are suggested resources relevant for locating both official and historical Canadian place names. A search for Kenow Mountain, British Columbia is used to illustrate the challenges encountered when attempting to determine naming origins.

Keywords: toponymy; place name; Kenow Mountain (B.C.); names, geographical -- Canada

In late August, 2017 an intense lightning and thunder storm ignited a wildfire on remote Kenow Mountain in the Clark Range of the southeastern corner of British Columbia about ten kilometers from the boundary with Waterton Lakes National Park (WLNP) in Alberta. Hot weather, strong winds and exceptionally dry conditions fueled the fire as it raced northeast along the Cameron Valley and into the park. This extreme wildfire eventually burned a total of 19,300 hectares within Waterton Lakes and destroyed or damaged a significant amount of the park's built infrastructure (e.g., visitor centre, campground, stables, bridges, guardrails, hiking trails). It became known as the Kenow Mountain wildfire.

About a year later, in September, 2018, WLNP Archivist Mr. Edwin Knox mentioned to me that he'd had no luck tracking down details about the origin of the name Kenow Mountain which he suspected might be the surname of an early mineral prospector. At first I believed it might be possible to find the answer quickly with some creative Googling but the task proved somewhat trickier than I'd anticipated. I thought it might be interesting to summarize what I discovered while researching Canadian geographic names in case others get these types of questions.

Decisions About Official Place Names are Authorized by the Geographical Names Board of Canada

The <u>Geographical Names Board of Canada (GNBC)</u> officially authorizes geographical names and is comprised of members from each province and territory as well as various federal departments concerned with mapping, archives, defence, Indian reserves, and national parks. From 1897 until 1961 the GNBC was responsible for all of Canada's naming decisions although provinces and territories were invited to provide advice on the use, spelling and application of names. After 1961

naming responsibility was largely transferred to the provinces. The GNBC indicates on its web site that provincial and territorial names authorities rarely initiate the naming of geographical features themselves. Instead almost all names are either gathered through their field survey programs or they're submitted by the public. Currently approved official and historical place names for all 350,000 named places can be found in the Board's <u>Canadian Geographic Names Database</u>.

Correspondence with GNBC about Kenow Mountain confirmed what I'd found in their database which was that its official naming decision date was April 6, 1950. Unfortunately, at that time, the origin of a name itself, or the reason why a name was chosen, was not recorded.

Provinces and Territories Provide Services Related to Geographic Names

Each of Canada's provinces and territories have offices responsible for administering geographic names. They represent their jurisdictions as <u>members of the GNBC</u>. Provincial web sites typically include information about how the public can propose new names. Some also provide functionality for finding the origins and histories of existing ones. For instance, the <u>BC Geographical Names Office</u> provides an excellent <u>geographic name search application</u> with a map-like interface that can be searched in various unique ways (e.g., name changes by date, names shown in map area, etc.).

Unfortunately, my query for Kenow Mountain in the BC database originally returned "Work in Progress: Origin Notes for this name have not yet been transferred from paper records and maps to the website." My direct inquiry confirmed that the name Kenow Mountain was officially adopted on April 6, 1950 but little else in the way of naming rationale.

Use Museums, Libraries, Archives and Local Historians as Sources for Finding Name Origins

Geographic naming boards are certainly amongst the most comprehensive and respected sources for locating name origins of Canadian places. In the event that they don't have these details available for a particular location of interest it becomes necessary to look further afield. Fortunately, many libraries collect Canadian toponym books and eBooks. These resources explain the meanings behind names of places and features from different regions of the country. A good starting point for identifying place name books (e.g., *Canadian Mountain Place Names: The Rockies and Columbia Mountains* by Glen Boles, Roger Laurilla and William Putnam) is within the Canadian Encyclopedia's fascinating entry about Place Names.

In addition to books, there are national, regional, and specialty museums and archives (e.g., Whyte Museum of the Canadian Rockies in Banff, Alberta) that can also be sources of background information. Similarly, historians and contact persons at historical societies may have recommendations about potentially relevant items for unearthing details concerning local name origins.

My own investigations of the naming of Kenow Mountain utilized locally-available toponym books, local histories and historians, boundary surveys, and enquiries to several archives though these were initially fruitless. After several weeks of on-again off-again searching, I slowly came to the realization that this mountain might have been too far out-of-the-way for its name origins to have been documented. Luckily it turned out I was incorrect as soon after resuming my search I was rewarded with a scrap of detail about Kenow Mountain. It appeared as a single sentence in an obscure book published in Montana entitled *Place names of Glacier/Waterton National Parks* by Jack Holterman.

The Uncertainty of Name Origins

My attempts at tracking down details about Kenow Mountain in British Columbia was definitely frustrating but I gained some useful insight about how and why Canadian places end up with their official names. As one might suspect, the earliest names applied to the mountains of the Canadian Rockies were given by First Nations peoples. A handful of these names were retained by early explorers but they were frequently disregarded, misinterpreted or even re-named as explained in *Canadian Mountain Place Names*.

The brief mention of Kenow Mountain I'd found on page 73 of Holterman's book stated that Kenow was the name for "eagle" in the Chippewa language. I was able to verify this using the online version of the Ojibwe People's Dictionary which further indicated that the English translation of the word "giniw" was "golden eagle." Additionally, the dictionary's audio pronunciation of giniw sounded remarkably similar to the word Kenow which led me to suspect that there might indeed be a connection.

Interestingly, it also turns out that something called the <u>Golden Eagle Flyway</u> passes directly above Kenow Mountain. The flyway is a migration route that links the eagle's wintering grounds in the western U.S. to their breeding grounds in northwest Canada and Alaska.

So might this evidence answer Edwin's question about the origins of the name Kenow Mountain? Unfortunately, it's not possible to ever determine with absolute certainty that the origin of this particular mountain's name is derived from the Chippewa word for golden eagle... but the little evidence I did find certainly make it a distinct possibility!

ACMLA NEWS



June 11-14 | McMaster University | Hamilton, ON

McMaster University will host the 53rd annual CARTO conference of the Association of Canadian Map Libraries and Archives in Hamilton, Ontario from June 11-14, 2019.

Are map libraries obsolete?

In her 1970 ACMLA conference paper by this title, Association member and McMaster University Map Librarian Kate Donkin foretold the rise of geospatial data and pondered the future of static maps—and the libraries containing them—in a digital environment. Nearly half a century later, many of Ms. Donkin's predictions have been validated: the confluence of broadly-available geospatial data, large-scale digitization projects, and the maturation of user-friendly software for analysis and map visualization have ushered in what may be referred to as an "age of accessible cartography".

Perhaps most interestingly, the implication suggested by the paper's central question has not been realized: Map libraries have not become obsolete during the rise to prominence of geospatial data. Rather, map collections, their spaces, and the professionals working within them have evolved in diverse ways to meet the changing needs of researchers, students, government, and the public.

As we approach the 50th anniversary of such a provocative question, the community has an opportunity to reflect on it, and perhaps, ask it again. How have the roles of maps, map-related professionals, and the map library been transformed in the age of accessible cartography? How are map libraries adding value to modern-day scholarship? How might their role evolve over the next 50 years?

The Carto 2019 conference committee invites librarians, library staff, archivists, geographic information specialists and other interested individuals to submit proposals for papers, panels, posters, and workshops that explore this theme and others related to it.

Topics of interest include (but are not limited to):

- The application of domain and/or software expertise to add value to existing collections
- Innovative uses of modern or historical cartographic materials to support teaching and research
- New approaches for supporting the software training needs of researchers, students, and the public
- Considerations for acquiring, curating, and making available indigenous collections
- Creating geospatial data through digitizing and georeferencing collections
- Approaches for linking digital map collections to archival and other relevant materials
- Strategies and systems to improve the discoverability and reusability of cartographic materials and geospatial data
- New uses for physical space in map collections and libraries
- Innovative methods for geospatial data analysis and visualization
- Opportunities for map collections and their staff to collaborate with groups across the academic and public spheres
- Managing geospatial collections and research data, and addressing challenges associated with using, describing, archiving, preserving and providing access to this information.

Please submit an abstract (250 words) of your proposal in either French or English and brief biography using this submission form. The deadline for submissions is **February 14th, 2019**. If you do not receive an acknowledgement of your submission or if you have any questions about the conference, please contact a member of the program committee.

The members of the organizing committee are:

- Marilyn Andrews, University of Regina
- Jason Brodeur, McMaster University
- Gordon Beck, McMaster University
- Kara Handren, Scholars Portal
- Christine Homuth, McMaster University
- Vivek Jadon, McMaster University
- Amber Leahey, Scholars Portal

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 that 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

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

Nomination Committee Looking for Members

Dear CARTO/ACMLA Members

The CARTO/ACMLA Executive is looking for 2-3 ACMLA members in good standing to join the Nominations Committee to coordinate and carry out the 2019-20 executive election. The committee's work will be completed by mid-April, when the election results will be announced at our Annual General Meeting in Hamilton. Meetings will take place over the phone and via email.

Duties include identifying and contacting potential candidates to run for open executive positions, accepting nominations for open executive positions, providing information to potential candidates about open executive positions, answering questions from members about the online voting procedure, and notifying both successful and unsuccessful candidates of election results.

Please contact Marcel Fortin (<u>marcel.fortin@utoronto.ca</u>), if you are not interested in standing for election and would be willing to serve on this committee.

Chers membres de CARTO,

Le Comité exécutif de CARTO est à la recherche de 2 à 3 membres de l'association pour se joindre au Comité des candidatures afin de coordonner et de procéder à l'élection des membres du Comité exécutif de 2019-20. Les travaux du Comité s'achèveront à la mi-avril, lorsque les résultats des élections seront annoncés à l'Assemblée générale annuelle qui aura lieu à Hamilton en mai 2019. Les réunions se dérouleront par téléphone et par courriel.

Les tâches consistent à identifier et contacter des candidats potentiels pour des postes au sein du Comité exécutif, recevoir les candidatures, fournir l'information sur les différents postes disponibles, répondre aux questions des membres au sujet de la procédure de votation en ligne et aviser les candidats sélectionnés ou non des résultats de l'élection.

Veuillez contacter Marcel Fortin (<u>marcel.fortin@utoronto.ca</u>) si vous n'êtes pas intéressé par un poste au Comité exécutif, mais que vous êtes tout de même disposés à participer au Comité des candidatures.

Book Reviews

Compiled by Sarah Simpkin

Books Reviewed in this Issue:

Atlas of the Unexpected: Haphazard Discoveries, Chance Places and Unimaginable Destinations
by Travis Elborough
Reviewed by Rhys Stevens

Getting to Know Web GIS, Third Edition by Pinde Fu Reviewed by Martin Chandler

The Writer's Map: An Atlas of Imaginary Lands by Huw Lewis-Jones Reviewed by Julie Jones

Atlas of the Unexpected: Haphazard Discoveries, Chance Places and Unimaginable Destinations

Rhys Stevens University of Lethbridge

Elborough, Travis. *Atlas of the Unexpected: Haphazard Discoveries, Chance Places and Unimaginable Destinations.* London, U.K.: White Lion Publishing, 2018. 208p. \$38.99 CAN. ISBN 9781781317167

Armchair travelers and geographical trivia buffs alike will almost certainly discover new details about fascinating locales throughout the world within the pages of *Atlas of the Unexpected: Haphazard Discoveries, Chance Places and Unimaginable Destinations*. The entries contained in the atlas were assembled by freelance writer, author and cultural commentator Travis Elborough as a kind of sequel to his Atlas of Improbable Places: A Journey to the World's Most Unusual Corners (2016). In the two-page introduction to *Atlas of the Unexpected*, he explains that, "...[the book] is a compendium of places – odd and enchanting, ancient and modern – touched by the certainty of chance and the often haphazard nature of what passed for discovery in the golden age of exploration."

Of the 45 places included in the atlas there will be several that are already familiar to readers such as the ancient Roman city of Pompeii near Naples, Italy which was entombed in volcanic ash after the eruption of Mount Vesuvius in AD 79. A majority of entries, however, describe places slightly

off the beaten path like the pre-Columbian Native American site of Cahokia Mounds, Illinois as well as numerous others that might be considered downright obscure. For instance, how familiar are you with Grand Tsingy, Madagascar, home to the world's largest stone forest? Ever heard of the thirty-three unique species found in Movile Cave, Romania that exist nowhere else on earth? A handful of sites described might be considered tourist destinations (e.g., the hidden Greek fortress town of Monemvasia) though a number of others are best observed from afar – in particular the "garbage city" of Manshiyat Naser, Egypt, known for receiving and recycling Cairo's rubbish. The only Canadian destination included is Chemainus, British Columbia on Vancouver Island which pioneered townscape revitalization through the use of outdoor murals.

The atlas is loosely organized into five thematic chapters which group these unexpected locations into categories like "Accidental Discoveries", "Cavernous Locations" and "Serendipitous Spaces." Within each chapter, individual locational entries are allocated four pages of descriptive text, maps, and black and white photographic images. The textual descriptions make for enjoyable reading thanks to Elborough's skill in weaving together interesting stories about each place using a variety of snippets from popular and scholarly sources. One downside is that entries contain neither footnotes nor in-text citations which limits the utility of the atlas for academic purposes despite the inclusion of a four-page selected bibliography.

In summary, the brief historical, geographical, and socio-cultural background details described in the *Atlas of the Unexpected* make for absorbing reading about some of the world's lesser-known places. This engaging work is suitable for public library collections but perhaps less relevant for academic libraries.

Getting to Know Web GIS, Third Edition Martin Chandler Brock University

Fu, Pinde. *Getting to Know Web GIS, Third Edition*. Redlands, CA: Esri Press, 2018. 486p. \$94.99 US. ISBN 978-1-58948-521-1

Getting to Know Web GIS, Third Edition, is an excellent resource for those new to web GIS learning and use. The text is easy to read, providing both background information on how the software works, as well as straightforward tutorials that guide the reader through many of the features of Esri's ArcGIS Online and its associated web-based tools.

With the first edition of the text published in 2015, and the second edition in 2016, one may ask why a third edition needed publishing in 2018. The tech world, of course, is partly to blame, with the "break things and move fast" ethos. Similarly, textbook publishing can be a lucrative industry, and new content is always needed. Given statements such as "With the rapid advances in mobile GIS, the vision of using GIS for anything, anytime, anywhere, and by anyone is being realized faster than we can imagine" (p. 7), one would expect regular changes are necessary.

Changes are present in the third edition. For example, the section on Story Maps was moved from Chapter 4 to Chapter 2; WebApp Builder was moved from Chapter 5 to Chapter 3; and Spatial

Analysis and Geoprocessing was moved from Chapter 7 to Chapter 8. Reminders about title ownership have been added, with the introductory text and table of contents now bearing ®, TM, and SM symbols. The tutorials remain largely the same, however some crucial aspects were missed – or perhaps the software was updated after the publishing of the text – as the screenshots used in the text don't always match the software. This is easily overcome with some critical thinking, but happened enough to be a noticeable issue.

This is not the only problem encountered in the tutorials. There are issues when needing to type out links (eg: "Is that an upper case 'I' or a lower case 'L'?"), which, again, can be overcome with some critical thinking, and trial and error. One dataset did not exist, though a related one did – again, critical thinking is necessary – and there were a number of broken links within. Another link of "premium content" would not load, at least when this reviewer was working through the tutorial. The text, meanwhile, blithely glossed over the ethics of credit consumption for viewing said premium content (p. 86).

As a whole, *Getting to Know Web GIS*, *Third Edition* offers a rich introduction to ArcGIS Online, and has plenty to offer for those who do not have a previous edition. For individuals or institutions with the second edition, though, there isn't much new here, and you would be better off waiting for the fourth edition.

The Writer's Map: An Atlas of Imaginary Lands
Julie Jones
Simon Fraser University

Lewis-Jones, Huw. *The Writer's Map: An Atlas of Imaginary Lands*. Chicago: University of Chicago Press, 2018. 256p. \$45.00 US. ISBN: 978-0-226-59663-1

The Writer's Map is a beauty of a book. It explores the relationship of maps to writing and how writers use maps in their craft – whether as points of entry into worlds that they want to explore or as writing tools that assist with communicating, clarifying, and enhancing the worlds that they themselves are building. The book does this via the presentation of gorgeous literary maps as well as essays about literary maps by various authors and mapmakers.

The 167 illustrations in this book are mostly maps and are all intoxicating and inspiring. They fall into three main categories. First there are beautifully reproduced literary maps that take us deep into the imaginary worlds of many novels, with children's and young adult fiction figuring prominently. These are maps that tell stories and convey complex journeys, that give shape to fantastical, imaginary lands. Then, wonderfully, there are reproductions of maps that writers have created in their private notebooks to assist in literary creation. Sometimes, like Helen Moss's sketch of Castle Key that she drew while writing her Adventure Island books (included on p. 140), these evolve into finished maps that appear in their books (this was indeed the case with Moss's sketch and the map of Castle Key that came to be included in her books is also included on p. 140). Other times these maps function as tools that assist authors as they "work out how their story fits together, what their characters do, even the way the surroundings might 'look, smell, and feel'" (p. 201). Abi Elphinstone shares: "I begin every story I write by drawing a map because it is only

when my characters start moving from place to place that a plot unfold. ... I always draw my way into stories. Sometimes I sketch my fictional world directly on an Ordnance Survey map to make sure the geography works and other times I draw on a blank sheet of paper, using memories of interesting places I've discovered" (p. 147). And lucky for us, we get to see both of these types of maps that she creates as a part of her writing process on p. 146 and 147, respectively. And then there are many early, mainly European, maps of the real world included as well. These maps enhance these pages because they too deal with imaginary lands, in a way—they were created when so much of the world was still unknown and unexplored so had to be partly if not completely imagined.

After the Prologue by Philip Pullman and the two stage-setting opening essays by Lewis-Jones (he's joined by Brian Sibley in the second) in Part One, the essays are divided into three parts: Writing Maps (writers write about the maps that have inspired and been created as a part of their writing process and projects), Creating Maps (mapmakers and illustrators write about the literature that has inspired their maps), and Reading Maps (writers exploring more themes such as women in cartography and maps of the body).

This is a special and unique book that would be a wonderful addition to map libraries serving humanists, writers, and possibly human geographers. It could easily function as an outreach tool for bringing new populations into the map room and could even potentially inspire a syllabus concerned with literary maps, early maps of the world, and/or the philosophy of writing. All of this is to say that this is a potentially very useful book for librarians and other map professionals collaborating with faculty and other types of instructors. It would also make a wonderful gift – for you or someone else. Like all good atlases, it is wonderfully engrossing and a complete joy to get lost in.

New Cartographic Resources

Cheryl Woods

MAPS

Vancouver Island Reise Know-How

2019

ISBN: 9783831774258

Sulawesi

Reise Know-How

2019

ISBN: 9783831774210

Poland

Reise Know-How

2019

ISBN: 9783831774036

Rhodes

Reise Know-How

2019

ISBN: 9783831774203

Lebanon

Reise Know-How

2019

ISBN: 9783831774197

Greenland

Reise Know-How

2019

ISBN: 9783831774180

ATLASES

British Columbia: A New Historical Atlas

Douglas & McIntyre

2019

ISBN: 9781771622110

ISSN 2561-2263

The Atlas of Religions in Czechia

University of Chicago Press

2018

ISBN: 9788024637945

National Atlas of Hungary,

Vol 2 – Natural Environment Hungarian Scientific Academy

Acadel

2019

Free download

BOOKS

An Introduction to R for Spatial Analysis

and Mapping

Brunsdon, Chris

2019

ISBN: 9781526428509

Panamá: 500 años=500 years

Calomar, Antonia

2018

ISBN: 9789962667254

Arcgis Server a Complete Guide – 2019

Edition

Blokdyk, Gerardus

2018

ISBN: 9780655515128

Mapping Russia's Natural Focal Diseases:

History and Contemporary Approaches Malkhazova, Svetlana and Mironova,

Varvara

2019

ASIN: B07JQQQ8Y4

13

Regional News

Compiled by Marilyn Andrews

Alberta

Edmonton Map Society David Jones

Fascinating News from Abroad

Fourteen members of the Edmonton Map Society attended the Winter Meeting held on March 11th 2019. John Horrigan and David Jones were the speakers for the evening.

David Jones introduced attendees to the Brussels Map Circle, a very active map society currently celebrating its 20th anniversary. The Circle, originally known as the Brussels International Map Collectors Circle (BIMCC) aims to:

- 1) provide an informal and convivial forum for all those interested in maps, atlases, topographical views, etc. be they collectors, academics, antiquarians, students, etc.
- 2) organize lectures on various aspects of historical cartography, on archiving and conservation
- 3) arrange visits to exhibitions, private collections and map rooms of libraries or institutions.

The Circle maintains a webpage (http://www.bimcc.org/) with valuable links including: 'News', 'Events', 'Exhibitions' 'MAPS IN HISTORY', 'Gallery', 'History of Cartography', and 'Links'

Another interesting link, the 'History of Cartography' link, delivers you to:

- -a Latin, Dutch, French & English lexicon of cartographic terms
- -a timeline of the history of cartography (in 4 time periods)
- -locations of major map collections, and lists of reference books published in Belgium, the Netherlands, France, and Great Britain.

The MAPS IN HISTORY link connects to the society's publication of the same name. *Maps in History*, published three times per year with contributions from members and specialists, provides information on a wide variety of historical maps, and reviews of specialized books and exhibitions. Except for the three most recent issues the contents are available online in PDF format and are searchable.

John Horrigan gave an illustrated review of his recent trip to London and Majorca. Sites he visited:

- 1) <u>The National Maritime Museum</u> in Greenwich, England with a new <u>Tudor and Stuart</u> Seafarers' exhibit.
- 2) <u>The Middle Temple Library</u> where John photographed incredible Molyneux Globes from the late 16th and early 17th centuries. These are on limited display at the Middle Temple Library and some London map dealers.
- 3) Palma, Majorca (https://en.wikipedia.org/wiki/Portolan_chart), the place where many portolan charts originated. John showed many photographs taken which show both portolan charts and early maps. John commented on the large number of sundials he observed while in Majorica.

Another highly interesting meeting of the Edmonton Map Society is scheduled for May.

Ontario

University of Waterloo Eva Dodsworth

100 Years Visual Directory, Index and Accounts of Kitchener-Waterloo!

The Geospatial Centre is excited to announce the launch of a major team project this year, *Urbanizing Kitchener Waterloo: A Historical Geospatial Perspective.*

The aim of the project is to provide scholars, researchers, and the public with a one-hundred year visual directory, index and account of Kitchener-Waterloo's residential, business and community development. The project uses digitized city directories (1900-2000), collates them, and will offer the tens of thousands of individual geocoded entries as a single product in ArcGIS Online.

The searchable interactive online map will organize the advertisements, household and business entries by street address, enabling query and location specific searches, allowing researchers to conduct spatial analysis, gain new insights, ask new questions based on geographic proximities, and transform their research and teaching as it relates to urban structure and population geography. Using a combination of city directories with fire insurance plans and other historical resources, we have already discovered changes in street names and building numbers, adding an additional layer of complexity to the geocoding process.

This project wouldn't be possible without the Kitchener Public Library, the Ontario Genealogical Society, and members of the Ontario Historical Society, who have all offered their time and resources in scanning the resources that we need. This project is sponsored by the Social Sciences and Humanities Research Council (SSHRC), as well as the University of Waterloo Library.

Saskatchewan

University of Saskatchewan Sarah Rutley Data, GIS & Government Publications Librarian

Scholarships and Photographs

ESRI Scholarship

In March, the University of Saskatchewan sent its nomination to ESRI for the 2019 ESRI Canada GIS Scholarship Award. The evaluation committee (representing the University Library, Research Computing, and Social Sciences Research Lab) reviewed several excellent applications from students across campus, and while we can't announce our decision quite yet, we look forward to congratulating our winner!

Air Photo Project

The University Library holds over 100,000 aerial photographs, with coverage across Saskatchewan from 1920-1990. In January we initiated a collaboration with the USask Historical GIS (HGIS) Lab around digitizing and georeferencing these photos. Due to the size of the collection we are taking an approach that focuses first on geographic areas that align with HGIS and campus research interests, with an eye to developing a project infrastructure that can be re-engaged over time as resources become available.

HGIS faculty members have also expressed interest in digitizing and georeferencing the photos for the purpose of GIS instruction, so our hope is that in this way (and others) the project will mutually benefit multiple stakeholders.

We are currently in the very earliest stages of planning, so I'll add that input and advice from those who've walked this path before is always in season!

17

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES BULLETIN

Geospatial Data and Software Reviews

Tomasz Mrozewski

Planetary GIS and the USGS Astrogeology Science Center

On January 3, 2019, the China National Space Administration's (CNSA) Chang'e 4 spacecraft became the first to land on the far side of the Moon when it touched down in the Von Kármán carter. On February 15, 2019 the Working Group for Planetary System Nomenclature of the International Astronomical Union (IAU) officially named the landing site Statio Tianhe, after "the ancient Chinese name for the Milky Way, which was the sky river that separated Niulang and Zhinyu in the folk tale 'The Cowherd and the Weaver Girl." This got me wondering: are there sources of GIS data for planetary bodies other than the Earth?

As it turns out, there is a comprehensive of source of free, open data on what tends to be called "planetary GIS": the USGS Astrogeology Science Centre². Planetary GIS is related to this discipline known either as astrogeology or planetary geology (a word of warning: if you take a wrong turn at Google and search for "astrogeography," you'll instantly find yourself deep in a world of astrological woo). The Astrogeology Science Center, which supports not just the American but the international scientific community, counts as part of its mission the conduct of "innovative, fundamental research that advances the fields of planetary cartography, geoscience, and remote sensing." Any search for planetary GIS information should start here. The website hosts a large collection of georeferenced imagery, maps, and datasets, as well as GIS tools, tutorials, and other information.

The Astrogeology Science Center was founded in 1968 to support the manned Apollo missions to the Moon and has continued to map "nearly every solid surfaced body in the solar system," according to USGS GIS specialist Marc Hunter⁴. Creating maps in the early years was a "complicated process of hand-cutting mosaics, and airbrushing relief maps," continues Hunter, "but over the last 30 years has become entirely digital as [the Astrogeology Science Center uses] mission data to create science and GIS ready products"⁵. Hunter notes that planetary data may pose challenges where things like custom coordinate systems and lack of standardization occur, but that

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¹ "IAU Names Landing Site of Chinese Chang'e-4 Probe on Far Side of the Moon," International Astronomical Union, https://www.iau.org/news/pressreleases/detail/iau1901/?lang - all URLs retrieved March 20, 2019.

² https://astrogeology.usgs.gov/.

³ <u>https://astrogeology.usgs.gov/about/mission</u>.

⁴ Private correspondence.

⁵ Ibid.

more recent changes to applications such as QGIS and ArcMap have made these easier to handle. However, Hunter grants that "a lot more commonality with terrestrial geoscience data than people would think" and that planetary GIS draws significantly on conventional GIS practices.

Perhaps the best starting point for data discovery is Astropedia⁷, the "[1]unar and planetary cartographic catalog" for browsing imagery and data holdings, listed under the site's Maps/Products tab as Product Search. Start browsing holdings by selecting the planetary body from the iconographic menu to the left of the screen; moons are listed as "sub-targets" of their parent planets and other entities have their own entries under "Small Bodies" (Plutophiles may rejoice to see that Pluto is implicitly recognized as a planet in this navigational scheme). Selecting an entity invokes a small info box with cartographic stats and quick links, an expandable web map of the body with overlays and an export feature, and a list of available data products for that body. There are several filters for locating data: for GIS-ready datasets, product type (potentially including DEMs, topographic maps, nomenclature, imagery mosaics, and others such as may be available for a give body), spacecraft (the source of the data), region (if applicable to the body), and a feature finder for named geographic features on the subject body. This last filter will select and zoom to the selected feature in the web map (see above) and filter the dataset results for products which include that feature. Astropedia isn't searchable, strictly speaking. There is only a site search feature available, although this does separate results found in data products from those found on the site's regular pages. The portal's idiosyncratic layout and navigation may pose accessibility issues for some users.

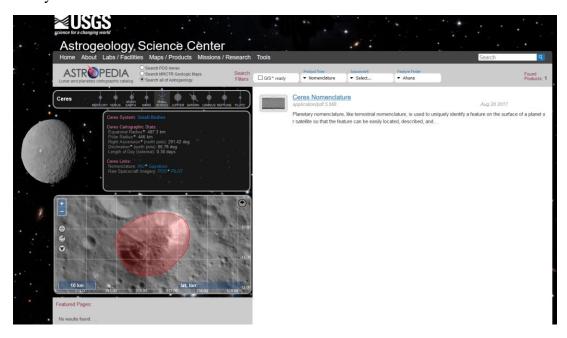


Figure 1 Screenshot of the Astropedia results page using the Feature Finder filter to locate a dataset showing Ahuna Mons on Ceres. Note that the feature is highlighted in the map box.

⁶ Ibid.

⁷ https://astrogeology.usgs.gov/search.

Each data product has a detailed record page. The Astrogeology Science Center creates metadata based on the FGDC standard⁸, extended by NASA's PDS4 (Planetary Data System 4)⁹, and including a helpful prose description/abstract of the product. The record page also provides direct download links as well as record links to products from which the current product was derived, to ancillary products, and to related products. Additionally, the record page allows the user to "[p]roject, clip, convert format... and download" the product with a tool called Map a Planet.

Map a Planet (actually, Map a Planet 2, also stylized Map-a-Planet 2 or MAP2) is a service that "allows users to select global image mosaics for download, or with an account, one can also request the mosaic be map projected, clipped to extents, run pre-defined algebra functions against multiband mosaics, and/or then convert it to the user's desired file format"¹⁰. Users must request a free account to use Map a Planet; the request requires the user to justify the request but there are no eligibility requirements posted and I was able to quickly obtain an account for the purpose of writing this review. Data requests through Map a Planet are not instantaneous; users submit work orders through the tool and are notified by email when the USGS servers complete the job.

The Astrogeology Science Center also hosts ArcGIS Server and WMS services to provide basemaps through its Planetary GIS group in ArcGIS Online¹¹. These basemaps can be pulled directly into ArcMap, ArcGIS Pro, or the ArcGIS Online map viewer. The basemaps do not work well in ArcGIS Online, however, as the platform wants to superimpose them onto the default Earth basemap and project them onto the Earth's coordinate system.

The USGS also hosts the IAU's Gazetteer of Planetary Nomenclature¹², which is highly integrated with the Astrogeology Science Center's site. As well as providing a navigable, web-based gazetteer of features, the site also provides shapefile and KML downloads for named features of 41 planetary bodies using IAU-approved coordinate systems. The more Humanities-minded users may appreciate that the gazetteer includes information on the origins of the named features and the languages from which their names are derived.

Users can also download static map images from the Maps portal¹³. In general, this portal is less well organized and navigable than Astropedia and some product links in fact go to Astropedia

⁸ https://www.fgdc.gov/metadata/geospatial-metadata-standards.

⁹ L. Gaddis et al, "Astropedia Annex: A repository for planetary research products," June 2012, https://astropedia.astrogeology.usgs.gov/download/Docs/PDS/AstropediaAnnex_PlanetaryDataWorkshop2012.pdf. See also M.S. Bailen et al, "Astropedia - a data portal for planetary science," 43rd Lunar and Planetary Science Conference, 2012, https://www.lpi.usra.edu/meetings/lpsc2012/pdf/2478.pdf. For more about the Planetary Data System and its Data Standards, see https://pds.nasa.gov/datastandards/about/.

¹⁰ https://astrogeology.usgs.gov/tools/map-a-planet-2.

¹¹ https://www.arcgis.com/home/group.html?id=e71b1a3d3d704e0fb135bd02cb2ff80d

¹² https://planetarynames.wr.usgs.gov/.

¹³ https://astrogeology.usgs.gov/maps.

records. However, the maps portal does host colour, high resolution images of some planets for turning into globes¹⁴.

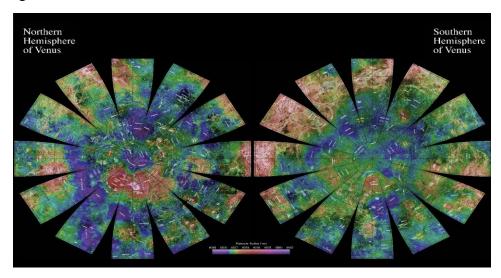


Figure 2 The Venus Magellan Globe, available through the map portal.

Several tools and tutorials are available through the Mapping, Remote-sensing, Cartography, Technology, and Research (MRCTR, pronounced "Mercator") GIS Lab at the Astrogeology Science Center¹⁵. These range from introductory videos for new ArcGIS users to more specialized, self-guided tutorials to the Planetary Geologic Mapping Python Toolbox¹⁶ and other tools for ArcMap 10.x¹⁷. According to Hunter, much of his work through MRCTR is to "remove the hurdles and 'buttonology' of accessing and using GIS data for scientists and mappers". MRCTR's inhouse services include "data management, custom tools, tutorials, help desk support and standards development".

Finally, the Astrogeology Science Center partners with NASA on the Planetary Geologic Mapping Program²⁰. While much of this site's information refers back to the pages on the Astrogeology Science Center's site, it does provide access to a larger version of the web map embedded in the Astropedia portal²¹ and protocols, guidelines, and symbology for generating planetary maps according to USGS standards.

¹⁴ https://astrogeology.usgs.gov/maps/planetary-maps-and-globes.

¹⁵ https://astrogeology.usgs.gov/facilities/mrctr-gis-lab.

¹⁶ All of these at https://astrogeology.usgs.gov/facilities/mrctr/gis-tutorials.

¹⁷ https://astrogeology.usgs.gov/facilities/mrctr/gis-tools.

¹⁸ Private correspondence.

¹⁹ Ibid.

²⁰ https://planetarymapping.wr.usgs.gov/.

²¹ https://planetarymapping.wr.usgs.gov/Review.

GIS Trends

Barbara Znamirowski Trent University

Situating GIS Services: New Neighbours and Spaces

Years ago I gave a paper at a joint conference of the Association of Canadian Map Libraries and Archives and the Canadian Association of Public Data Users arguing that "MaDGIC Units" could be an ideal way to organize specialized library units that would include maps, data, government publications and GIS technologies and services. At that time, Queen's and Trent had this form of organization, with Carleton soon following. The Ontario crowd were not alone in recognizing the merits of organizing services and collections in this way. In fact, I believe it was Sharon Neary of the University of Calgary who first coined the acronym "MaDGIC" that a number of us then adopted (not all units included government information, but the acronym also accommodated GIS centres and other variations). MaDGIC units are still found across Canadian university libraries, although some have broken up, and some are looking at new definitions of their roles within the context of evolving library technology needs and organization.

Is there a perfect organizational structure? Over the course of my career I've spent many hours in library management meetings devoted to this question (sometimes willingly, and sometimes wishing I could escape and get back to what I really enjoy – the immediate operations of my unit). But organization does matter: we work in a field where rapid changes in technology regularly require us to adapt and reorganize ourselves to better meet the needs of our students and researchers.

What trends, then, are apparent in the organization of GIS support services? Are MaDGIC units still our best bet?

The past two years have seen my library turned upside down – in a good way. The university received a major grant to renovate our main library building. This required "shovels in the ground" and a renovation project to be completed within 18 months. Together with our collections, we all moved out to a variety of rented warehouses and other vacant spaces. To put it plainly, we, along with our faculty and students, adapted to these new circumstances. But the move became an opportunity not just to adapt, but to rethink collection content and how our spaces are organized. Marie Kondo here we came: we purged many stacks, by and large keeping only what would make a 21^{st} century academic library relevant, and, hopefully, a "joy" for future research and teaching efforts.

Our project architects asked tough questions about logical groupings and overall needs. I found my view confirmed that maps, spatial and statistical data, and government publications - and the

technologies related to the support of these collections — should be kept physically and administratively together. These collections often share corporate authors, they relate to each other, and, I have observed, are used together. Those who service these collections are in a better position to do so, I would argue, if their turf includes all of them. Fortunately, project architects and library administration and colleagues agreed with me.

The more interesting question soon became: who should be our neighbours? The renovations gave us an opportunity to make a "big ask," and we went for it. We wanted access to new technology and a lab, in MaDGIC, where students and researchers could work with specialized software and peripherals. Like many other universities, we're on the "data visualization" bandwagon. The MaDGIC Unit now oversees the Data Visualization Lab, various specialized software (spatial, statistical, visualization) and a range of hardware peripherals.

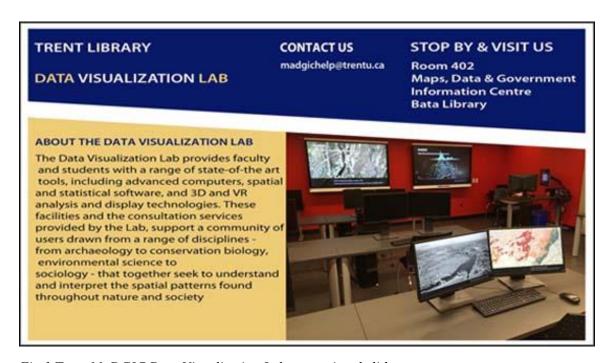


Fig.1 Trent MaDGIC Data Visualization Lab promotional slide

We also asked to be next to the library's new Critical Making Studio – a Maker Space with extra features that take it beyond physical fabrication to support such activities as podcasting, textual digitization and video capture. We've rationalized our purchases with our new neighbor, so that now our budgets go further, making it possible to support more software, and peripherals such as 3D and laser printers, 3D object and wide format scanners, a range of cameras including 360 VR, microphones and other video and audio capture technologies. Not on our list was a drone – an oversight which I hope we can correct in the near future.

Already, MaDGIC and the Critical Making Studio are collaborating on projects, trading keys to our spaces, and learning from each other. Critical Making Studios make ideal neighbors for MaDGIC units.

Another interesting result of this transformation of space and associated organizational discussions was that the university's senior administration moved some research labs associated with the quantitative social and natural sciences next to us, with the hope that collaborative projects would naturally evolve. For example, the Trent Centre for Aging and Society, the Canadian Environmental Modelling Centre, and the Indigenous Environmental Institute are among MaDGIC's new neighbours. The jury's still out as to whether this will lead to greater involvement in collaborative research, but the infrastructure and interest are certainly pushing us in the right direction.

Finally, MaDGIC also gained a small room dedicated to Virtual Reality (VR) and digitization. In an upcoming research leave I plan to make this space my new "happy place" – exploring how VR and associated spatial technologies can be integrated and used to tell stories about local environmental history in new ways.

I look forward to more discussions at upcoming conferences regarding ideal organization structures for our services, and I welcome your thoughts and feedback on this article.

About the Author

Barbara Znamirowski is Head of the Maps, Data & Government Information Centre and Data Visualization Lab at Trent University Library.

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