

BULLETIN

ASSOCIATION DES CARTOTHÈQUES et ARCHIVES CARTOGRAPHIQUES
du CANADA



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ASSOCIATION DES CARTOTHÈQUES ET ARCHIVES CARTOGRAPHIQUES DU CANADA

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Les opinions exprimées dans le *Bulletin* sont celles des collaborateurs et ne correspondent pas nécessairement à celles de l'Association.

L'Association des cartothèques et archives cartographiques du Canada remercie le Conseil de recherches en sciences humaines du Canada pour son apport financier.

Erratum to ACMLA Bulletin 111, Spring/Summer 2001

Owing to a technical problem, several figures in ACMLA *Bulletin* 111 did not reproduce at the standards which we expect.

Replacements of these figures are provided. Please affix these replacements over the existing figures in your copy of *Bulletin* 111, Spring/Summer 2001.

Figure 2 appears on page 4.

Figure 3 appears on page 6.

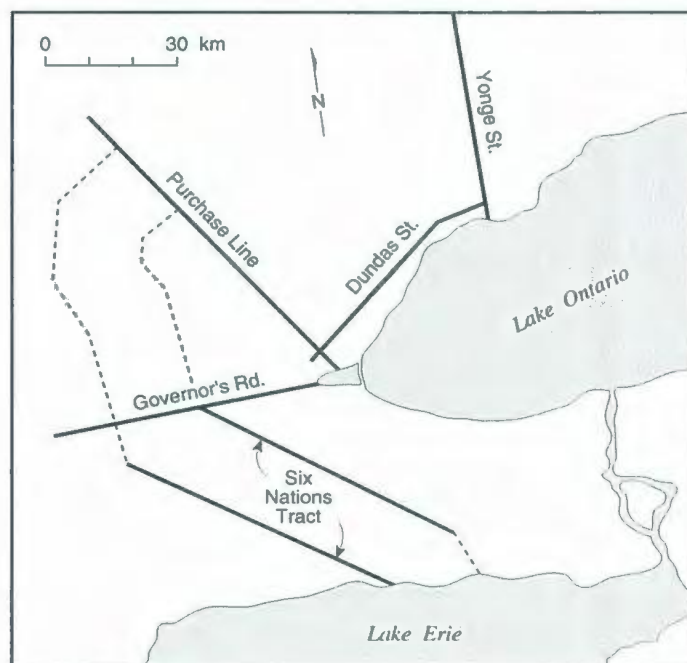


Figure 3. Major lines surveyed by Augustus Jones.

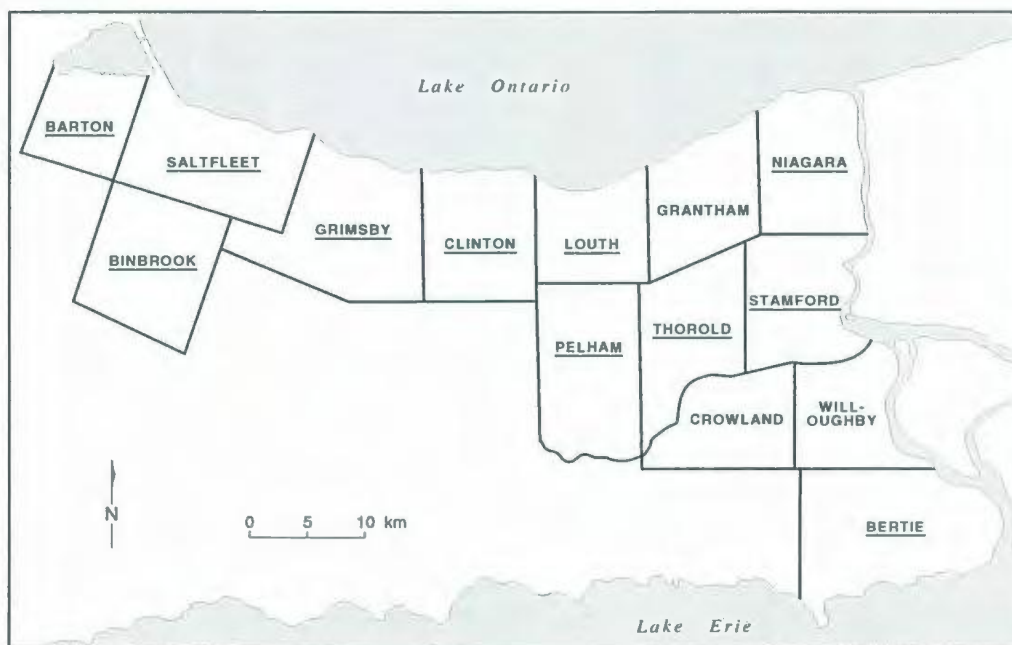


Figure 2. Niagara Peninsula townships surveyed under the supervision of Philip Frey between June 1787 and February 1789. Surveys that involved Augustus Jones are underlined.

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ON THE COVER...

Extrema Americae... by Joan [John] Blaeu, 1663. This map appeared in Joan Blaeu *Le Grand Atlas*, Amsterdam. It is reproduced from an original in the Provincial Archives of New Brunswick. It has been reproduced as ACML Facsimile Map Series, Map No. 47 (ISSN 0827-8024).

Extrema Americae... par Jean Blaeu, 1663. Cette carte apparut dans *Le Grand Atlas* de Jean Blaeu, Amsterdam. Reproduite à partir d'un original des Archives Provinciales du Nouveau Brunswick. Reproduite dans la Série de cartes fac-similés de l'ACC, carte No. 47 (ISSN 0827-8024).

PRESIDENT'S MESSAGE

I am very pleased to address the membership of the Association for the first time as your president. I think that it is only appropriate that I begin by thanking my predecessors, James Boxall, the immediate past president and Alberta Auringer Wood who has served on the Executive since 1993, both of whom have worked so hard on our members' behalf. I am also looking forward to working with the talented Executive who will guide me in the year to come.

Conference: Our annual conference, which took place in Montreal in conjunction with the Canadian Cartographic Association on May 31-June 2, was as always an unqualified success. Thanks to Pierre Roy of the Université du Québec à Montréal and Pierre Lepine, Bibliothèque Nationale du Québec, for all of their hard work as members of the Local Arrangements Committee, and Carol Marley for her outstanding job with the program. A special thank you should be accorded to our own personal tour guide in Montreal, Pierre Roy's wife Louise, who so warmly welcomed us to her city and made every evening unique with her excellent restaurant suggestions. The highlights of the conference are too numerous to mention so I will refer instead to the very detailed conference report in this issue which has been assembled by Alberta Auringer Wood from our members' summaries (page 19).

Committees: Three committee chairs have stepped down after long years of service in their positions. Cheryl Woods, as Chair of the Historical Maps Committee, has consistently produced beautiful map reproductions in the series "Historical Maps of Canada/Cartes historiques du Canada" and "Canadian Cities: Bird's Eye Views/Villes du Canada: Vues à vol d'oiseau" which have enhanced the reputation of the Association and generated solid revenue every year. Lorraine Dubreuil, as chair of the Publications Committee, has shepherded several publications through the arduous publication process and is currently working with Cheryl to produce a new work on fire insurance plans in Canadian libraries. Carol Marley, as Chair of the Copyright Committee, has kept us up-to-date through informative reports and workshops on legislation and developments as they relate to the

Il me fait grand plaisir de m'adresser aux membres de l'Association pour la première fois en tant que présidente. Je pense qu'il est plus qu'approprié de débiter en remerciant mes prédécesseurs, Jame Boxall, le président sortant et Alberta Auringer Wood qui a siégé sur le comité directeur depuis 1993. Tous deux ont travaillé très fort pour l'intérêt de tous les membres. Je suis également enchanté de pouvoir travailler avec un comité directeur talentueux qui saura me guider dans la prochaine année.

Conférence: Notre conférence annuelle qui a eu lieu à Montréal conjointement avec l'Association canadienne de cartographie du 31 mai au 2 juin fut, comme à l'habitude, un franc succès. Mille fois merci à Pierre Roy de l'Université du Québec à Montréal et à Pierre Lépine de la Bibliothèque Nationale du Québec pour tous leurs efforts en tant que membres du comité organisateur et à Carol Marley pour son travail exceptionnel à la programmation. Un merci tout spécial s'adresse à l'épouse de Pierre Roy, Louise, notre guide privé lors de la visite de Montréal qui nous a chaleureusement accueilli dans sa ville et qui a rendu chaque soirée unique en son genre grâce à ses superbes suggestions restaurants. Il y a trop de moments importants pendant la conférence pour les mentionnés tous ici, je préfère plutôt vous référer au rapport très détaillé publié dans ce bulletin et préparé par Alberta Auringer Wood à partir des sommaires des membres de l'Association (page 19).

Comités: Trois personnes ont quitté la présidence de comité après plusieurs années dans leurs postes. Cheryl Woods, présidente du comité des cartes historiques (Historical Maps Committee), a produit, au cours de son mandat, plusieurs reproductions de cartes dans les séries "Historical Maps of Canada/Cartes historiques du Canada" et "Canadian Cities: Bird's Eye Views/Villes du Canada: Vues à vol d'oiseau" qui ont servies à rehausser la réputation de l'Association et générer un revenu important à chaque année. Lorraine Dubreuil, présidente du comité des publications (Publications Committee), a piloté plusieurs projets de publications à travers le processus ardu du monde de l'édition et travaille présentement avec Carol Marley à produire un nouvel ouvrage sur les plans d'assurance-incendie (fire insurance plans) dans les bibliothèques canadiennes. Carol

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AUGUSTUS JONES: THE LIFE AND LOVES OF A PIONEER SURVEYOR

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Department of Geography, Brock University

*Paper presented at the Twenty-first Annual Niagara Peninsula History Conference
Brock University, September 18-19, 1999*

I'd like to begin on a personal note. On June 1, 1996, I got married, and the ceremony was held outdoors on the banks of the Niagara River, alongside a ravine just back of the McFarland House. Why did we choose this location? Well, it's obviously a very nice spot, especially when the weather is fine. But there's another reason too, for this is the place where Augustus Jones commenced the survey of the Garrison Line (now the East-West Line in Niagara-on-the-Lake) on June 11, 1787, thereby setting in motion a major program of surveys in the Niagara Peninsula. Jones was of Welsh descent, and his partner on the survey was Philip Frey, who had a Swiss background. I am Welsh and my wife has Swiss ancestry, and my main research interest is in the early surveys of this area, so you see why the wedding had to take place right there on the Garrison Line. [Figure 1]

Describing the survey many years later, Jones tells of starting at 'the deep hollow... above Navy Hall', and proceeding westward past a 'white oak tree' and over a 'split rock' all the way to the Four Mile Creek, thus lending an almost romantic aura to what was otherwise a straightforward exercise in practical geometry. Whether or not Jones himself viewed the survey in this light is of course debatable, for the work would have been hard, and surveyors on the whole are a pretty down-to-earth bunch. But even if romance had little place in his survey work, it seems to have played a significant

role in his personal life, which in many respects is as fascinating as his extraordinary professional career.¹

Our information about Jones comes from two main sources. First, official records such as the survey

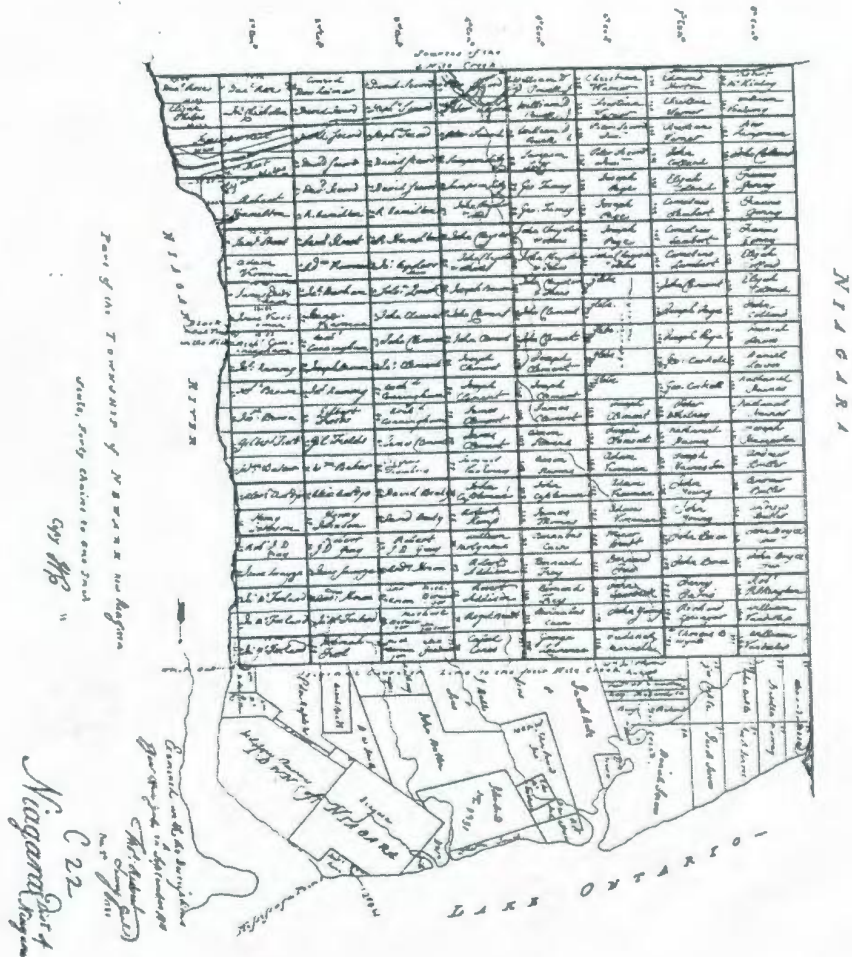


Figure 1. Copy of Thomas Rideout's 1811 map of Niagara Township showing the Garrison Line, separating the lots surveyed by Philip Frey and Augustus Jones in 1787, from land reserved for the Crown. The map is orientated with south at the top.

instructions he received, the reports and letters he wrote, his diaries and fieldnotes, his expense claims, and even — on one noteworthy occasion — the minutes of the House of Assembly of Upper Canada. And second, the writings of his descendants, notably his son Peter, who was a prominent Methodist missionary among the Indians in the first half of the nineteenth century.

It is from Peter that we learn of the family's Welsh background. Jones' grandfather emigrated from Wales, and his father Ebenezer was a tenant farmer in Dutchess County in the Hudson River valley, where Augustus was born in 1757 or 1758. Later the family moved to the vicinity of Newburgh in Orange County, where Jones, who had trained as a surveyor in New York City, took part in land transfers in 1783-84. Another descendant, Donald Jones, tells us that Jones' father and two of his brothers enlisted in the King's Orange Rangers during the American War of Independence, while another brother seems to have served with the rebels, but it is not clear what Augustus himself did. At any event, in about 1786 he arrived in the Niagara Peninsula, either accompanied or followed by his father and most of his siblings.²

He came to a Niagara reeling from the aftershock of the British defeat. Prior to 1779, the Peninsula was the sparsely populated domain of the Mississauga Indians, but war had changed all that. Refugees flocked to Fort Niagara, creating a huge demand for land when hostilities ceased, a demand that was exacerbated by the disbanding of Butler's Rangers and regular troops. Limited settlement of the west bank of the Niagara River had been permitted during the war, but now there was a real danger of the peninsula being flooded by unauthorized 'promiscuous' settlers. Surveys were urgently needed to subdivide the land and ensure its orderly allocation, and Deputy Surveyor Philip Frey was

assigned the task, reporting in 1786 to Major Archibald Campbell, Commandant at Fort Niagara.³

Fortuitously, Augustus Jones had brought with him a letter of recommendation from Cadwallader Colden II, son of a former lieutenant governor of New York and a prominent loyalist, attesting to his 'good moral, and loyal character' and his surveying ability. On presenting this to Campbell, he began work under Frey. Some preliminary surveys took place in 1786 — it is uncertain if Jones was involved in these — but the main surveys commenced with the running of the Garrison Line in June of 1787.⁴

There ensued an extraordinary 20-month period of surveying activity, which saw the laying out, in whole or in part, of 14 peninsula townships extending from Barton in the north west to Bertie in the south east. [Figure 2]

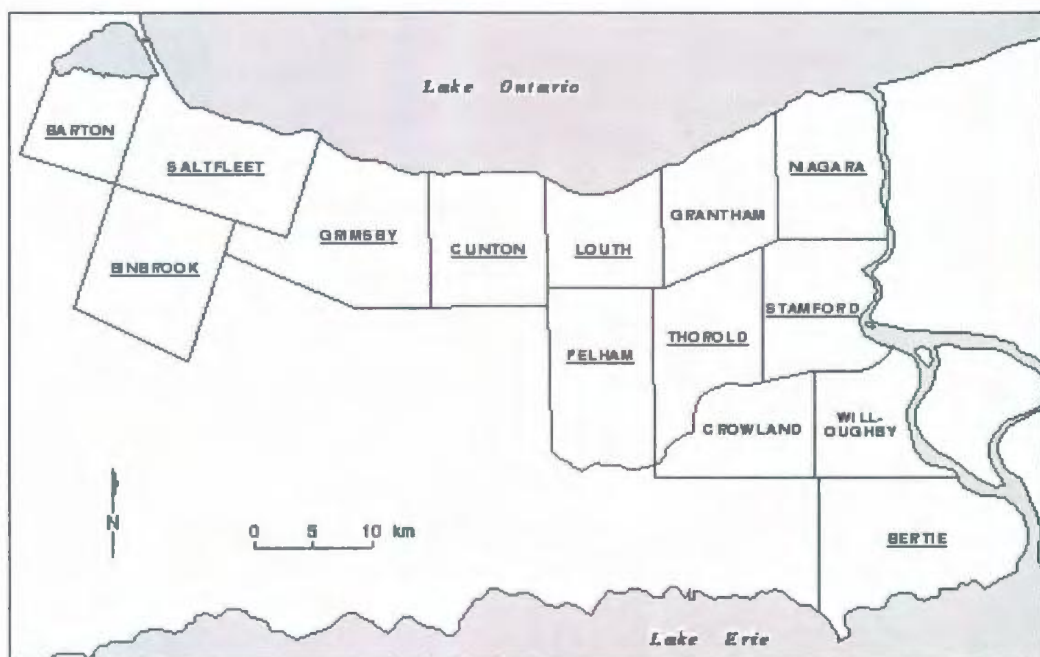


Figure 2. Niagara Peninsula townships surveyed under the supervision of Philip Frey between June 1787 and February 1789. Surveys that involved Augustus Jones are underlined.

By his own account, Jones was involved in the surveys of all but three of these townships, and was in the field for the whole time with hardly a break. From July 11 to August 24, 1787, he worked on Niagara township, or as it was then known Township No. 1. The land north of the Garrison Line was reserved for the Crown and left unsurveyed, but the land to the south — the township proper — was systematically divided into 100-acre lots. From August 30 to October 27, he surveyed the lakeshore

and first concession in the lakeshore townships of Louth, Clinton, Grimsby, Saltfleet and Barton (Nos. 4 to 8), and from November 5 to January 8, he laid out Stamford (No. 2). The rest of 1788 saw him working on Barton, Clinton, Bertie, Saltfleet, Thorold, Grimsby, Pelham and finally the last township to be surveyed, Binbrook, which was completed on February 12, 1789.⁵

Every township except Binbrook was laid out according to the Front and Rear system of survey, a time-consuming process that was used only in the Niagara Peninsula. The surveyor ran the township baseline and outline, and then moved back and forth along the lot lines, leaving markers at the front and rear of each concession. The survey parties ranged in size between about six and twelve men, and from time to time these included Jones' brothers Ebenezer and Joseph. Some of the townships, such as Niagara and Stamford, were laid out in their entirety, but the surveys of others, for example Pelham and Thorold, were extended only as far as existing settlement warranted.⁶

Jones' precise role in these surveys can only be conjectured, for the official record is not clear. To begin with, he was probably no more than a humble chainbearer, but as time went on he is known to have assumed greater responsibility. On January 15, 1788, he was appointed by Jonas Watson, Commandant of the Upper Posts, as an assistant to Frey at 2/6 (i.e. two shillings and six pence) a day. The appointment is puzzling, for Jones had already been employed at least seven months — possibly he had been working gratis before this. The figure of 2/6 is puzzling too, for Jones later claimed 4/- a day for surveys carried out both prior and subsequent to the appointment. On March 31, 1788, Watson agreed to Frey's suggestion that he deploy three parties in the field, to be led by Augustus Jones, Daniel Hazen and Jesse Pawling, in order to expedite the work. Here Watson may have been ratifying a situation that already existed, for Jones and the others seem to have been in charge of parties from the end of 1787 or even earlier. Certainly the reports Jones submitted much later suggest that he played a key role in most of the townships he surveyed, though he may have been exaggerating somewhat, and he would have been subordinate at all times to Frey.⁷

Be that as it may, there is no doubt about Jones' role after 1789, for late that year Frey suddenly departed for the United States and Jones became Acting Deputy Surveyor in his place. Throughout 1789, Frey's relationship with his superiors in Quebec had become increasingly fractious. Particular sticking points were his inability to supply large-scale township plans showing settlers' names, and suggestions that he was granting land to settlers without legal authority. Though he was able to explain both, he was further frustrated by pressure to complete the surveys as rapidly and cheaply as possible, and by the apparently uncontrollable spread of squatter settlement. The final straw came when Governor-General Dorchester refused him leave of absence to visit his relatives in the Mohawk Valley. He up and left anyway.⁸

The Surveyor General's office continued to issue instructions in Frey's name for a period in 1790 — news between Niagara and Quebec travelled very slowly at that time — but it was Augustus Jones who carried them out. By now the Nassau Land Board, established in October 1788 to assess claims for land, was fully functional, and Jones worked closely with it on a number of matters. In January he presented a plan of Niagara township, on which the Board entered the claimants for land whose titles appeared clear, and in August he reported on a resurvey of part of the Garrison Line that he and Lewis Kotte had performed to settle a land dispute. He also surveyed in Gainsborough township and possibly — the year is not certain — in Geneva township (later East Flamborough, north of Burlington Bay).⁹

Late in 1790, the Land Board, concerned that the westward spread of settlement might encroach on the land granted to the loyalist Six Nations Indians along the Grand River, directed Jones to survey the boundary between it and Nassau. The Six Nations tract, carved out by a massive land purchase from the Mississaugas in May 22, 1784, was meant to extend six miles on either side of the Grand, but the river's winding course made this impracticable. On February 1, Jones presented a survey of the river to the Board and Six Nations chiefs, who agreed on two fixed points (approximately Dunville and Brantford) that would define the centre of the southern portion of the tract. Jones then proceeded to run boundary lines parallel to and six miles on either side of the centre line, completing the work by the end of March.¹⁰

[Figure 3]

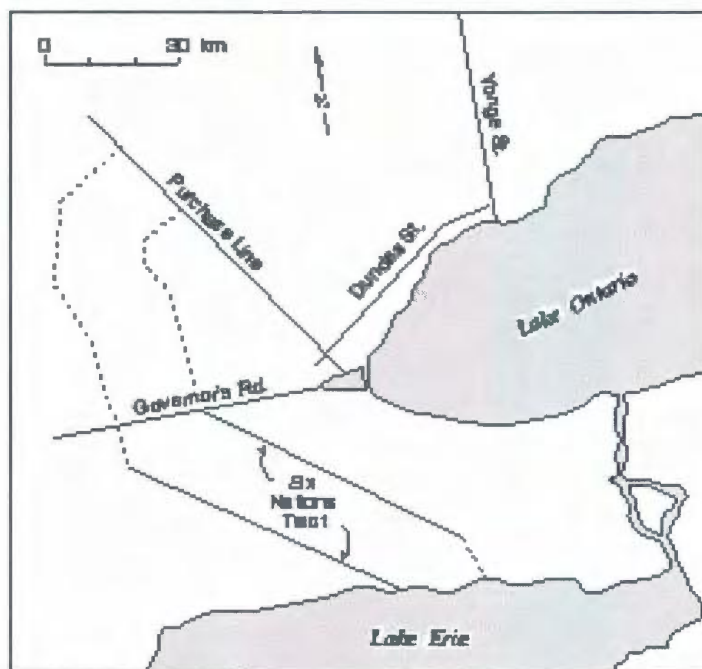


Figure 3. Major lines surveyed by Augustus Jones.

It was while the Grand River survey was in process that Jones was officially appointed Deputy Surveyor, and he is one of six provincial surveyors named in instructions handed down by Governor-General Dorchester on February 14. Contained in these were specifications for the performance of surveys, and a list of surveys to be carried out in the immediate future. Jones, as Deputy Surveyor for Nassau, was assigned two important tasks: laying-out the town of Lenox (later called Newark, and now the Old Town of Niagara-on-the-Lake), and surveying the front lines and partial side lines of 11 townships on the north shore of Lake Ontario from the Bay of Quinte westward to Toronto.¹¹

No provision for townsites had been made in the original township surveys of Niagara, and when the question of a location for Lenox came before the Land Board, its first choice was a riverfront site midway between the Garrison Line and the Niagara Escarpment. But since the lots in question were already occupied by settlers, the Board recommended that the Militia poll public opinion on four possible locations: the riverfront site, Queenston Heights, the glebe (church) lands in Stamford, and — the eventual choice — land in the crown reserve immediately north of the Garrison Line.¹²

Jones carried out a preliminary survey of the chosen area in June, 1791, and discovered to his dismay

that the plan provided by the Surveyor General overestimated the space available for the townsite by almost 50%. The Land Board's immediate response was to halve the size of the town lots, thus retaining the same number as before, but a few days later adopted the alternative solution of relocating the town to the north-west of Navy Hall instead of the south.¹³

At the end of June, Jones reported to Deputy Surveyor General John Collins in Quebec that the Lenox survey had been delayed pending government approval of the change in location and completion of the grain harvest, and in the meantime he would proceed with the survey of the Lake Ontario townships. This he carried out between July 1 and September 17. Writing again to Collins in November, Jones stated that other work had been delayed by the accidental deaths of his father and one brother the previous month, but he was now able to enclose the long-awaited large-scale township plans marked with settlers' names — those that Collins had originally asked Frey to provide almost three years previously. The facts that these plans are dated 1791 and carry Jones' name have led to a common misconception that the townships in question were surveyed by Jones that year, but the surveys all came earlier in 1787–89 and some (e.g. Grantham) did not involve Jones at all.¹⁴

The survey of Lenox began on November 28, but Jones had been working less than a month when bad weather caused a three month delay, and the survey was not completed until April 10. Completed is perhaps the wrong word, for one corner of the townsite was never laid out — this because of the refusal of certain existing settlers, among them Colonel John Butler, to relinquish their land.¹⁵

By the time Jones finished work on Lenox the political/administrative situation had changed completely. The Constitutional Act of December 1791 had created the new province of Upper Canada, and John Graves Simcoe had been appointed its first Lieutenant Governor. Change brings uncertainty, and early in 1792 we find Jones and Collins speculating on what the new regime might mean for them. Collins writes that he has already recommended Jones to Simcoe 'in the manner I think you merit', and adds, 'I cannot say who will be your Surveyor General in future, should it be your humble servant, you may command my

ready and best services'. Jones, obviously no slouch when it comes to flattery, replies in suitably deferential vein, 'If I am so fortunate as to retain my present place under the new government I shall owe it entirely to your obliging recommendation for which I shall be ever thankful & shall doubly esteem my appointment should you be at the head of the Department'.¹⁶

In the end, Collins was out of luck. He never did become Surveyor General, possibly because, in Simcoe's view, he possessed 'neither strength nor intellect', and died in 1795. Jones' fate, however, was different. He quickly gained Simcoe's confidence, and became a key figure in the implementation of Simcoe's grand design for the new province.¹⁷

I have described Jones' pre-Simcoe career in some detail, because this is when he did the bulk of his work in Niagara. The remainder of his career I shall do little more than summarize. Suffice it to say that from 1792 until late in the decade he engaged in numerous township and other surveys north, west and south of Lake Ontario, more so than any other surveyor, including laying out the greater part of York township, and a portion of York townsite, the present-day Toronto. Among the 'other' surveys, however, are three of special significance that merit individual mention.¹⁸ [Figure 3]

The first, carried out in the fall of 1792, was the survey of the Purchase Line, or Jones Baseline, which ran N 45° W from Burlington Bay and marked the north-eastern boundary of the lands bought from the Mississauga Indians in 1784. The original intention was that the line would terminate at the Thames River, but this, as was suspected in advance, was geographically impossible, and having proceeded over 50 miles along the stated course Jones had to take southwesterly offsets to find the Thames. The original line did, however, intersect the Grand River, and became the upper limit of the Six Nations tract. Since the tract was originally meant to extend further to the source of the Grand, the Indians launched legal challenges to the Purchase Line, but to no avail.¹⁹

The second survey, carried out in the spring 1793, was that of Governor's Road (originally Dundas Street) from Coote's Paradise at the tip of Burlington Bay roughly westward to the Thames River. The line

bisected the Six Nations tract, crossing the Grand River at the Forks, a location that was to play a significant part in Jones' later life. Later, in 1796 and 1798, Jones extended Dundas Street eastward to York.²⁰

The third survey, and possibly the most noteworthy of all, was that of Yonge Street. Jones first ran the line in 1794, and then opened up a road along it in 1796. Reporting on the completion of the work in her diary, Mrs. Simcoe wrote on February 18, 1796, 'The party who went to cut the road from hence [York] to Lake Simcoe, called the Yonge Street, are returned after an absence of seven weeks. The distance is 33 miles and 56 chains.'²¹

According to a brief biography written for the Association of Ontario Land Surveyors, 'From 1787 to 1799 inclusive, no surveyor in Upper Canada surveyed and subdivided as large and important an area of land as Augustus Jones.' And in the words of the official chronicler of surveying in Ontario, writing on the occasion of the centenary of the AOLS, he was 'the outstanding surveyor of the 1790s, indeed of the early history of Upper Canada.'²²

But then in 1800, everything changed, and his full-time surveying career came to an abrupt end. His very last regular survey, completed on December 28, 1799, saw him back where he began, working in the gore between Niagara and Stamford townships. Though he was called upon to perform some limited surveying after that — including two more resurveys of the Garrison Line in 1801 and 1828 — and wrote letters responding to various inquiries about his work from successive Surveyors General, he was never again employed as a full-time government surveyor. He did do some private surveying, but otherwise devoted his life to farming.²³

Why this sudden change? Two reasons suggest themselves — personal choice and government policy.

Though Jones was still young in 1799 — he was barely in his forties — and must have had a very robust constitution, he was in his own words, 'quite tired and worn out, by being so many years in the woods in driving the work ... to accommodate settlers.' The life of a pioneer surveyor was incredibly hard, and involved work on the most

difficult terrain and in the worst kinds of weather. Jones speaks of 'Cold fingers and frozen Ink' in winter and 'Swarms of mosquitoes' in summer, of hundreds of rattlesnakes near Burlington Bay, and of mice chewing his fieldnotes (sadly for posterity, these were the notes for his survey of Niagara township with Frey). He and his men frequently contracted the ague or malarial fever, a party member once came down with smallpox, he himself fractured his breastbone in a fall from a horse, and on another occasion he was shipwrecked by storms on Lake Erie.²⁴

It could not help matters that Jones was experiencing severe frustration in his financial dealings with the government. Such problems were not unusual for pioneer surveyors, but Jones' case is surely exceptional. The main issue related to his very earliest surveys under Frey in 1787-89. Frey's sudden departure meant that proper accounts were never submitted, and it was left to Jones to try and persuade the government to pay both himself and the others who worked with him. The matter was first discussed by the Nassau Land Board in 1792, but was still unresolved when Jones ceased full-time surveying in 1800. In 1810 and 1811 he petitioned the House of Assembly of Upper Canada for back pay and expenses totalling £526.15.2, incurred in surveying 'the greater part of fifteen Townships, containing 2,537 lots of 100 acres each', but was turned down. He did not give up, and from then until 1829 continued writing to successive Surveyors General in an attempt to gain compensation. So far as we know, he never did succeed.²⁵

Jones' weariness with the surveying life in 1800 may have been accompanied by a genuine desire to settle down and become something of a gentleman farmer. He was familiar with the vast estates of the big landowners of the Hudson River valley, and understandably perhaps wished to emulate them. He and his family settled in the Stoney Creek area soon after their arrival in Canada, and through the system of petition and grant Jones received extensive lands in and

about Saltfleet township. He also acquired town lots in Newark and York. His own home was on the west side of the outlet of Stoney Creek itself, in lot 24, concession 1 of Saltfleet.²⁶ [Figure 4]

Jones continued to farm at Stoney Creek until 1817, and became a prominent member of the community. He received visits from the Simcoes, he served as a captain in the militia, he was a proprietor of the King's Head Inn, erected by Simcoe at a key road intersection at the southern end of Burlington Beach, and he was the first settler named on an 1811 petition to the House of Assembly of Upper Canada for the creation of a new district and county town for the townships surrounding Burlington Bay. Evidently, if Jones had any inkling of his future

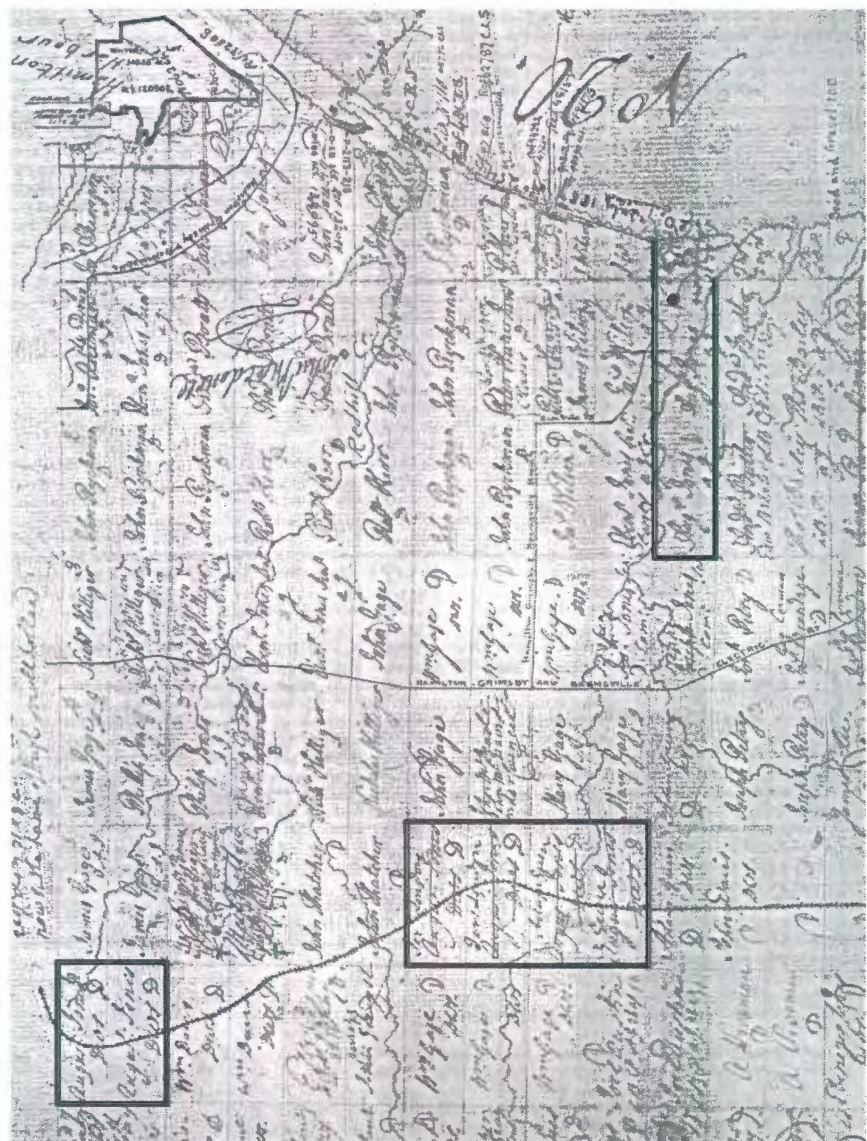


Figure 4. Portion of Augustus Jones' 1791 map of Saltfleet with lots bearing his name highlighted. The dot marks the approximate location of his home.

success, there was every reason for him to switch from surveying to farming.²⁷

But there may have been another, more sinister reason. His change of career may not have been voluntary. There is a possibility he was deliberately dropped as a government surveyor because of his ties with the Indians, and in particular with the Mohawk war chief Joseph Brant, so often a thorn in the side of the authorities.

Jones' involvement with the Indians could not have been closer, nor more complex. Augustus' son Peter writes in his journals that his father's survey work (and no doubt the Grand River surveys in particular) 'brought him in contact with the Indian tribes; he learned their language, and employed many of them in his service. He became much interested in the Indian character, so much so that he resolved on taking a wife from among them. Accordingly he married my mother, Tuhbenahneequay [also known as Sarah Henry], daughter of Wahbanosay, a chief of the Mississauga Tribe of the Ojebway nation.'²⁸

This is where the story starts to get complicated, for Jones' only recorded marriage is to another Sarah — Sarah Tekarihogen, the 18 year-old daughter of Mohawk chief Tekarihogen. A wedding notice, accompanied by a suitably sappy verse, appeared in the *Upper Canada Gazette* of May 12, 1798: 'Married — At the Grand River about three weeks since, A. Jones, Esq., Deputy Surveyor, to a young lady of that place, daughter to the noted Mohawk Chief Tettihogah.' They settled in Stoney Creek, and had eight children.²⁹ [Figure 5]

So how does Peter's mother, Tuhbenahneequay, fit into all this? Apparently, her father Wahbanosay had served as Jones' guide on journeys into the interior, and invited Jones to take his daughter along after she came of age in the mid 1790s. She and Jones became romantically involved, and may have been married in a native ceremony, though there is no record of this. Jones wanted her to settle and become Christian, but she refused, preferring the Indian way of life, and instead he married Sarah Tekarihogen, who was already a Christian. But Jones did not sever ties with Tuhbenahneequay, and in fact she gave birth to their first son John not long after the wedding to Sarah Tekarihogen. Jones' relationship with Tuhbenahneequay continued for

**MARRIED] At the Grand-River a-
bout three weeks since, A. JONES, esq.
deputy surveyor, to a young lady of
that place, daughter to the noted Mo-
hawk warrior TERRIHOGAH.**

**" At each kind glance may their souls
unite,
While love's soft sympathy imparts
The tender transport of delight.
Which beats in undivided hearts."**

Figure 5. Augustus Jones' wedding announcement in the *Upper Canada Gazette*.

at least a few years more, for Peter, their second and last child, was born in 1802.³⁰

For a while there, Jones enjoyed a unique double life, living most of the time in traditional English fashion with his Mohawk wife (who according to a contemporary 'presided at the table with a taste equal to a refined lady's'), but occasionally cohabiting with his Mississauga wife when her people camped near his home or when he visited the interior. What gives the situation extra spice is the fact that the Mohawks and Mississaugas were rarely the best of friends. How Jones reconciled all this with his Methodist beliefs is unknown, but the situation evidently embarrassed his missionary son Peter, who does not even mention the Mohawk wife in his journals, leaving the reader with the impression that all her children were born to his own mother. This deliberate oversight has led to all manner of confusion in secondary sources that mention Jones' personal life.³¹

It seems unlikely that Jones' marital circumstances would have bothered the authorities greatly — such arrangements were not unknown in frontier areas — but his support for Joseph Brant's endeavour to sell off portions of the Six Nations tract was a different matter. By Instructions handed down to James Murray, Governor of Quebec, in 1763, it was illegal to dispose of lands reserved for Indians without Crown permission. Though some in the Six Nations supported the official view, Brant (and Tekarihogen) saw things differently, and viewed

land sales both as a source of money and a means of disposing of territory surplus to their needs. Deeds had been issued to various settlers as early as 1787, but Simcoe put a stop to further sales. Matters came to a head, however, in the late 1790s, and faced with the possibility of Indian violence, the authorities capitulated. Early in 1798, the Indians parted with over half their tract, most of it in the upper reaches of the Grand north of the Governor's Road.³²

Jones' role in all this did not go unnoticed, and later that year Peter Russell, administrator of the Six Nations colony, reported ominously that Jones could not be depended on, as he was 'connected with Capt'n. Brant'. Connected is putting it mildly, for the two had been personal friends ever since 1795, when Brant took up residence at Wellington Square, a village on his 3000-acre grant at the northern end of Burlington Beach, and just a few miles from Jones' own home. As son Peter put it, 'The two families were constantly crossing this sandy beach, living on friendly terms with each other' and 'sharing each other's hospitality'. Indeed, they were so close that Brant gave his own Indian name — Thayendanegea — to John, Augustus' first Mississauga son, and named Jones as one of the executors of his will.³³

Whether or not this was sufficient reason to terminate Jones' employment as a surveyor is uncertain, but it is not inconceivable, and the fact that Brant had assigned Jones a lease on 4800 acres of land in the Six Nations tract in 1797 could not have helped. A further 1200 acres were added in 1805, making a total of 10 square miles, the whole apparently in return for services rendered — surveying and otherwise — and in recognition of Jones' Indian connections. The rent on the latter property, to be paid in January of every year for 900 years, was 'one Pepper Corn, if same shall be lawfully demanded'.³⁴

This land, known as Cold Springs, sat just east of the Forks of the Grand astride the Governor's Road, which Jones had surveyed in 1793, and it was here that he was to end his days. He and his family moved from Saltfleet in 1817, and either went straight to Cold Springs or went first to the Mohawk Village (Brantford), moving north to Cold Springs in the mid 1820s.³⁵

The half dozen or so years prior to the move from Saltfleet had seen Jones' fortunes take a turn for the worse. The War of 1812 caused particular problems. The previous year, Jones had resigned from the Lincoln Militia after 17 years' service, for reasons that one superior officer considered decidedly frivolous: 'Captain Augustus Jones resigns without any other excuse that he does not like to get the ill will of his neighbours by making them do their duties'. He may have re-enlisted in time to fight for the British, but would have been in the thick of things anyway because the Battle of Stoney Creek took place on the nearby farms of his sisters Mary and Susannah Gage, and his own house was occupied twice in 1813, first by American troops and then by British. The enemy caused relatively little damage — £17.7.6 worth by Jones' estimate — but the British (including Delaware Indians attached to the force) trashed the place and stole many animals and implements. Jones submitted a minutely itemized expense claim for £585.14.6 — including, for example, £7.1.0 for '1 large hog taken by the 100th Regt. weighing 200 lbs. at 9d [a pound]', but he received only £253 in compensation. This would have provided little solace for the proud owner of a fine eight-roomed house 'built somewhat after the style of those old Continental days, with profuse and elaborate carpenter and joiner work'.³⁶

At this time also, Jones would have been getting more and more concerned about the fate of his two Mississauga sons, John and Peter, who at their mother's insistence had lived with her since birth to be raised in the Indian fashion. The Credit River band to which they belonged was in serious decline. Disease, especially smallpox, had carried many away, alcohol abuse and fighting were rampant, and by the end of the war their numbers were down to 200. And so in 1816, when he was almost 60, Jones journeyed into the interior to bring his sons back to Stoney Creek. Peter, then only 14, could speak only a few words of English, but was immediately enrolled in a grammar school, and there began his astonishing transformation into one of the leading Methodist missionaries of the time.³⁷

The family might possibly have remained in Stoney Creek but for growing racial intolerance among Jones' neighbours, especially recent immigrants from the States. As his son said many years later, 'the old American settlers... think it is not right for

the whites to intermarry with Indians'. An arsonist burned Jones' barn in 1815, and while it is not known if this was racially motivated, it was clearly becoming time to go.³⁸

Living on the Grand River, Jones supported his large family by farming and by selling off portions of his vast estates, and became actively involved in Indian life, helping form what became the Mohawk Institute and serving as trustee of the first Indian school. His later years were not the happiest, however. Energetic to the end, he had plans to build a mill on his property and lay out the surrounding land in town lots, but problems with a company contracted to manufacture mill irons left him facing debt and the possible loss of his farm. He appealed to the Lieutenant Governor Sir Francis Bond Head for redress, but died on November 16, 1836 before the matter could be resolved.³⁹

It is doubtful that Bond Head would have been sympathetic, for in a subsequent letter he referred to Jones disparagingly as 'an American surveyor' who 'in open adultery had children by several Indian squaws' — not the most appropriate epitaph for someone who played such an important role in the early years of Ontario, and who by all accounts must have been a truly remarkable man. Jones was buried at Cold River, and later re-interred alongside his son Peter in Brantford. His grave is unmarked.⁴⁰

Notes

¹ Niagara Historical Society, 1917, Publication No. 30, p. 35.

² Donald G. Jones, 1988. 'Augustus Jones — An Outline Biography', *Papers and Records*, Head of the Lake Historical Society, 15, p. 91; Rev. Peter Jones, 1860, *Life and Journals of Kah-ke-wa-quo-na-by*, Anson Green, Toronto, p. 1; Donald B. Smith, 1988, 'Augustus Jones', *Dictionary of Canadian Biography*, 7, 1836-1850, p. 450.

³ Alexander Fraser (ed.), 1905, *Third Report of the Bureau of Archives for the Province of Ontario*, King's Printer, Toronto, pp. 307-308, 309 [This volume contains transcriptions of official documents (letters, reports, proclamations, instructions, lists, etc.) for the period 1763 to 1791. In the interests of brevity, the documents are not cited individually in these references, but the relevant page numbers are

stated. The same applies to other collections of documents, such as Survey Letters and Cruikshank below.]

⁴ Peter Jones, op. cit., p. 1; Donald B. Smith, 1987, *Sacred Feathers. The Reverend Peter Jones and the Mississauga Indians*. University of Toronto Press, Toronto, p. 5; Donald B. Smith, 1988, op. cit., p. 450.

⁵ Alun Hughes, 1995, 'The Deep Hollow, the White Oak Tree, and the Split Rock: the Early Surveys of Niagara Township,' *Bulletin*, 95, Association of Canadian Map Libraries and Archives, pp. 1-11; Survey Letters, Archives of Ontario, Vol. 32, pp. 1-17, 443-448.

⁶ Ibid., pp. 443-448, 457.

⁷ Ibid., pp. 1-17, 443-448; Fraser, 1905, op. cit., p. 309.

⁸ Ibid., pp. 300, 314-318.

⁹ Cruikshank, E. A. (ed.), 1930, *Records of Niagara: a Collection of Contemporary Letters and Documents, 1790-1792*. Niagara Historical Society, Publication No. 41, Niagara-on-the-Lake, p. 21; Fraser, 1905, op. cit., pp. 195, 308; Survey Letters, op. cit., pp. 15, 405.

¹⁰ Fraser, 1905, op. cit., pp. 300-301, 492-493.

¹¹ Ibid., pp. 319, 389-391.

¹² Ibid., pp. 298-299.

¹³ Ibid., pp. 303-304, 321.

¹⁴ Ibid., pp. 314, 321, 324-325; Donald Jones, op. cit., p. 96.

¹⁵ Fraser, 1905, op. cit., pp. 327-329.

¹⁶ Ibid., pp. 326-328.

¹⁷ John L. Ladell, 1993, *They Left Their Mark: Surveyors and Their Role in the Settlement of Ontario*, Dundurn Press, Toronto, pp. 86, 89.

¹⁸ Association of Ontario Land Surveyors, 1923, 'Augustus Jones', *Annual Report*, pp. 115-117; Field

Notes, Augustus Jones, Archives of Ontario.

¹⁹ Fraser, 1905, op. cit., p. 332; Steve Thorning, 1995, 'Augustus Jones and the Jones Baseline', *Wellington County History*, pp. 53-56.

²⁰ Donald Jones, op. cit., pp. 99, 101; Grant Karcich, 1983, 'Augustus Jones, Upper Canada Public Land Surveyor', *Families*, 22, p. 324; J. H. Smith, 1897, *Historical Sketch of the County of Wentworth and the Head of the Lake*, County Council, Hamilton, reprinted in Wentworth Historical Society, *Papers and Records*, pp. 64, 66; Wm. C. Yates, 1962, 'The Life and Hard Times of the Early Land Surveyors', *The Ontario Land Surveyor*, 62, p. 18.

²¹ Field Notes, op. cit.; Mary Quale Innis (ed.), 1965. *Mrs. Simcoe's Diary*, Macmillan of Canada, Toronto, pp. 170, 174; Don W. Thomson, 1966, *Men and Meridians: the History of Surveying and Mapping in Canada*. Vol. 1, Queen's Printer, Ottawa, p. 231.

²² Association of Ontario Land Surveyors, op. cit., p. 117; Ladell, op. cit., p. 105.

²³ Karcich, op. cit., p. 325; Niagara Historical Society, op. cit., pp. 34-35.

²⁴ Innis, op. cit., p. 169; Donald Jones, op. cit., p. 102; Donald B. Smith, 1981a, 'Augustus Jones', *Dictionary of Hamilton Biography*, Hamilton, p. 110; Donald B. Smith, 1988, op. cit., p. 451; Survey Letters, op. cit., pp. 143, 167; Yates, op. cit., p. 21.

²⁵ Fraser, 1905, op. cit., p. 306; Alexander Fraser (ed.), 1912, *Eighth Report of the Bureau of Archives for the Province of Ontario, 1911*, King's Printer, Toronto, pp. 331, 446; Survey Letters, op. cit., pp. 437, 443-448, 455; Yates, op. cit. p. 21.

²⁶ Mabel Burkholder and T. Roy Woodhouse, 1975, 'Crown Patentees of Saltfleet Township', in *Saltfleet — Then and Now*, Town of Stoney Creek, Hamilton, pp. 22-23; Donald Jones, op. cit., pp. 98-99.

²⁷ Marjorie Freeman Campbell, 1966, *A Mountain and a City. The Story of Hamilton*, McClelland and Stewart, Toronto, pp. 36-37; Fraser, 1905, 1912, op. cit., pp. 422-423; Innis, op. cit., pp. 113, 158; R. Janet Powell (ed.), 1950, *Annals of the Forty, 1784-1818*, Grimsby Historical Society, No. 1, p. 45.

²⁸ Peter Jones, op. cit., p. 1.

²⁹ *Upper Canada Gazette*, May 12, 1798.

³⁰ Donald B. Smith, 1987, op. cit., pp. 3-4.

³¹ Campbell, op. cit., p. 22; Peter Jones, op. cit., pp. 1-2.

³² Fraser, 1905, 1905, op. cit., p. x; C. M. Johnston, 1981, 'Thayendanegea (Joseph Brant)', *Dictionary of Hamilton Biography*, Hamilton, p. 193; Ladell, op. cit., p. 105; Mary Nelles 1991, 'United Empire Loyalists along the Grand River in Haldimand County', in *Loyalist Families of the Grand River Branch, United Empire Loyalists' Association of Canada*, Pro Familia Publishing, Toronto, p. 58; Donald B. Smith, 1987, op. cit., p. 5.

³³ Rev. Peter Jones, 1861, *History of the Ojebway Indians*, A. W. Bennett, London, pp. 50-51, 210-211; Donald B. Smith, 1981a, op. cit., pp. 110-111.

³⁴ Donald Jones, op. cit., p. 101; Donald A. Smith, 1956 (?), *At The Forks of the Grand*, Paris Centennial Committee, Paris, pp. 5-6; Donald B. Smith, 1987, op. cit., p. 5.

³⁵ Karcich, op. cit., p. 325; Donald Jones, op. cit., pp. 104, 107; Donald B. Smith, 1981a, op. cit., p. 111; Donald B. Smith, 1987, op. cit., p. 44; Donald B. Smith, 1988, op. cit., p. 451; Survey Letters, op. cit. p. 443.

³⁶ Campbell, op. cit., p. 48; William M. Gage, 1986, *The Coming Together of the Keyes and Gage Families*, Gateway Press, Baltimore, pp. 369-372; Donald Jones, op. cit., p. 105-107.

³⁷ Donald B. Smith, 1981b, 'Kahkewaquonaby (Sacred Feathers)', *Dictionary of Hamilton Biography*, Hamilton, p. 112; Donald B. Smith, 1987, op. cit., pp. 34-41.

³⁸ Donald B. Smith, 1981a, op. cit., p. 111; Donald B. Smith, 1987, op. cit., p. 43; Donald B. Smith, 1988, op. cit., p. 451.

³⁹ Donald Jones, op. cit., pp. 107-108; Donald B. Smith, 1988, op. cit., p. 451.

⁴⁰ Donald Jones, op. cit., p. 108; Donald B. Smith, 1988, op. cit., p. 451.

INTER-LIBRARY COOPERATION FOR GIS SERVICES: A ROAD TO SUCCESS

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Introduction

This paper focuses on the cooperative endeavours of two Canadian university libraries to build a collection of local geospatial data and share the workload associated with the provision of GIS services. We will look at how we got started, what worked, what we have learned in the process and our plans for the future.

Who We Are

Our two universities are both located in the city of Ottawa, Canada's capital, less than 4 miles apart travelling along the scenic Rideau Canal. Both are mid-size universities, Carleton with an enrolment of 17,000 students, and the University of Ottawa, which has both a medical and law school, with 30,000 students. The University of Ottawa is the largest bilingual (French/English) university in North America.

Our map libraries are comparable in size: Carleton has a collection of 160,000 maps, while the University of Ottawa has 145,000 maps and 250,000 air photographs. Carleton's map collection was integrated several years ago with the Government Documents and Data Library, an amalgamation that has worked quite successfully. The University of Ottawa's map collection is still a separate entity within the Humanities and Science Library.

The two map libraries have a history of collaboration dating back to the 1970s. There is some cooperative collection development for maps and local area air photos, but since the advent of GIS services the cooperation has become more active.

Setting/Background

As with most North American libraries, the Association of Research Libraries (ARL) Geographic Information Systems (GIS) Literacy Project was a significant step in acquiring introductory level GIS capability in Canadian libraries. Part of the impetus for the ARL GIS Literacy Project in the United States developed from the fact that libraries were being "flooded" with geo-spatial data from their federal government which they could not effectively exploit without some type of GIS software. In Canada, where government agencies hold crown copyright and are governed by cost recovery policies, we were "data poor". When the planning was underway for the Canadian phase, a "basic" set of Canadian data was identified as critical for project success. It proved impossible to secure such a data set, but the project proceeded despite the lack of "real" Canadian spatial digital data. The Canadian component was launched in the spring of 1995, with the participation of 28 libraries. ArcView 2.1, accompanied by the Digital Chart of the World (DCW), ArcWorld, ArcUSA and ArcScene, arrived in our libraries in the fall of 1995.

So, as librarians, we were faced with providing a service with almost no data. Regional and local problems were analysed using the 1:1,000,000 data from DCW, or professors were faced with designing labs and exercises using readily available U.S. local scale data. We were tired of hearing GIS professors complain: "Do I have to do another lab on the Boston area – can't you get me Ottawa data?" It was ironic that while Canada is considered one of the world leaders in GIS technology, and our government produces some of the highest quality spatial data in the world, we were graduating an

entire generation of university students with GIS training who had little or no exposure to Canadian geo-spatial data.

The data scarcity problem improved with what in Canada is called the Data Liberation Initiative, an agreement between Canadian university libraries and Statistics Canada. Under this consortium arrangement, Canadian universities were provided with access to all Statistics Canada products including census geography files for an annual subscription fee. In 1998, in response to the demand for Canadian content within The Schools and Libraries Program, ESRI Canada created *ArcCanada: The Schools and Libraries Edition* containing national and provincial datasets. However, only one local scale sampler was included in the CD-ROM for Kingston, Ontario, and use of the CD-ROM was restricted to in-library use.

Teaming Up

This was our situation at the beginning of 1998: we recognized the potential of GIS, had software and equipment, were ready to support the teaching and research needs of our users, but were frustrated by the lack of access to local and regional level GIS data. We knew that students learn best by studying actual problems and it is easiest for them to relate to issues in their community where they could do fieldwork or conduct on-site verification.

We had successfully worked together in the past at Carleton, and there were already in place informal agreements for some collection development. It seemed logical to team up to acquire geo-spatial data for our local area.

The Turning Point

At the beginning of 1998, a letter was written to the Regional Municipality of Ottawa-Carleton (RMOC), suggesting that the two universities work together with them to develop a proposal permitting students and faculty access to digital geo-spatial data for the region. The region is an amalgamation of several local municipalities, and the Region's Geomatics Division was the primary source of GIS data for Ottawa. We explained that we had proven ourselves as responsible data custodians through the Data Liberation Initiative, and that we would ensure that individual users would sign an end-user data agreement honouring the terms and

conditions of the license. The Region's Geomatics Division had been filling individual data requests for many years from students, but found the process neither efficient nor effective. They quickly recognized the advantages of having a common distribution service in the two local universities, and were sympathetic to the needs of GIS students for meaningful local data.

A contact person was appointed by the municipality to work with us to identify GIS data files suitable for distribution (naturally some regional files were considered too sensitive to release). The license agreement between the two universities and the Region was worked out with surprisingly little pain and little legal intervention, considering that it was the first license of this type for the Region. There was a willingness to expedite the process and not get caught up with small details.

At that point in time, the Region had a proprietary GIS application but used MapInfo for some desktop applications. Even though the University of Ottawa used ArcView exclusively, we agreed to accept the data in one format, MapInfo; Carleton agreed to do the format conversion to ArcView for the benefit of their users as well as ours. We also accepted the data in the locally used projection, Modified Transverse Mercator, rather than requesting additional conversion work from the Region. In some cases, we also accepted single copies of the CD-ROMs and then made copies for each other. We were fortunate that metadata was supplied with the CD-ROM containing the GIS data files, although it was not as detailed as we would have liked. For the first time, students in our universities could work with local data rather than focussing solely on national or provincial issues.

Extending Our Reach

Encouraged by our success with the Regional Municipality, we next approached the National Capital Commission (NCC), at the suggestion of a local high school teacher who learned of the existence of recent digital orthophotographs. The National Capital Commission is a federal government agency responsible for managing the National Capital Region, an area that extends across two provinces on both sides of the Ottawa River and includes Gatineau Park, a commonly used site for field studies and exercises by the two universities. As well, the Regional Municipality and

the NCC have actively cooperated in several mapping projects in the past.

Again we were lucky that our technical contact was extremely sympathetic to the needs of GIS students and wanted to make the data accessible. The negotiation process was considerably facilitated by the existing agreement with the Region, in part because the NCC and RMOC share a number of GIS datasets. The license with the Region was used as a model for the license with the NCC, reducing what can sometimes be a complicated, lengthy process to just a few days. During the negotiation with the National Capital Commission, we tried to extend the agreement to also cover the local community college and secondary school board who faced the same data procurement problems we experienced. However, the NCC preferred to negotiate with the universities together and issue separate agreements for other interested institutions.

Although we first started with the digital orthophotos, the NCC has since donated to our libraries under license, a 1:25 000 topographic series, as well as a number of boundary files and recreational files for the Gatineau Park. We are now in the process of acquiring a number of bio-physical data files.

Implications

While our two universities have benefited directly by the donation of this GIS data, the generosity of these two institutions has been extended to other educational institutions across Canada. The Regional Municipality put together a "General use CD-ROM" consisting of basic themes such as boundaries, roads, rivers, etc. which would allow students to create the equivalent of the Region's General Use Map. Other data, such as school locations, were added to the "base" GIS data set to increase the relevance of the data and expand the range of possible student projects. Over 300 CD-ROMs were distributed to schools in Ottawa. The experience has been so positive that the Region now makes the data available to the public and educational sectors across Canada from their web site (<http://atlas.city.ottawa.on.ca/mapping/atlas/atlas.htm>).

Several months after we received the data from the NCC, our contact called to ask "Are there other

universities in Canada with similar programs like yours, and are they "starved" for current valid Canadian information?" It was a revelation to them how data poor Canadian universities were. As a result, the Commission extended their offer of free GIS data to other universities across Canada, using the model license and data agreement form developed by the University of Ottawa and Carleton. To date, 14 Canadian libraries have taken advantage of their generous offer.

As a library, we collect and offer data in a variety of formats, projections and datums. We needed to be able to convert to and from the projection used by the Region and NCC. At the time, the ArcView projection utility was not available. We tackled this problem by writing a joint letter to a Canadian company specializing in data conversion software and explaining our situation. The company supplied us with their conversion software and has continued to provide us with updates.

Training

We don't think anyone involved in providing GIS services in libraries would argue that staff training is a critical issue: GIS requires specialized training and good computer skills. GIS services will not thrive unless staff have the requisite skills and knowledge to support the service. Library training budgets, however, are normally inadequate for vendor supplied training.

The training issues in our libraries were answered in part by a chance encounter at the Ottawa ESRI user group meeting with a GIS professor at Carleton. He agreed to allow the Map Librarian from the University of Ottawa to audit his Introductory GIS course at Carleton and extended the offer to all of the map library staff at his own library. We have also audited his advanced GIS course (no assignments to do!). This arrangement works well on a number of fronts: library staff become more comfortable with ArcView and learn how the data is being used in the classroom; the professor stresses the importance of starting in the library for data (what else can he do when we sit in the audience); library staff contribute information about data availability and related issues in the classroom. A similar arrangement is now available at the University of Ottawa.

Other Liaison Activities

We have also tried to foster liaison activities in other ways: we asked for and received approval to take our contacts at the Region and the National Capital Commission to lunch along with the two professors most involved in teaching GIS at our universities. In addition to allowing us to show our appreciation of the support from our technical contacts, it gave us an opportunity to informally talk about GIS teaching, student needs and data production in a relaxed setting.

This informal contact has unexpected benefits. When the Regional Municipality of Ottawa-Carleton provided us with a coloured photomosaic of the entire region, they did not have the time to create geo-referenced information ("world") files for the individual photos. The GIS faculty member at the University of Ottawa willingly agreed to georeference the files, which were then given back to the Region.

Publicity and Marketing

The success of any GIS service requires that the service be widely publicized and marketed. It is not enough to think that if you acquire the data and the equipment "users will come". The user community needs to be kept informed of new acquisitions, new services, etc. This is another area where cooperation has reduced the workload; we created joint press releases, flyers and brochures to inform our user community of the rich source of local data for their teaching and research, as well as a CD-ROM data sampler for faculty members to see first hand what the data looks like.

We also participated in a joint GIS day in cooperation with the local ESRI office. Again this is another area where sharing the workload enabled us to tackle an activity which we may have avoided as a single institution. We worked together to plan the activities and publicity materials - GIS Day poster, invitations and backgrounder/press release. ESRI contributed a number of handouts such as the *ESRI Map Book*, the *Millenium Map of Canada*, current issues of *ArcNews* and *ArcNorth News* and GIS Day buttons. Geo Access Division of Natural Resources Canada and Statistics Canada also participated. Many local high schools planned field trips to Carleton as GIS Day activities. We estimate that over

300 students, teachers, faculty and other visitors took part in our GIS Day event.

Everyone Benefits

In total, our institutions have received data valued at more than \$200,000 - data we would never have been able to buy even with educational discounts. Working together has given the confidence to build our GIS service, while reducing the burden on each library. We have developed common documentation and web pages, and shared publicity materials. Our success has been positively received by our university administrators, and has raised the profile of our map libraries within our Universities and the local GIS community. We now have a support network within the universities and with local GIS producers, and we share information about new data, new developments in the field, etc and help distribute the work. Our contact from the region even came to the Association of Canadian Map Libraries and Archives conference to discuss the Region's approach to data distribution, and explain how positive the experience has been for them to make their GIS data accessible to the educational sector and then the general public.

Our researchers and students can now address real world problems in the community, and professors can design class assignments and labs using readily available, up-to-date local data. Only a few short years ago, students spent much of their time on securing and formatting data, often digitizing paper sources - now they can focus on learning GIS and its power for analysis, modeling and problem solving. GIS students also develop an appreciation of local data sources.

As mentioned, the data producers have also experienced unexpected benefits. Most obviously, they no longer have to fill ad-hoc individual requests from university students for data. They are happy to turn over their data distribution to the universities. They have developed a better understanding of the needs of GIS students and their professors, and the door for cooperative projects has been opened. The universities now provide co-op students who have worked with their data. Most importantly, the students who graduate today are future data consumers. Our contacts have also developed an appreciation of the

importance of metadata and how critical it is for GIS users. They now automatically provide the metadata with the data!

What We Have Learned in the Process

Administrative support is critical. We have been fortunate that from the very beginning, our libraries have supported GIS services through the provision of equipment and training (in part because of our efforts to educate them about the importance of GIS, its growth on campus and its multi-disciplinary nature). We have also taken advantage of every opportunity to inform them of our successes, so that they could justify their return on investment. We have given them a concrete example of inter-library cooperation, cooperation which resulted in a donation of more than \$200,000 worth of geo-spatial data.

One has to be persistent and take advantage of every opportunity to make contacts and maintain relationships. One of the best places is the local ESRI user group meeting - not only do you learn about the latest developments at ESRI, but you have an opportunity to meet with data producers. The free ESRI seminars on new products are also good places to develop contacts. These may be the best bargains in town. We also attend the ESRI meetings for high school teachers, as a means of understanding what is being taught in the high schools and the issues facing high school teachers.

Only do it once and share. If we develop user documentation, we make it available to the other library in a form that can be manipulated (just use the find and replace). We have developed joint web pages and have consulted together on their design, content and appearance. If one of us learns of a new data source or interesting web site, we automatically inform the other. In many cases, our data producers just supply one CD-ROM with data and we automatically make a copy for the other institution.

Our motto is, if you don't ask, you won't get. The worst anyone can say is no. We have been surprised by the positive reception we have received, some of which we attribute to the fact that we are working together as a team. Even if you can't get something for free, a data producer or software

vendor may consider an educational discount, or even a donation in return for an income tax receipt.

It may be self-evident, but always, always, acknowledge donations. A thank you letter is nice but it is important that the data supplier know that their data is being used and appreciated. We recently sent the Region and National Capital Commission examples of student lab exercises and projects so that they can see how their data has benefited our students. Also, make sure that the thank you letter goes to the person in charge!

Think globally. Don't just think of your own institution - first we ask for ourselves and then we ask for others: the high schools, community colleges and other Canadian universities. Certainly in Canada, many data producers are unaware of the lack of GIS data for students and need to be educated to the needs of the students locally and across the country. In the case of the Region, their experience with the two universities and the creation of the school CD-ROM has been so positive that they now make the data freely available on the web for non-commercial purposes. The data is regularly refreshed. In recognition of their work in improving access to geospatial data, the Region and the NCC recently received an award from the Association of Canadian Map Libraries and Archives.

Data producers also need to be educated about the importance of metadata, especially those at municipal government levels. They don't automatically supply metadata, and what they often supply is brief. It has been an education process for them. The Region now has very good descriptions of their data on their web site, in part because we told them that it would be one of the first questions they would be asked once the data was available online.

Don't be afraid to blow your own horn. What do we mean by that? Librarians have a tendency to downplay their accomplishments. However, the survival of GIS services depends on the administration appreciating the work that has gone into developing the service and acquiring the data and skills necessary to ensure its success.

It takes a lot of time and energy to support GIS services in a library, but when you work together it can be fun.

Where Are We Going?

We are now in the process of planning a joint data service using ArcCatalog, which is part of ArcView 8.1. Because we share so many datasets, it is only logical that we look at shared storage and description of data. This process will be facilitated by the fact that our two institutions already have a number of cooperative arrangements for a shared data service. We also want to explore ArcIMS as a delivery mechanism for our data.

User training is another issue, particularly as GIS moves into a broad range of disciplines on campus. While we expect that GIS training will be provided by the Geography department or other departments, we still need to ensure that our users have a basic skill set to be able to use the data. We

are exploring the idea of a compulsory library workshop to ensure that new GIS users understand the basic concepts of GIS and computer use. We are currently looking at a self-study Adobe file that would be enhanced with embedded video clips.

We are always pursuing new sources of data, local and other.

Now you have seen where we have been and where we are going. We encourage all libraries to look for partners at all levels - you may not have another university nearby, but perhaps there is a community college or local school board, and in our virtual environment, we are all close. As a group, we need to explore ways of cooperating and sharing the work in the provision of GIS services.



Unfortunately, there is no group photo this year, to commemorate the ACMLA-CCA conference CARTO 2001 in Montreal. This small but select group is shown following the tour of the Bibliothèque nationale du Québec. All conference photos are courtesy of Alberta Auringer Wood.

CARTO 2001 CONFERENCE REPORT

ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES (ACMLA) AND THE CANADIAN CARTOGRAPHIC ASSOCIATION (CCA) MONTRÉAL, MAY 30 - JUNE 2, 2001

Prepared by Alberta Auringer Wood

Based on conference abstracts and reports by
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Shirley Harmer (SH), Susan Jackson (SJ), David Jones (DJ), Eileen Meillon (EM),
Cathy Moulder (CM), Lori Sugden (LS), Berenica Vejvoda (BV), Grace Welch (GW)
and Ronald Whistance-Smith (RWS)

Introduction

This conference took place at Université du Québec à Montréal (UQÀM) through collaboration between the associations, as well as the Geography departments of UQÀM and l'Université de Montréal. A joint session with the Canadian Association of Geographers (CAG) was also held on the campus of McGill University where CAG was holding its 50th anniversary meeting. Assisting the associations in the meeting were various corporate sponsors, including the Canadian Space Agency, Natural Resources Canada's The National Atlas of Canada, Éditions Brault & Bouthillier, ESRI Canada, Québec Ministère des Ressources naturelles, Bibliothèque nationale du Québec, Bibliothèques de l'UQÀM, Hydro Québec, Musée Stewart au Fort Île Sainte-Hélène, PCI Geomatics, Aux Quatre Points Cardinaux, Tecsalt, MP Photo Reproductions Ltée, and Ville de Montréal. The organizing committee consisted of Pierre Lépine, Bibliothèque nationale du Québec, Carol Marley, McGill University, and Pierre Roy, UQÀM on behalf of ACMLA, and Yves Baudoin, UQÀM, François Cavayas, Université de Montréal, and Michel Fournier, Cartologique for CCA.

Wednesday, May 30

ACMLA Board Meeting: The ACMLA Board, chaired by President James Boxall, met with all in attendance (Susan Jackson, First Vice-President; David Jones, Second Vice President; Marc Cockburn, Secretary; Patrick McIntyre, Treasurer; and Alberta Auringer Wood, Past President), as well

as guest Grace Welch, incoming ACMLA President. Attending part of the meeting were new Director General, Marilyn Osborne, of the Government Records Branch of the National Archives, and David Brown of their Machine Readable Records section. Considerable discussion was held on GeoConnections, networking opportunities, the SSHRC - National Data Archives initiative, and ACMLA expectations of the National Archives.

Thursday, May 31

Opening Session - History and Cartographic Evolution

The first session, moderated by Alberta Auringer Wood, began with Réal St-Laurent, Ministère des ressources naturelles du Québec, who spoke on "De la carte à l'information géographique en ligne" or "Of the map with on-line geographical information". He noted that rapid cartographic development in Quebec is inextricably linked to the province's commitment to modernize its institutions and stimulate its economy. The exploitation of natural resources and its contribution to economic development has been the driving force for a cartographic repository, providing the basis for knowledge and land management. This impetus has given rise to geodesic networks, a topographic base map of Quebec at a scale of 1:20,000 that now extends to 51° latitude North, as well as topographic and administrative maps at a scale of 1:250,000 that cover all of Quebec. The era of computing and constantly increasing demand for knowledge has been accompanied by the digitization of data,

cartographic databases (BDTQ, BDTA, etc), Global Positioning System (GPS) technology, remote sensing and the development of geographic information systems. In the age of communications and the Internet, yesterday's map, used mainly for the survey and management of natural resources, is now a more democratic resource, increasingly accessible to the citizen. Nowadays, "geographic information online", "geobase" and "geomarketing" are bandied about. The new challenge of the coming years is to cater to the internauts, economists, advertisers and population, with up-to-date geographic information that is easy to access and use.

St-Laurent was followed by Yves Belzile, Centre for Topographic Information - Sherbrooke, Geomatics Canada, who spoke on the federal topographic program. The National Topographical System consists of topographical maps for all of Canada. These base maps are at a scale of 1:250,000 and 1:50,000 and were produced over the last 60 years. Their digitization during the last decade has led to the creation of the National Topographic Database (NTDB). The present challenge is to upgrade and maintain this daunting assemblage of topographical information in order to respond effectively to present and future applications. Some questions that he posed were: How great is the scope of this problem? What possibilities are there for solving it? What model is emerging? Foremost in importance to the map library community from this talk was an announcement by Belzile that free access to digital topographic maps for the education community was going to be provided through their participation in the Depository Services Program. The agency will be providing paper and digital topographic maps, as well as geological maps, but numerous details remain to be worked out. However, there is an agreement in principle with formal agreements yet to be signed. It will give access to the digital files by FTP. Issues to be resolved include record keeping and auditing, and the aim is to have a standardized license. Natural Resources Canada will be reimbursed for costs by the Depository Services Program. It is expected that the annual fee that we have been paying for "mailing costs" for the paper topographic maps will be dropped. The work by Grace Welch and Susan Jackson on bringing about this tentative agreement must be enthusiastically acknowledged!

Ed Dahl, recently retired from the National Archives,

was the Guest Speaker for this conference and concluded this session with the topic "The Future of Our Cartographic Past: Some Reflections about Canada's National Map Collection". Maps have been collected by the National Archives (NAC) since 1872, and even earlier by individual government departments, but there is no "National Map Collection" today. In the 1980s and 90s, in the interest of "Efficiency and Streamlining", the Archives switched to a structure based on function rather than format. This approach separated staff, maps and researchers physically, and resulted in many concerns about the quality of service. A Special Ministerial Commission was established in 1998, under Professor John English, to examine the future role and structure of the National Archives and the National Library (NL). Prior to the conference, Dahl conducted a mini-survey of his own to determine whether the situation has changed since his retirement three years ago. And his conclusion was that very little has improved. The Archives still has little profile in publications or on the Internet. Public service still gets a failing grade, as it did from Dr. English. Dahl concluded with three recommendations for priority action: 1) Create a partnership with ACMLA, NAC, NL and relevant government agencies to establish a Canadian "National Map and Geographic Information Collection"; 2) Locate archivists and staff working with non-text holdings as close to the physical collections as possible; 3) Strengthen the provision of quick access to archivists and services for researchers. Dahl's paper is reproduced in this *Bulletin*, beginning on page 37. (CM)

Women, Montreal, Harrison

After a brief break, three concurrent sessions were held. The one moderated by Pierre Lépine was led off by Professor Will C. van den Hoonaard from the University of New Brunswick's Sociology Department. He outlined his research project that will be profiled in an upcoming book titled *The Dark Side of the Moon: The Life and Times of Women in Cartography*. Thirty-eight women cartographers around the world were interviewed. He noted that many described childhood experiences that led to their interest in cartography. Many also came to be cartographers as a second career. In a work world dominated by male employees, many felt that they were treated as intruders. He also explored the possibility of women cartographers acting as mentors to young women, but found mixed



Participants in Session II: left to right, Joanne Perry, Jean-François Palomino, Pierre Lépine (moderator) and Will van den Hoonaard.

attitudes among his interviewees.

A project at the Bibliothèque Nationale du Québec uniting historical materials and cartographic software was described by Jean-François Palomino. Using Goad's *Atlas of the City of Montreal*, published in 1881, Lovell's census reports, and rental and tax rolls, a new series of thematic maps can be produced with the help of cartographic software. An example of the type of map that could be produced is one using colours to show buildings of low, medium and high rent, allowing historians to make interpretations not previously possible. This is part of a project titled "MAP" to treat data from maps of 1825, 1846, 1880, 1912 and 1949 for the city of Montreal.

In the third paper, the career of Richard Edes Harrison was outlined by Joanne M. Perry, Map Librarian, Pennsylvania State University. Trained in the biological sciences and architecture, Harrison went on to become a supplier of perspective maps for articles appearing in *Fortune* magazine in the 1930s and 40s. Using innovative methods that included photography of a globe and the use of rich colours, the resulting perspective maps were highly appealing. A similar product could be made today using cartographic software, but a comparison shows that Harrison's maps have a greater aesthetic appeal. (EM)

Forging Municipal Partnerships

Also going on at the same time was a panel discussion on "Forging Municipal Partnerships for

Data Acquisition". This thought-provoking session, moderated by Heather McAdam, concentrated on the growing importance and mutual benefits to be gained from forming broader partnerships for geospatial data acquisition. Speakers included: Richard Grignon (John McCrae High School), Richard Pinnell (University of Waterloo Map Library) and Laura Cole (City of Ottawa). The impetus for forming a municipal partnership was clearly articulated by

Richard Grignon and Richard Pinnell, who emphasized a strong demand for local data for both student papers and faculty research. Greater accessibility to American data and Canadian data of national and provincial levels were also noted as key challenges to local data acquisition. Developing awareness and trust were cited as essential ingredients for partnership formation. This trust develops over time and awareness requires knowledge of staff, different cultures and sectors, and ultimately knowing what to request and what is available. Moreover, trust and awareness need to be developed mutually by all partners. Issues and obstacles for forming this kind of partnership, such as receiving updates, metadata, data release forms, licensing agreements and modes of data delivery were also exposed. One specific issue which the City of Ottawa resolved was evaluating which data were appropriate for the public (since some obviously were not). Importantly, cost was not seen as an obstacle. Benefits extend to all partners, not just those receiving data. For data recipients, these include: current information that is updated regularly; large-scale data; an opportunity to focus on unique themes; standardization; and obviously local coverage. According to Laura Cole, the City of Ottawa enjoys a raised profile and is able to create new co-op jobs. Also, the City can ease the burden of front line staff and focus on updating data sets while map libraries assume responsibility for administering data. Student-made projects are also expected to provide added value to the City. This compelling presentation provided motivation for others to seek similar partnerships and sharing arrangements in their jurisdictions. (BV)

History

One after-lunch session was moderated by Pierre Roy, Université de Québec à Montréal. Harry Steward, Clark University, gave a talk called "Cartography, History and Literature: The Prospects for Integrated Teaching". Maps are found in all kinds of literature treated as literary devices, but he makes use of these maps to embellish his teaching of the history of cartography and also cartography. He shows students literary examples to which parallels in cartography can be made. He demonstrated with a sampling of illustrations from diverse sources (e.g. from Narnia, *Treasure Island*, *Gulliver's Tales*, Jules Verne, maps from various cultures) explaining the cartographic concepts to which they can be related.

Also in the same session, Anne Godlewska, Queen's University, spoke about the development of a web-based atlas of the Napoleonic wars and how her research has evolved into this means of dissemination. She is interested in the spatial awareness and spatial information of this period. There is a large body of maps which were produced by geographical engineers to incorporate new territories, as well as images which illustrate Napoleon's view of battles and perpetuate his myth. She was looking for a means of giving access to the research as an interpretative tool and to make it available as a research tool for other scholars. Thus, she decided on a web-based atlas which allows links from a base map to maps of the period with descriptions as well as links to paintings and text. She illustrated navigation through the atlas which is expected to be ready in summer 2001.

This session concluded with Margaret Pearce, Humboldt State University, who presented a paper entitled "Encroachment by Axis, Word and Tree: Local Mapping Techniques from the Colonization of New England". She is interested in maps as a tool for colonization and elaborated on what is known about colonial mapping techniques in North America in the seventeenth and eighteenth centuries. This research concerns larger scale mapping of a study area in western Connecticut. Her study methodology involved reading deeds from the earliest possible dates and following the land over time. Comparing her findings to known mapping techniques showed that native toponyms disappeared from the record. As well, there was encroachment on native areas by axis to take in

more space and make the corners ambiguous, by tree markings and by colonial appropriation of native mapping. (SH)

Early Maps, Rhetoric and Montreal Transport Map

The first speaker in the session was absent. In "Cartography as Rhetoric", Mark Denil grabbed participants' attention by stating in his abstract: "Cartography as we have known it has been characterized as being under threat", and that this threat could be surmounted only by achieving "a clear understanding of the nature of cartography itself", something no one had yet been able to do satisfactorily. Denil's ideas are illustrated by his publication (especially chap. 4) which formed the basis of his talk, namely his Master of Fine Art (Design) thesis "Cartographic Design: Rhetoric and Persuasion" at the Nova Scotia College of Art and Design, and available at <http://www3.ns.sympatico.ca/mark.denil/>.

This talk was followed by one titled "La carte réseau de la STCUM" or "The Network Map of the STCUM", by Marcel Lésvesque, Société de transport de la Communauté urbaine de Montréal. He pointed out that 250,000 copies of the Montreal region's new transportation map had been printed in folded "pocket format" and another 800 as flat "wall maps". (Conference participants each received a copy of the map.) In the year 2001, for the first time, this map had been produced completely electronically. Special efforts were required for the acquisition of the necessary data, and the treatment of diffusion of this. The map does not yet have an ISBN. Further information is available at the STCUM website: <http://www.stcum.qc.ca>.

Metadata Workshop

A parallel event was the "Metadata Workshop: Metadata, Data and Data Portals CGDI" presented by Annie Laviolette-Laponsee and Judy Guenette, of GeoConnections, Natural Resources Canada. This two-part workshop provided an overview of the client access services available from the CEONet web site and the connectivity procedures that are used by organizations to register and provide metadata of their data products. It was presented in the morning in French and after lunch in English. These are some of the highlights: CEONet, recently renamed "GeoConnections Discovery Portal", is an

interface developed by NRCan for searching geospatial information sources within the CGDI (Canadian Geospatial Data Infrastructure) regardless of the format (digital or paper) or the source of origin, e.g. organization type. An overview of the search options and the metadata tools was shown using a search by organization (e.g. CCRS or Canadian Centre for Remote Sensing); a service (e.g. environmental); or data type (Ontario vegetation). The interface provides limiting searching criteria for each type of search. A search result provides a list of related data sources, metadata, and access information. The process of "How to register your organization" was also shown: a service of CEONet that could also be used to provide free advertising for an organization. It was suggested that perhaps this may be a venue for ACMLA to advertise the organization and its publications. The metadata standard used in CEONet complies with the FGDC (U.S. Federal Geographic Data Committee), but will soon migrate to ISO TC211 standard. We were told that Canada is recognized for supplying excellent metadata. The standard involves data to be entered for 35 fields that are mandatory. They are currently finalizing a technical manual that lists these fields. This manual can be requested through GeoConnections. However, CEONet provides a user-friendly "Help completing metadata files" wizard that assists the data provider through the process. CEONet also has a mechanism in place for metadata quality control.

The second part of the workshop was presented by Judy Guenette, who focused on the technical aspects of CEONet from the viewpoint of an organization that is already registered. It focused on the services provided by CEONet for metadata standards; retrieval standards; quality control, etc. One service called the "MetaManager" is a toolkit used by organizations to "CGDI enable" their data. CEONet strives to be a seamless database; however to actually gain access to data could mean going to a producer's web site and

ordering under their copyright and release conditions. Additional tools were shown that can be used to enhance access to an organization's database on CEONet, such as Earthscape II which supports web mapping, geographic feature display, and GIS functions; and Earthscape Lite which is an HTML-based map viewer client. A handout of both presentations was provided. (CB)

Data Acquisition and Diffusion

The remaining four sessions in the afternoon were under the umbrella heading of Data Acquisition and Diffusion.

The first session, moderated very ably by Grace Welch, included three presentations (by four presenters) which dealt with federal information. The first presentation, by Ernie Boyko and Tim Davis (both of Statistics Canada fame), covered developments related to the 2001 census and products coming from Statistics Canada. Generally speaking, there are not too many changes in content but some developments in format and delivery. There will be more electronic products (a development that has progressed from 1996), and online delivery of key indicators or community profiles is seen as critical. This is also in keeping with the attempt to be more timely in delivery of products most in demand and with the greatest public good. More products will also be 'on-the-fly' web-based, and will integrate previous items from 1996 side by side with



Statistics Canada representatives Ernie Boyko (left) and Tim Davis (right) share the platform in unveiling Canada Census 2001.

2001. The plans are to keep the same number of paper products in the Depository Services Program (DSP). There was also a recognition that concerns about long term access and preservation of the products (and not just the data) were an issue. This part of the presentation, by Boyko, was full of new developments and plans which are to take place between 2001 and 2003. However, what may be most important for users and libraries is to maintain a close watch on the DLI lists, and the StatsCan web site, to keep in touch with developments and delivery dates. And as always, there will be a need for workshops and training with new products.

Tim Davis, sharing the presentation time with Ernie Boyko, gave a quick overview of the developments we can expect from the Geography Division at StatsCan. All products being planned with the 2001 census will be delivered through the digital interface. There is a clear and determined plan to move away from printed maps towards electronic delivery and digital products. There will also be more "public good" products, as well as better metadata tools, an online geosearch tool, revised pricing and licensing, and some new types of geographic coverages. On March 12th of next year, the population and dwelling counts, reference maps, community profiles, metadata tools and the geosearch products will be available (some may be earlier, but that is the target date). Around that time, there will also be a national road file, the online GeoSuite and geography dictionary and the cartographic boundary files. After that time, the division will release the correspondence files for 1996-2001, the national overviews, the PCCF and other postal products as well as user guides, an online guide, working papers, and any other reference products which may be of assistance. Tim also outlined some new geographies being created: the MIZ (metro-influence zone), DA (dissemination area, 50,000 pop, and do not have to respect FED boundaries) which will replace the EA (Enumeration Area), and the "block", which will be a base level for data (but confidentiality issues mean the data is not released at that level). Again, there was too much in the first presentations of this session to adequately summarize. As always, maintain a close watch at the StatsCan web site and contact the DLI list or Ernie and Tim directly to get more news.

The next presentation was by Patrice Furlong of the Client Services Branch for Natural Resources

Canada (NRCan). This presentation gave a quick historical overview of the development of the paper cartographic products and the current situation with paper and digital product development. At the present time, at the 1:50,000 scale, the National Topographic Data Base (NTDB) is only covering 60% of the country and most of the files (and even the paper products) are 20 years or older. NRCan, through the Centres for Topographic Information in Sherbrooke and Ottawa, is attempting to develop a system/organization that will allow for faster and more accurate mapping at less cost. This requires new investment and new partnerships to make up for the loss in resources over the last decade (a cut in the range of 50%). Demand is increasing, but the ability to meet that demand is decreasing. Patrice then outlined the development of an integrated, but distributed, network which will populate the NTDB with data from local and provincial sources. All data will be developed at national level standards. This is the "Topograf" system being proposed; data collected once at the source, and then populating a network to generate national views and 1:50,000 maps on the fly, on the Internet, and/or with print on demand. Obviously there are issues and concerns, but the key (as expressed during this session) was that we still haven't mapped the whole nation, and if we ever plan to and have it up to date then something will have to be done to increase output without increasing costs. Patrice also expressed that there is a view that depositories and libraries have a role to play in this equation.

The final presenter was Jeff Labonte from the GeoConnections Secretariat. Jeff reviewed the recently released *Policy Study* by KPMG Consulting. This presentation was, to understate, highly anticipated by the audience. Jeff provided an excellent overview of the history and methodology of the study, and then proceeded to talk about what the results meant in terms of potential policy outcomes. Most significant to map libraries and archives is the recent agreement in principle to distribute topographic data (and associated files) through the DSP to libraries. While this is not directly an outcome of the KPMG study, the study findings and recommendations have made such initiatives easier. The executive summary of the study is available from the GeoConnections web site: <http://www.geoconnections.org>, and there is no attempt here to provide a summary of the summary. However, the most important points seemed to be with regard to the needs of the academic

community, and the resulting barriers to teaching and research with more restrictive access. Of note to ACMLA members and readers is the exceptional work of Grace Welch (the new ACMLA President) in her efforts through the Access Node of GeoConnections which implemented the KPMG study. Overall, the study should help to alter actual policy, as well as how existing policies are interpreted; one glaring example was the case of crown copyright, which is now being viewed/proposed as a non-restrictive tool. Jeff did make the point at the end that associations and individuals need to maintain involvement and provide feedback on the study. In light of all three presentations, it was clear to all gathered that there is still much to do to make certain that information and data is more widely available, preserved and useful. (JB)

Road Map, Internet vs. CD-ROM, Land Registry

At the same time as the previously described session, one took place that was moderated by Michel Fournier, one of the conference co-directors. In this one, Sylvie Laroche, Interim Head of the Service Geomatique of the Quebec Ministry of Transport, talked about the new edition of the official road map of Quebec. Having prepared it for more than 30 years in a conventional way, they will publish this summer their first road map 'numerique'. The realization of this map has made it possible to carry out a complete revision of the contents and standards of presentation used for several years.

Jean Tremblay of SoftMap Technologies Inc. spoke next on "Maps and Geographic Data Distribution to the General Public: Internet versus CD-ROM." He showed different examples of maps and geographic data distribution through the Internet or through the maps and software distribution channels on CD-ROM, and presented pros and cons of both methods.

This session concluded with Michel Morneau, Ministry of Natural Resources Quebec, who spoke on "Le plan du cadastre du Québec, maintenant accessible sur Internet" or "The Plan of the Land Register of Quebec, Now Accessible on the Internet". Of European inspiration, the Quebec land register is unique in North America. In 1992, the government of Quebec undertook a vast reform of its land register. At the end of this work, in about 2007, the new plan of the land register of Quebec

will be made up of about four million batches allowing a complete image of the parceling out. The Land register of Quebec resulting from the cadastral restoration constitutes a reliable database, updated daily, representing accurately the overall land parceling. Each batch has more than thirty attributes of geometrical nature (lines of batches, number of batch, measurements, surface, etc.) or descriptive (municipality and land district, name of the owner, document of title, agreement with the old batches, etc). The land register is a tool essential for territorial management and a major asset for the development of the Quebec geomatic. Indeed, the cadastral data is pivotal for many products and integrated management services of spatially referenced data. As of autumn 2001, the Infotot service will allow on-line consultation of the descriptive and geometrical data. Since 1996, it is also possible to obtain extracts of the numerical cadastral data via the Internet site of the Ministry of Natural Resources (www.mrn.gouv.qc.ca/cadastre).

Data Archives, Election Mapping, Population Ecumene

After an afternoon break, there were two more sessions in the theme of data acquisition and diffusion, one of which was moderated by Susan Jackson and began with "Gone Today but Here Tomorrow? The Quest for a National Data Archive", presented by Wendy Watkins, Data Centre Coordinator at Carleton University. Wendy outlined concerns about vanishing data that led to the establishment of the Advisory Group on a National Data Archive, jointly sponsored by the National Archives and the Social Sciences and Humanities Research Council of Canada. They began with a general consultation with stakeholders in the fall of 2000 and continued with working groups over the past six months. Although Canada had at one time been active in archiving government data, this new initiative arose from the realization by senior bureaucrats that Canada is now one of the very few OECD countries that has not provided for securing the future of its data resources. There is now an initial report that supports further work to establish a national data archiving paradigm, with attention given first to research data.

This presentation was followed by one by Paul Harker of the GeoAccess Division of Natural Resources Canada on "Midnight Plotting - Natural

Resources Canada Provides On-the-Spot Results of the 2000 General Election". The session presented the work done by the National Atlas staff to create on-the-fly mapping of electoral results for the 2000 General Election, which in turn was built on earlier work done with Elections Canada. The biggest change was in the use of MapServer technology that enabled near real-time access to the riding results for broadcasters and those who were following via the Internet. The data resides in the *National Atlas* and provides a permanent query tool for election results that will benefit both researchers and the public interest.

This session concluded with Anna Jasiak and Arthur Matson of the National Atlas of Canada talking about "Creation of the Population Ecumene for the On-line *National Atlas of Canada*." One of the difficulties in mapping Canadian demographic data is the highly uneven distribution of settlement. This creates a technical problem for valid display that is being worked on for the online *National Atlas*. The staff of the National Atlas tested a number of models, seeking to ensure that a reasonable view can be presented in the context of the atlas. Anna brought her prior experience in demographic analysis from her work at Statistics Canada to the field of population mapping. The new ecumene more realistically portrays characteristics of Canadians, whether they live in heavily or sparsely populated areas. (SJ)

School Atlas, CD-ROM Atlas, Regional Atlas

The last paper session for the day was chaired by Claire Gosson and covered a variety of topics. The first paper was on a school atlas of Québec on the Internet and was jointly authored by Jean Carrière, UQÀM; Jacqueline Anderson, Concordia University; Janine LeSann, Université Fédérale du Minas Gerais; and Patrice Pitre, UQÀM. Starting from the experiment of the *Atlas of Quebec* on the Internet (<http://atlasduquebec.qc.ca>), a team of researchers will develop a version adapted to teaching the abilities and fundamental concepts for the geographical comprehension of phenomena. In the heart of this atlas, one will find a toolbox and an interactive cartography. Moreover each user will have access to maps for each of the 17 areas of Quebec, a bank of regional data, a tool for browsing of hyperlinks for the teaching of social sciences and an interactive glossary in connection with the texts,

graphs and maps of the *Atlas*. A prototype of this atlas will be on line in 2002.

The second paper on "The Technical Evolution of an Interactive CD-ROM Atlas" was prepared by Lawrence W. Martz, Elise Pietronino, and Frank Bulk of the University of Saskatchewan. They noted that the development of a CD-ROM atlas incorporates many elements and tackles many issues including generalization, legibility, speed, screen resolution and colour, as well as software capabilities, hardware requirements, cross platforms and file sizes. A CD-ROM atlas that is generated from the transformation of an existing paper medium is not any less complex. In fact, using a previously existing atlas and converting it to fit a new medium brings new issues that do not exist when starting from scratch. The *Atlas of Saskatchewan*, Millennium edition, was published in 1999, being a large paper volume of 340 pages, over 800 multi-coloured maps, and many pages of texts, charts, and photographs, and is 34 cm x 25 cm in size. The CD-ROM edition was created using the Macromedia line of products including Director/Shockwave Studio 8 and Flash 4. The Macromedia products incorporate many multimedia tools that were implemented into the CD-ROM version of the atlas. Various paint and graphic software packages were also used for extracting graphic elements from the original atlas files. They included CorelDRAW! 9, Photopaint 9, Illustrator 8.0, and Phostoshop 5.5. Converting the pages to fit a landscape oriented monitor, while insuring that all elements are legible, visually appealing and concise so as to communicate clearly to the user, proved to be a difficult task. Many of the pages had to be re-organized, new layouts had to be designed and each element had to be converted from a vector to a raster format. These elements also had to be resized and cleaned in order to enhance their appearance for the monitor, all this while maintaining the integrity of the book version of the atlas. Various stages were developed in order to facilitate the production of this product, including conceptualization, organization, story boarding, data transformation, design and development, and quality control. In each stage, various technical issues emerged and had to be addressed. The development of these stages, and an organized technical team, were the key factors to the successful production of the CD-ROM Atlas.

The final paper on an electronic atlas of the Saguenay-Lac-Saint-Jean region in Québec was

presented by Majella-J. Gauthier, Université du Québec à Chicoutimi, in collaboration with his colleagues Martin Dion, Carl Brisson, Claude Chamberland and Alain Roch. He reported that since the start of the project of the *Atlas électronique du Québec et de ses régions*, the implementation of regional atlases has proceeded slowly, but seriously. The works produced for the regions of Bas-Saint-Laurent and Saguenay-Lac-Saint-Jean were initiatives that not only have inclined researchers to use new ways to communicate information, but also have contributed to elaborate useful geographic "savoirs". The project of the *Atlas électronique du Saguenay-Lac-Saint-Jean*, which has been running for some years, may give evidence of the important role played by a team of researchers in a region where social-economic problems, questions of development and land planning, utilization of natural resources, and municipal restructuring are the order of the day.

Evening

A brief meeting of the Canadian Committee of the International Cartographic Association was held at the end of the sessions. Those in attendance discussed the forthcoming conference in Beijing and travel details, as well as the Petchenik Children's Map Competition and the Canadian exhibit at the conference. Nearly 30 people from Canada are giving 20 papers.

The closing event for the day was a lovely reception at the Bibliothèque nationale du Québec Édifice Saint-Sulpice on St. Denis. Hosted by Pierre Lépine of ACMLA, it provided an opportunity for everyone to visit and catch-up on activities while admiring the spacious main floor room of the building containing their old card catalogue, a reference collection, and various art works.



ACMLA's superlative conference organizers take a well-deserved break at the Bibliothèque nationale du Québec reception. Left to right, Pierre Lépine, Carol Marley and Pierre Roy.

Friday, June 1

Research and Cartographic Application

Spatial Analysis, Vietnam, Remote-Sensing, Immigration

There were eight papers in two sessions before 10 am. One session that was moderated by Yves Baudouin covered the above topics. It began with "Essai de clarification au sein de la hiérarchie des méthodes d'analyse spatiale appliquées aux activités commerciales" or "Test of Clarification within the Hierarchy of the Methods of Spatial Analysis Applied to Commercial Activities" by Stéphane Joost, University of Geneva, Department of Geography, Lausanne. This covered the use of geographical information systems in the commercial field. Various fields of search, applications or exploratory techniques dependent in one way or another on various commercial activities are joined together under the name of geomarketing.

This was followed by "Transects perceptuels et modèle de terrain comme base d'une cartographie ethnique dynamique et efficace : Le cas du district de Bac Ha, Vietnam" or "Perceptual Transects and Model of Ground as Base of a Dynamic and Effective Ethnic Cartography: The Case of the District of Bac Ha, Vietnam" given by Yann Roche, UQÀM, co-authored with Martin Lapointe. In the North-West of Vietnam, a frontier mountainous zone, the ethnic

mosaic is rich and varied, a principal factor of tourism in the area. These ethnic groups have a relation with the physical environment (forests, mountains, rivers) very different from that of the Viet majority, which live traditionally in the rice lowlands. The French colonizers had directed a precise and detailed cartography of the principal ethnic groups (Hmong, Yao, and others) which populated the area, in particular for more or less creditable political reasons. A new methodological approach is thus necessary and it was presented here. The potential of this dynamic cartography as a tool of analysis and management is very promising, but it depends on the quality and the precision of the data obtained.

The third paper in the session was presented by François Cavayas, Université de Montréal, on "Télédétection-objet cartographique / objet imagerie satellitaire" or "Cartographic Remote Sensing-Object / Imagery Object Satellite". The ending paper in this session was given by Brian Ray, Citizenship and Immigration Canada, on "Metropolis Project on Representation of Ethnocultural Communities in Montréal: The Atlas de l'Immigration dans la Région de Montréal en 1996 Project". The *Atlas*, a project sponsored by the Montréal Metropolis Centre of Excellence Immigration et Métropoles, is based on cross-tabulated Statistics Canada data from several special tabulation runs. This presentation focused on some of the major attributes of the *Atlas* and examined the problems entailed in representing the socio-economic and demographic characteristics of population sub-groups that are frequently small in size and unevenly distributed.

Imagery, Digital Change, Photographic Web Library, Voronoi Polygons

Another session occurring at the same time was moderated by David Broscoe. The first presentation was by Barbara Lush and Mike Shasko, Cloverpoint Cartographics, on "Projecting High Resolution Imagery". Lush and Shasko examined the issue of repeated re-projections of GIS data, e.g. from UTM to Albers and back, and from raster to vector format, and analyzed loss of information due to repeated re-sampling of the data. They studied a one metre resolution image over successive re-projections and found that there was indeed loss of data, with the worst effect in urban areas. The data loss was clearly visible in successive images of houses. They

concluded that it is important to know the history of your data. One should prefer unmodified data, use the best software available, and do not re-project the data, if possible. It was also helpful to classify the data prior to re-projecting it.

Second in this session was Andrew Millward talking about "Toward Normalization of Disparate Data for Meaningful Digital Change Detection", authored with Joseph Pinowar and Philip Howarth, all of the University of Waterloo. The presentation began with a discussion of the historical context of satellite data. The research goal was to investigate PCA (principal components analysis) as a method of normalizing spatially and temporally disparate satellite data, using four images from three different satellites from 1988 to present, for the Sanya region of Hainan in southern China. Each was geometrically corrected to a base image, principal components were extracted, and change detection - analysis of similarities and differences - applied. The strength of PCA was in comparing data of different types from different sources. The researchers found that areas of environmental change from coastal development, and the cumulative impacts of such disturbance, could be clearly shown and analyzed using PCA.

Millward was followed by Hervey Audet, Altaphoto Technologies, who spoke on "Une photothèque de photographie aérienne sur Internet" or "A Photographic Library of Air Photography on Internet". Audet presented the Kodak Earth Imaging airphoto internet library at <http://www.kodak.com/> (search for Earth Imaging) or <http://kei.kodak.com> for a direct link. This comprises about 20,000 air photos available for purchase, of places in the U.S., and will expand to 200,000 photos worldwide in future, as images are scanned. The site includes map-based, place-name, and coordinate-based searches, and advanced search by street address. Sample images at the site show enlargements to various scales, for a few American and Italian cities. The American images were created by Citipix (Québec) using their Scenepix software.

This session ended with Martin Lapointe, UQÀM, talking about the Voronoi polygon as the basic spatial unit of a map of land use in an urban environment. Lapointe's goal was to create a base map to show land use in the urban area of Montréal. He used cadastral lots as the unit of functional evaluation, and applied the Voronoi algorithm to

their centroids. The Voronoi algorithm calculates the area of influence of each polygon on adjacent polygons. Compared with matrices, he found it very appropriate for land use mapping. (LS)

International Cartography, Montreal Past and Present, Miscellaneous

After a break, the sessions on the topics of "Research and Cartographic Application" continued. One of the two parallel sessions was moderated by Diane Lacasse and begun by Pierre Inkel, UQÀM, speaking on a "Portrait of the International Cartography". He noted that national cartography is an essential element for territorial development, delimitation and recognition. However, this cartography is most important when its cover is complete (and adapted to the medium), when the scales are varied (according to the interests), when it is up to date, when diversified in its sets of themes and when accessible and available. Thus a Cartographic Index of Development (IDC) was developed in order to determine the cartographic reality of various countries, to allow comparison, but especially to identify strong points and weaknesses in order to propose the corrective measures as necessary and to fulfill the requirements of development potential. This approach synthesizes the complex situation of the cartography of 126 countries with the assistance of a universal, standardized and reliable index. Attributes noted were an identifiable year, adequate cartography possessing certain characteristics, notably complete coverage adapted to the topography, appropriate scales, current information, specific topics, availability and accessibility. A Cartographic Development Index (CDI) has been constructed to measure such characteristics. This international index facilitates comparisons, identify strengths and weaknesses, as well as corrective measures. To date, the CDI has been applied to 126 countries. The web address for the project is <http://www.cdi-idc.net/>.

Inkell was followed by Sherry Olson, McGill University, who talked about "Translating the Then and There into the Here and Now", which had been prepared in conjunction with Jean-Claude Robert of UQÀM. A dozen scholars and their students are working to develop a GIS representation which can be universally shared as a tool for historical research on Montreal. The strategy is to scan four remarkable maps which show each building in the city and its suburbs (1825, 1846, 1881, and 1949), 'warp' them to match the present day GIS of the City of Montreal (le SIURS), and create digital layers: city blocks, cadastral lots, and buildings. For each date, built-in databases will provide information about owners and values of the lots, tenants and rents of the dwellings. The high-precision base map and an open structure make possible integration of other layers, sources, and dates. Each participant has a different application in mind (which she illustrated with slides). Building footprints of 1880, for example, can be seen against the backdrop of a modern orthophoto. A layer of points summarizes the ecology of occupations, block by block. The street grid can be analyzed as a network of changing densities. A doctoral student in cultural geography is tracking the moves of churches and their membership, and another, in history of architecture, displays simultaneously the locations, dates, and floor plans of several hundred nineteenth-century houses. A historian is exploring the continuity of property-owners 1825 to 1846, and a geographer has added a boundary file for comparing census variables for 1901 with 1951. By



CCA presented special achievement awards to old friends of ACMLA Lou Sebert (left) and Ed Dahl (centre). Cliff Wood (right) congratulates them at the banquet.

overlaying building layers of different dates, heritage planners inquire: What is left of the city of 1880? What blocks have been demolished or re-designed since 1949? It takes two to tango, but two or three dozen to do this kind of research. In addition to urban planners and geomaticians from the City of Montreal, key players are the half-dozen map librarians and archivists who have organized retrieval and high-resolution imaging of the sources, and attacked the demanding problem of metadata. To ensure both conservation and wider public access for sources of historic value, numerous institutions have embarked on large-scale imaging operations. They are attempting to move to the next stage: to bring a sequence of maps and databases into a single frame of reference where they can compare, overlay, query, and visualize what was going on 'there and then'. The work is labour-intensive, and therefore costly. Olson noted in closing that the most difficult challenge, and the most satisfying rewards, lie in the intense communication required among so many partners.

The session concluded with Michel Fournier, Cartologique, verbalizing on "And Yet They Live!" or "Et Pourtant elles Vivent! It's alive!!!!" He showed illustrations of early maps, and other maps, including one St. John's tourist map.

Cartographic Excellence, Generalization, Transformations

At the same time, another session was going on which was moderated by Byron Moldofsky. First in the session was Rupert Brooks of the National Atlas of Canada, on "Striving for Cartographic Excellence in an Age of Data Infrastructure". Brooks' presentation, as he explained it, was to demonstrate how times have changed for map makers because of the relatively recent ideology of what he termed the "data infrastructure". He explained that before, a map was considered somewhat of a database because it held all the information disseminated through it, but now the map is a product of a database. The National Atlas of Canada has had the role of mapping the country at a scale of 1:1,000,000 in paper format for years, but now the National Atlas wants to better utilize a data infrastructure present from years of development, to create better paper and digital map products. In 1999, the first maps using this data infrastructure were completed for the Yukon, Northwest Territories, and Nunavut. The layer targeted was

hydrology at a scale of 1:4,000,000. There was a tremendous amount of data and there were software constraints, but within these two problems lay the fact that they had excellent cartographers. Brooks explained that in the Atlas' view, a data infrastructure is not a threat to creating good maps, but instead it is an opportunity to make better paper and digital mapping products. Their project is an example of the uses of a data infrastructure to create both paper and digital products and use to the fullest, the expertise of experienced cartographers.

The middle talk was given by Rhian Evans, also of the National Atlas of Canada, on "Generalisation at the National Atlas of Canada". This presentation was on the experiences of computerized generalization of small scale mapping, more specifically on the project of the hydrology maps, which were the subject of the first part of this session. The project, according to the author, is a rare example of applied automatic processes to determine connectivity, skeletonization, and directionality to a mapping project. One of the main points expressed was that while these maps were a strong example of the use of a computerized generalization system, there is still a great role to be played by cartographers in ensuring accuracy and quality of the final product.

The concluding speaker in the session was Léo Larivée, Collège du Limoilou, talking about "Transformation between DATUMS and/or PROJECTIONS". Larivée's presentation was on the mathematical methods for transforming datums and projections. He suggested a mathematical approach instead of a retail software approach, because of issues of accuracy and precision. Software transformation tools, he explained, have proprietary and secret algorithms, which leave the user in the dark as to the process used for conversion, and wondering about accuracy. To strive for accuracy in these transformations, in his estimation, better metadata must be developed, which can identify these fields better. He recommends a coding system for various datum in order to automate some of the processes for identification. (MF)

Annual General Meetings

During the lunch break, the ACMLA and CCA annual general meetings were held. They were



Richard Pinnell (right) received an ACMLA Paper Award. He is congratulated here by Awards Committee Chair Lori Sugden.

rather brief meetings due to the tight schedule as the afternoon sessions began at 1:30. The ACMLA meeting was well attended with about 35 members and visitors present. A resolution was passed to support the extension of Legal Deposit legislation to include cartographic materials in print and electronic format. It had been announced earlier that the National Library was interested in doing this in conjunction with the National Archives. The plan is that the National Library would receive the materials, while the National Archives would house them.

Technology, the Future and Stakes

The afternoon sessions focused on this theme.

Visualization, Web Server and Metadata

On Friday afternoon, in a session chaired by Colleen Beard, three speakers looked at some of the new technology and how it can be used for the management and delivery of spatial information. Anita Muller from Natural Resources Canada addressed the issue of cartographic visualization on the Internet by means of a case study of Iqaluit. As she pointed out, the Internet requires a new cartographic methodology for presenting information and needs to be understood to ensure

effective cartographic communication of information such as maps, air photos and dynamic representations. The Iqaluit case study gave the multi-disciplinary project team an opportunity to explore many aspects of cartographic visualization on the Internet: dynamic terrain representation by means of fly-bys, web site development so that the map acted as an interface to more information about the community, the effect of the web colour palette on display and the importance of good text placement.

Ruilan Shi from McGill University, Department of Geography, spoke on "Serving Maps on the Web using the ESRI Internet Map Server". With ArcIMS, local data can be integrated with Internet sources, interactive web sites for mapping can be easily created, designed and managed, and data providers can maximize their data investment by making their data more accessible. The software has a highly scalable server architecture and advanced portability options. Riulan reviewed the steps for setting up the ArcView IMS and ArcIMS software to serve maps on the Internet. Users can customize how their maps will appear on the web using HTML/DHTML, FrontPage, Avenue, Java, ActiveX, Visual Basic and Visual C++ applications.

The final presentation in this section explained the data management features of ArcCatalog, a module available with ArcInfo and the ArcView 8.1 release. ArcCatalog is used for creating and presenting metadata descriptions of data and permits users to preview data sources. FGDC metadata may also be imported and exported from ArcCatalog. Rosa Orlandini presented her experience using ArcCatalog to create standardized metadata for the City of Montreal geodatabase. The Montreal data received by McGill University contained minimal documentation, but with the metadata editor and standardized templates, she was able to create standardized metadata descriptions. ArcCatalog also automatically extracts metadata from the

geographic files (e.g. the projection details from the .prj file and geographic extent). Metadata in ArcCatalog is stored in XML format, but can be displayed as text documents or HTML pages. (GW)

Internet Cartography, Generalization, Map Info

The parallel session right after lunch was moderated by François Cavayas. The first speaker was Robert Daigle of Géomap GIS Amérique on "La cartographie et l'Internet : L'édition en temps réel pour optimiser ses opérations" or "Cartography and the Internet: Editing in Real Time to Optimize its Operations". Géomap concentrates its activities around geomatics on the Internet, the management of the infrastructures on the Internet as in the management of the linear networks. Its force is the addition/modification on-line of graphic objects. He provided a visual demonstration 'on-line' of some operational systems which showed the various facets of the application.

Daigle was followed by Lee Dan of ESRI who talked about "Map Generalization in GIS: Practical Solutions with Workstation ArcInfo". The generalization research and development at ESRI has focused on the support for both database and cartographic generalization with GIS-based technology. Workstation ArcInfo contains a full range of geo-processing tools to transform data from a master database to specific outputs through feature queries and selections, spatial analysis, data conversion and interactive editing. The new generation of ESRI's GIS software, ArcGIS 8.1, has adopted an object-oriented technology and data model. Geographic features can now be defined and stored as objects with intelligence, including their natural behaviours and relationships to other objects. Their ultimate goal is to provide the users with powerful and flexible generalization tools that help them to derive datasets and produce maps in a timely and efficient manner from a unified and scalable geodatabase.

This session concluded with François Bergeron of KOREM who presented on "Push'n'See™ Version 3.1 : Nouvelle version du logiciel de cartographie interactive pour usagers MAPINFO" or "Push'n'See™ Version 3.1: New Version of the Software of Interactive Cartography for MapInfo Users". KOREM develops solutions of interactive cartography on the Internet for various companies

and public organizations. The company created the Push'n'See software to make it possible to utilize MapInfo to share cartographic projects via the Internet or a corporate Intranet.

Digitizing Early Maps, Web Travel Maps, Philosophy

This session was moderated by David Jones. The first paper was Pierre Lépine speaking on a fascinating resource "Numériser des cartes géographiques anciennes : un défi de taille à relever en méga-octets" or "Digitizing Maps of Quebec: The Bibliotheque nationale du Quebec's Project". The BNQ is undertaking a major digitizing project which is now into its third phase. Phase 1 (1996-98) included 360,000 pages of text and 37,000 images; Phase 2 (1998 - 2000) over 8,700 images and 1,400 maps were digitized at high resolution; and Phase 3 (2000-01) covers 70 maps of old Montreal at high resolution. The Digital Library encompasses many images including 1,800 maps. These are available though the URL: www.biblinat.gouv.qc.ca. Maps included are some fire insurance maps (not all companies) with 103 titles and 727 plates; individual archival maps from 1632 to 1950 amounting to 306 maps (453 sheets); and 14 map series titles (579 sheets). Maps are searchable through four indexes - Authors, Chronological, Titles, and Toponyms. Clicking on an index gives an alphabetical list of entries. Clicking on the entry gives a description and thumbnail. The full images are in great detail and may be panned or zoomed. Maps were digitized at 200 dpi using direct digitization by Trigonix using their specialized flatbed scanner. The digitized files were in .tiff format and then transformed into .jpg. The three files delivered to the BNQ are: Original Image - .jpg high quality image (compression rates range from 4 : 1 to 10 : 1 but even so these files are too large for the web; Normal Image - .jpg image (high compression rates up to 33 : 1); Thumbnail - smallest side of map reduced to 480 pixels, other side proportionate: whole map then transformed to 72 dpi.. For example, for the Bouchette's map digitized at 200 dpi, the main (.tiff) file is 141.3 Mb; the .jpg high quality for conservation purpose on CD is 4.24 Mb; the high compression web image is 1.8 MB; and the thumbnail is 35 Kb.

Next Erin Richmond presented the preliminary findings on the role of "Maps in Tourism Destination Marketing on the Internet", a study done with C.

Peter Keller. The ultimate goal of the research is to develop design guidelines for incorporating maps into travel destination web sites. The study involves the identification and investigation of the existing use of maps in tourism destination marketing web sites, the classification and critique of these maps, and the development of design suggestions and guidelines. In order to identify a sample, and limit the research to a manageable project - the top 30 tourism destinations by country - data were collected from the World Tourism Organization's 1998 and 1999 statistics. An initial selection of 80 destinations was winnowed down to 30 and the 'official' web sites were found by searching through the "Tourism Offices Worldwide Directory". These sites were searched for maps and a 'navigation trail' to each map was documented. In all, 181 maps were then evaluated, independently, by three researchers (Ole Heggen, Peter Keller, and Erin Richmond). Evaluation was based on weighted response scores to statements on whether the information on the map was clear, useful or aesthetically pleasing. In addition, the sites were assessed on aspects of their location within the web site. The maps were classified as either static or dynamic and view-only or interactive, according to the web map classification scheme proposed by Kraak and Brown (2001). Of the 181 sample maps: 49.7% were static view-only; 45.3% were static interactive; 0.6% were dynamic view-only; 4.4% were dynamic interactive. Richmond discussed the future directions of this research and also described an online survey of the web sites and maps through which we will be able to participate in the research. The site is expected to be active in late July or early August at <http://www.geog.uvic.ca/mapsandtourism/survey/>.

In the last presentation of the session, James Boxall outlined a number of issues and questions associated with the building of the so called "Digital Earth". The presentation started from the call or suggestion by Mike Goodchild who outlined the need for a "moonshot" viewpoint at the ICA 1999 meeting in Ottawa. The former US Vice-President, Al Gore, has often been quoted as outlining the vision for Digital Earth - which in the end would be the ultimate user interface for a Global Spatial Data Infrastructure (GSDI). Boxall suggested that moonshots are great, and that the focus of both the official Digital Earth projects (one from NASA and one from the International Digital Earth Symposia) are to be supported or at least looked at with great interest by the library and archive communities.

However, he also pointed out that there are a great many socioeconomic and political factors which are not getting enough attention in the moonshot process (the phrase used to highlight this was "Houston we have a problem"). Boxall mentioned, from other papers by Goodchild, that there have been calls for cooperation and collaboration between the GSDI (and GIS) community with the library community. One troubling suggestion, from the Distributed Geolibraries text (published by the NAP in the U.S.), was the potential for libraries to be totally excluded from the process and from the delivery of geospatial information through the development of better technologies. In reviewing these trends, he used examples from standards developments and new technologies in GIScience. Two key points were expressed from this presentation (and in order to avoid confusion, he highlighted these in a very overt manner): librarians and library associations must become more actively involved within the context of GSDI and Digital Earth (we are not on the radar screen) and secondly, we need to bring to the "table" the practical understandings and traditions that make libraries and archives so sustainable and valuable (we ARE the "real" information infrastructures!). In order to do this, he suggested a re-framing of the discussion surrounding these types of moonshot initiatives to focus on "institutions and intellect, not just infrastructure and the Internet". (DJ)

Rapid Response, Interactive Cartography, Technology Integration

Moderated by Philip Dodds, this session concluded the formal paper presentations for the conference. The first talk was given by Sam Avella of Intergraph Corporation on "Rapid Response Mapping". He discussed recent mapping activities taking place at Canada's military Mapping and Charting Establishment (MCE) which is mandated with this in support of field operations. While military maps/charts are typically produced according to rigid specifications, Rapid Response Mapping calls for very quick turnaround, often within days or hours. Intergraph is applying their GeoMedia GIS in conjunction with other cartographic products in use at MCE, to produce "fit-for-purpose" map sheets in a very short time. He noted the Digital Cartographic Studio (DCS) that offers the cartographic community the tools to design aesthetically acceptable, clear and concise maps. In the DCS design environment, symbols are

appropriately scaled to reflect the purpose of the map. Founded on rules-based vector symbology, DCS provides libraries of vector symbols, allowing the user to create new or change existing symbols. The symbols can be readily displayed on the screen in digital vector format in association with all other symbolized features.

The second speaker was Ludovic Guerpillon, INRS-Urbanization, Université de Québec, who covered "Cartographie interactive multimédia : de nouveaux enjeux pour le cartographe" or "Multi-media Interactive Cartography: New Stakes for the Cartographer". He noted the challenges and opportunities offered by recent advances in technology and how they impact on tools, techniques and design of cartographic products.

The closing paper was presented by Paul Corbeil of Tecsalt on the "Intégration de technologie dans un projet de cartographie à l'étranger" or "Integration of Technology in a Project of Cartography Abroad". This focused on a project about the choice of route for electrical transmission lines in Mali, Sénégal, and Mauritania.

Evening

The banquet was held at Hôtel Gouverneur Place Dupuis where we enjoyed a superlative meal. During the evening, various awards were presented. Of particular interest to ACMLA members were the presentations of the ACMLA Honours Awards to

Pierre Lépine, Bibliothèque nationale du Québec, and Velma Parker, National Archives of Canada. The descriptive citations for these well-deserved honours are elsewhere in this *Bulletin*. In addition, our well-honoured ACMLA long-time members, Louis M. Sebert and Edward H. Dahl, received awards for their contributions to the Canadian Cartographic Association. A special presentation in memory of Norman Drummond was made to his wife Patricia and their son John. Various other awards were presented for contributions, maps, or papers by CCA.

Saturday, June 1

Technical Tours

Trigonix Inc., home of an extra wide high precision flatbed scanner, was the first stop for most people. Trigonix provides a solution to organizations and individuals who have a need to scan maps, drawings and other historical documents to a digital format. Often these documents pertain to special collections and are wider than normal or are rare, old and fragile and need to be handled with extreme care. In order to be able to scan these documents, Trigonix has designed the SHP 1000, an extra-wide high precision flatbed scanner capable of scanning maps and drawings 60 inches wide by unlimited length. The system has been designed to allow the originals to rest on the scanner table and lie flat without moving. A camera fixed to a gantry moves over the table and scans the documents, thereby eliminating the risks of damage. The technology is most useful for large, oversized maps or drawings, fragile documents, documents mounted on a rigid background like posters or works of arts, as well as documents requiring a high degree of accuracy. The main features of the scanner are: overall dimensions 81" wide by 119" long; scanning surface 60" wide by 102" long; geometric accuracy 0.003"; output black & white and colour. Trigonix was



The awesome Trigonix flatbed scanner.



Bibliothèque nationale du Québec conservation building - which doesn't look like an old cigar factory.

established in 1987 and is a privately owned company operating from its combined research, administrative and production facilities. It specializes in manufacturing extra-wide high precision flatbed scanners and offers document scanning services through its Scanning Service Bureau.

A visit to the conservation building of the Bibliothèque nationale du Québec, was the next stop for most. This building on Holt Street houses all material that has been printed in Québec since the beginning of printing in the Province in 1764 and up to today. The building is a recycled industrial building that used to be a factory where more than 600 women rolled cigars. Before being converted into the conservation building, it became a bunker where lottery tickets were printed from 1976 to 1982. We saw how this building was transformed in 1995 for the use of the Bibliothèque nationale du Québec for the conservation of its

collections, and also as its head office. The maps are also housed in this building. There are about 130 people working in the building in very comfortable and well-designed surroundings. A brief stop was made at Pierre Lépine's former office to see the great view of downtown Montreal. Pierre retired the previous week, and it is now occupied by Jean-François Palomino his replacement.

Other tours were taken to Service de prévention des incendies de Montréal, Quartier général des incendies, as well as Archives nationales du Québec, section Montréal.

Power Lunch

A special lunch-time meeting on "Future Directions in Canadian Geospatial Data Policy: Implications for Collections, Research and Teaching" was held at McGill University as a joint session with the Canadian Association of Geographers who were holding their 50th anniversary meeting. The speakers were Nigel Waters (CAG), Brian Klinkenberg (CCA) and James Boxall (ACMLA). This session offered an opportunity for members of the three associations to discuss this critical issue.

Sunday, June 3

Guided Tour of Old Montréal

A small group of conference attendees participated in the walking tour of Old Montreal. They gathered at the usual location on Ste. Catherine on a cloudy but pleasant morning. Pierre Roy then led them southward on Rue Berri to Square Viger where they met their guide M. Jean Leduc. Square Viger is built in segments between the north-south streets atop the Autoroute Ville-Marie. This seemed to be a very imaginative solution to a barrier which would otherwise have been created between the old town and the new by the building of the Autoroute. While crossing Rue Saint-Antoine, built along a former stream bed, and climbing the rise into the Old Town, the guide was asked about a large old brick building with huge arched doorways, which was visible several blocks to the east of the spot. He explained that this was the original Montreal railway station from which the first transcontinental railway trip originated. That would make it the point of departure for many overseas immigrants who traveled by train to new homes in Western Canada. As it is not shown on the tourist maps of Old

Montreal, one wonders whether the building will survive much longer.

With a break for coffee and sweets, the group was then guided and greatly enlightened by their guide's comments through the streets of the Old Town with stops outside Chateau Ramezay Museum (an 18th cent. Governor's residence), City Hall (from the balcony of which Charles de Gaulle made his famous utterance "Vive le Quebec libre!"), the three courthouses immediately west, and through a walkway between the old courthouse and City Hall. This led to Champ de Mars, a large park on the north slope of the old town. Through this area one may see the remains of two stone walls which were once part of the defenses of the old fortified city. From here they proceeded to a square from which they could view the once dominant financial district of St. James Street, following which they were led to Notre-Dame Basilica and the old Saint-Sulpice Seminary attached to the west side. Following an all too brief visit inside the Basilica they walked through an area where much restoration or rejuvenation of old building stock was taking place. Upon reaching Rue de Commune they turned west to their last stop, the Montreal Museum of

Archaeology and history, Pointe-a-Calliere.

A multi-media presentation, entitled *Montreal, Tales of the City* was a marvelous introduction to what they were to see as they descended into the archaeological exhibits below the surface. The museum web site describes the presentation, which opened in December 2000, better than can this reporter. "The show draws on many new technologies to bring the history of Montréal and its people to life, including projections on a giant screen, virtual figures in real sets, blending real actors with illustrations and projections in the archaeological remains". This was a real marvel! Although it won't be quite as good as being there, see their web site at <http://musee-pointe-a-calliere.qc.ca/indexan.html>. The museum is built on a site marked by hundreds of years of sequential occupancy by aboriginal and European cultures. Following their tour of the museum with a very knowledgeable guide, they had a wonderful lunch in the museum restaurant overlooking a part of the harbour. By this time, it was raining very heavily and so those who remained to the end took a taxi back to the residence. (RWS)



Pierre Lépine, with the happy smile of the Recently Retired, shows off his former office at the Bibliothèque nationale du Québec.

THE FUTURE OF OUR CARTOGRAPHIC PAST: REFLECTIONS ABOUT CANADA'S NATIONAL MAP COLLECTION

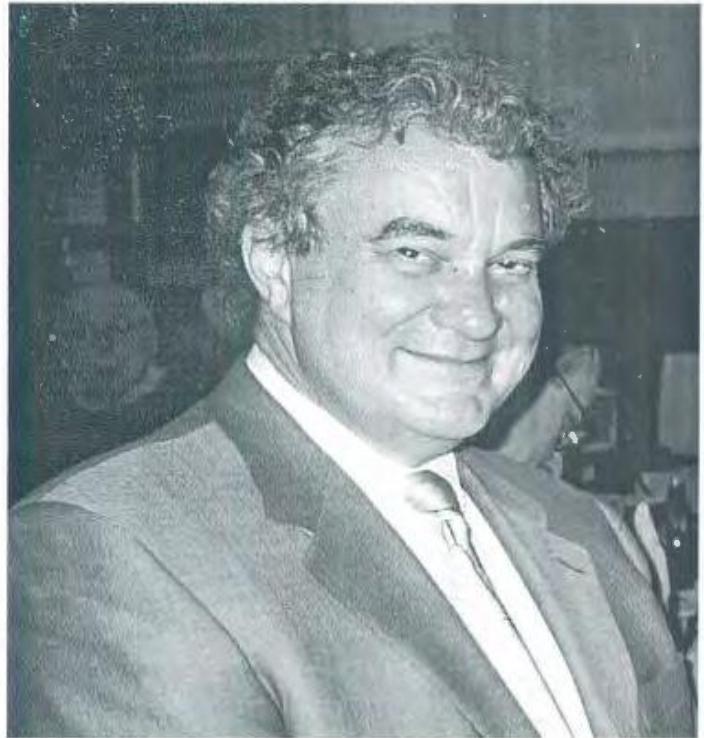
Edward H. Dahl

(Slightly revised version of a paper presented at "CARTO 2001", the joint conference of the Association of Canadian Map Libraries and Archives and the Canadian Cartographic Association, Montreal, 31 May 2001.)

When Pierre Lépine invited me to be a guest speaker at this conference, he said that the subject was up to me, but asked that I focus my remarks on matters of interest to the map librarians and archivists in the audience of this joint conference. Suspecting that, three years after leaving the National Archives of Canada, I might be "out of the loop," I contacted a number of you privately and in small groups to help focus my remarks. The consensus was clearly that I should deal with issues relating to Canada's "national map collection", a matter of continuing concern. I do not pretend to have the answers, but I wanted to try to make a contribution to this matter.

I have used the words "national map collection" in my title, even though there is no actual organization today with that name. It was the official name of the map division in the National (formerly Public) Archives of Canada for about two decades, but in 1987, when the Public Archives was renamed the National Archives, the various divisions that had "national" in their names had to change them. Before that, it had been named the "Map Division" since the early part of the twentieth century, and maps had in fact been collected since the creation of the Archives in 1872, and by various government agencies -- especially the Library of Parliament -- even before that. In the past fifteen years, the name has changed so frequently that even I cannot recall all the variations. Maybe some day the name "National Map Collection" will return....

I think no one present will be shocked if I say that all was not well at the National Archives of Canada in the past decade or so. The nineteen eighties and nineties were a time of almost feverish administrative reorganization at the Archives. I still do not pretend to understand what was the purpose of each stage, but "efficiency" and "streamlining" seems to have been at the heart of it. It was decided that a functional model would achieve the desired



Carto 2001 guest speaker Ed Dahl.

ends. What those of you who watched this will have noticed was that public service was removed from the map division and was now done by "public service specialists" in another branch -- and soon in another building. Much the same happened to custodial duties, and also to community outreach.

So the change was from an agency which had a sort of holistic approach to a particular documentary medium -- where staff in one division did the acquisition, documentation, custodial work, public service, and outreach -- to a very fragmented one. For more than a century, the staff that worked with maps had usually been in the same rooms as those maps, and researchers came to those rooms to interact with both the archival specialists and the maps. In the eighties and nineties, the distance between the staff and the maps grew, and today

the collection is in two main storage buildings -- in Gatineau, Quebec, and Renfrew, Ontario -- public service is in a third building, and the archivists are in a fourth. The archivists, their documents and the researchers who consult those documents are now so widely dispersed that the use and understanding of the cartographic material at the Archives is below acceptable standards, as several of you have made clear.

As a result of this fragmentation and functionalism, many people within the archives felt that this entire department was no longer working effectively -- in many areas, not just with maps. It also became apparent to those outside the department, and the news must have travelled up the ladder to the office of the Heritage Minister responsible for the Archives, the Honourable Sheila Copps.

In March 1998, she announced a Special Ministerial Commission, to be headed by Professor John English, a respected Canadian historian, former Member of Parliament, and the current chair of the Board of Trustees of the Canadian Museum of Civilization in Hull. His task was to carry out consultations on the future role and structure of the National Archives of Canada and the National Library of Canada. These consultations were indeed thorough and wide-ranging. Professor English held hearings across Canada and travelled abroad to visit similar institutions, and he was overwhelmed with submissions.

The Association of Canadian Map Libraries and Archives canvassed the membership about its concerns that summer. In September 1998, the Association's brief, fifteen single-spaced pages, compiled by the president James Boxall, was submitted, and Grace Welch presented a cogent summary of it orally before John English and answered questions. I attended as an observer and was impressed with what I saw and heard. (I regret to see that such a major initiative on the part of our association was never published in the *ACMLA Bulletin* for wider dissemination, and as a permanent record. The brief is still available on a website at Dalhousie University < <http://www.library.dal.ca/science/na-nl.html> > .) [Editor's Note: This oversight is rectified in this issue of the *Bulletin* - see page 42.]

To prepare myself, I posted on CARTA (the Canadian

map discussion list), a request for input from the ACMLA community. I mentioned that when James Boxall had asked for input for the Association's submission to John English (CARTA, 24 August 1998), he asked a series of questions, many of which I repeated:

- What role does the National Archives now play in your map library?
- Are you satisfied with the NA's contribution as the national agency in this domain?
- What shortcomings, if any, would you like John English to be made aware of?
- What suggestions do you have to improve the situation?

And I asked what the issues were now and invited comments addressed to this discussion list, or to me privately.

To my surprise, not a single message was posted on the discussion list -- all came to me personally. (And not a single comment came from anyone at the National Archives of Canada.)

My remarks are based on what you sent to me, on information given over the telephone, on the John English final report ¹ (along with submissions made to him), on various other reports and documents I have read, and somewhat on my personal knowledge.

Without giving you the rough statistics that I compiled for myself, let me just say that the map division's presence is what might be termed "minimal" in the many forums in which one would expect a lively presence from the national cultural institution for a particular medium. I looked at the last ten issues of the *ACMLA Bulletin* (articles, regional news, book reviews, reports, etc.) for input from and about the national map collection. Cataloguing was covered, but little else. The National Archives and its few remaining cartographic specialists are almost entirely absent from CARTA (the Canadian map discussion list), MapHist (the map history discussion list), let alone the more demanding, refereed publications, such as the journals *Cartographica*, *Imago Mundi*, and *Archivaria*.

John English quoted the following from the Canadian Historical Association's brief: "... despite the fundamental importance of [the National Archives and National Library] in the cultural

history of the country, and despite the many excellent, dedicated employees, the [institutions] are largely invisible."

One of you wrote: "Frankly I have no contact with the NAC map component."

Another: "I think that for most map librarians we just consider that there is no longer any National Map Collection and go on without any thought to the National Archives. Certainly there has been no attempt by the current administration to reach out to the community..."

And a third: "It requires asking for information to get anything; no one in that group posts information on a regular basis to CARTA. There is an annual report, but that is about it."

And someone added: "I find myself more in tune with the ... map collection in [my province] where they have a state-of-the-art imaging project and good information about their collections. I also use the Library of Congress imaging sites for reference."

So then I went to "the web." In the twenty-first century, one might expect that the World Wide Web would show the vibrancy of an active institution that prides itself on a large collection of rare archival maps, atlases, globes and related cartographic material. On the website of the National Archives of Canada, I found fewer than one hundred maps posted, many of which had already appeared in various books published by the Archives. The captions left much to be desired, filled with clichés, and lacking any references to the literature about these maps. For example, for the landmark 1871 Trutch map of British Columbia, this is the caption in its entirety: "Joseph William Trutch was the Surveyor General of the colony of British Columbia from 1859 to 1871 and served as the first lieutenant governor of that province from 1871 to 1876. He fought long and hard to bring British Columbia into Confederation." And nothing about the map. (Reading such a caption, one might expect to see a portrait of the man rather than a map.) Getting the image up on the web is only the first step, and the National Archives seems to have stopped there. This is the kind of "dumbing down" that some commentators fear about the new technology. Lacking is the rich contextual knowledge behind

such images that it is the role of archivists to research and understand.

As John English wrote in his final report: "... The rich resources of the [National Archives / National Library] are not filling the 'information highway'." And he added: "For Canadians who often hit on the remarkable Library of Congress Web site, especially American Memory, the absence of NA and NL in 'Canadian Memory' projects is striking."

One of you wrote to me: "The lack of a web presence and good finding aids is shocking -- lack of metadata and lack of the archiving of digital data. If you take a look at my home page (only two staff) there is more information about GIS and Canadian content than we can find at NAC, and not only my site, but take a look at McMaster or Waterloo, for example."

What about public service? In this area, the National Archives received a stark failing grade from John English and from those of you who wrote to me. I suggest that one might compare one's experience at the National Archives in Ottawa with entering the Geography and Map Division of the Library of Congress, where one is surrounded by well-educated staff -- usually with a degree in geography, a Masters in Library Science, and years of experience working with the maps.

John English wrote: "We heard numerous complaints about access problems at NA.... The Canadian Historical Association complained in its brief about 'fruitless searches through incomplete electronic finding aids' and 'ridiculously long delays in securing photocopies of material'."

One of you sent me these three concerns:

- The effect of Gatineau on the availability of original material, and the lack of reader accommodation there;
- The loss of expertise at the desk level of staff able to handle reader questions;
- The loss of research capabilities in the back rooms and the lack of a coherent research program designed to make available information on the Collection.

And one of you wrote to me: "There is no one to answer my questions. I dread it when I find myself having to refer a patron to the NAC because I know

they will never get through to a human being if they try to communicate electronically, and how many months do they have to wait to get an acknowledgement (even) if a question is sent by snail mail."

Or in another message, concerning a request referred to Researcher Services at the National Archives: "I had a phone call yesterday from someone at Researcher Services to say they didn't have coverage of that particular area (6 weeks turnaround time). When I heard that the request had gone to Researcher Services, I contacted McGill University's Geographic Information Centre. Carol hand delivered the maps, they have been consulted by the researcher and returned to McGill 3 weeks ago."

Back to the English report: "While we did hear praise for the work of some individual archivists, we heard other researchers complain about the inability to reach an archivist to obtain more specialized information. The archivists are now in the West Memorial Building and [the] research rooms [are] at 395 Wellington Street, and this separation has created a distance that is much greater than crossing Wellington Street would suggest. Heritage Research Associates, a group of individuals who carry out contract research and are heavy users of both institutions, presented an angry brief. From their point of view, 'user service problems constitute the major deficiency of both institutions'. Echoing other complaints by users, Heritage Research Associates stated that "In many instances [it] is not possible to obtain material from either institution in sufficient time for it to be employed for many public purposes. Moreover the difficulty does not lie in 'the time required for research'. Instead, it lies in the barricades to obtaining documents *in time to do the research*, and obtaining facsimiles in a variety of media *in adequate time* for them to meet the deadlines of ongoing projects... Photocopying and reproduction of photographs take too much time. Many students working on projects do not receive the reproductions within the span of an academic term."

Concerning "documentation" in the map area of the National Archives, the expertise is certainly there, but the management will to achieve desired ends has dissipated. One of you referred in a message to me to "the failure to make any progress

in creating even a short title catalogue for pre-1900 maps, and because of this, the absence of map material in web-based catalogues of the NA & NL", and "the need for, and apparent lack of, plans to attack the massive retro-cataloguing effort to keyboard the hand-written cards".

And, finally, the subject of electronic records. This is a domain to which I have little exposure, so I have had to depend on what others have told me. There is agreement that the National Archives has impressive expertise in dealing with electronic records. I know that various sessions organized at this conference will bring this matter to the fore as well, so I will only pass along a few impressions sent to me.

The main concern seems to be the lack of a rapport between the community across Canada and the Archives staff holding that expertise. Here is one candid comment: "The national map collection should be participating in the formation of a national geospatial data infrastructure, but instead it's all us librarians from the universities who are representing academia and research. It is very difficult to coordinate geographical information without some central agency to help -- we need the technical infrastructure plus personnel to help us all coordinate projects."

And what has happened since the John English report was released? Perhaps some of you who were even aware that the consultation had happened and a report had been published had forgotten about its existence. The ACMLA has taken several initiatives, but little that is concrete seems to have resulted. There may be reasons for this, and the Association's annual reports at least continue to mention that SOMETHING MUST BE DONE.

One of you wrote: "Actually, having read the English Report, I am shocked at how little has been done since, and angry. I agree that we have the resources in Canada to do better, but some of them have to be put into the national map collection."

CONCLUSION

Some of you may draw different conclusions from what I have said, or you may feel that I have not represented the situation fairly, that things are changing and I am not aware of this. Or, if there

are problems, you may have different ways of rectifying them. If I could be convinced of this, I would find it cheerful news.

As I was writing these remarks. I had planned to end with ten recommendations -- a nice round number -- but I have reduced these to three. This does not mean that there is less work to do, but if we achieve these three over the next years, much will have been accomplished.

ONE: The English report stated that the ACMLA had offered "to help in the creation of a Canadian 'National Map and Geographic Information Collection'... by 'having one collection, with one mandate, and a staff with the tools to do the job...'" Or, in the words of Grace Welch when she appeared before John English: "... to regain the expertise, quality service and professional example once evident at the national level."

The English report then recommended: "The National Archives and National Library should enter detailed discussions with the Association of Canadian Map Libraries and Archives and relevant federal government departments to consider the creation of a partnership leading to the formation of a National Map and Geographic Information Collection."

This is clearly priority number one.

TWO: John English emphasized this second matter by dealing with it in two separate recommendations (under "Preservation" and "Organizational Structure"). He provided the following background: "Separating the working and reference areas from the holdings, which are kept in the Gatineau Centre, causes problems for the performance of several functions due to the distance between the archivists responsible for those records and the records themselves. Specialized archivists, specifically audio-visual and cartographic archivists, frequently expressed the view that such archivists should not be separated from the materials with which they must work on a regular basis. Moreover, they expressed concern about the transport of these materials from the Gatineau site to Ottawa on a regular basis, as is necessary now. Stakeholder groups strongly and convincingly expressed similar views."

His recommendation was that "all archivists, especially archivists dealing with non-textual media (audio-visual and cartographic), should be located ... as close as possible to their materials."

THREE: The urgent need for major improvements in the areas of public service was reflected by John English's several recommendations concerning this matter, including:

a. "We recommend that the proposed common board have as its first priority the strengthening of access to the collections of the National Archives and National Library."

b. "Improving the quality of service and more closely defining and meeting performance standards is essential.... Researchers should have quick access to specialized archivists when needed."

c. "Both the National Archives and the National Library should improve photocopying and other services."

There are, of course, many more concerns that were identified. But there is good news too. Changes are certainly being made at the National Archives of Canada under Ian Wilson's leadership, across a broad range of issues and personnel, and there are initial hopeful signs of re-engagement by his new team of senior managers in the map area too. Your involvement is therefore needed now more than ever to encourage (and monitor and constructively critique) the National Archives as it begins to rebuild its damaged reputation and practices in the map area. Given the priceless nature of the collection itself and the institution's potential role in leading dynamically the Canadian archival and library map community, the stakes are high. So, too, will be the rewards if it is done well.



Notes

¹ *The Role of the National Archives of Canada and the National Library of Canada. Report Submitted to the Honourable Sheila Copps.* JOHN ENGLISH. [Ottawa, 1999]. Pp. 46, plus appendixes. Also in French. Available from The Department of Canadian Heritage, or at < <http://www.pch.gc.ca/wn-qdn/arts/english.html> >.

**BRIEF OF THE ASSOCIATION OF CANADIAN MAP
LIBRARIES AND ARCHIVES
FOR THE CONSULTATIONS ON THE
FUTURE ROLE OF THE NATIONAL ARCHIVES OF CANADA
AND THE
NATIONAL LIBRARY OF CANADA**

Submitted to
Dr. John English (Chair of the Review)
by
James Boxall
President of ACMLA
September 15th, 1998

The following is a consultative brief provided on behalf of the Association of Canadian Map Libraries and Archives (ACMLA), relating to the National Archives and National Library of Canada. This follows up on the May 8, 1998, letter from the then President, Alberta Auringer Wood (Appendix A), and is provided as a representation of the general views and concerns of the membership as expressed previously through a variety of channels and communications. While the ACMLA was unable to conduct a complete survey of the membership as it relates to this consultation process, those present at the Annual General Meeting supported our positions. These positions are based upon discussions ongoing since the founding of the association.

Throughout this document the terms 'cartographic materials' and 'cartographic information' are used extensively and interchangeably. For the purposes of this brief a working definition of cartographic materials entails: geospatial data in digital formats (on disc or stored/retrieved via the Internet); remotely sensed imagery; maps of all types and descriptions; atlases, and reference materials related to cartographic or geographic information (i.e., bibliographies as opposed to textbooks).

Introduction

Have you ever been lost? When was the last time you checked the World map to see the current status of a particular country? Did you ever wonder about the proper spelling for Musquodoboit, Nova Scotia? Did you ever get a chance to see a copy of the map

thought to have been used by Samuel du Champlain to record his journey, or perhaps the maps used by Canadian soldiers and military planners during the Battle of Ypres? Are you a sailor or pilot in need of a chart; a city planner in need of detailed images of all the infrastructure of a city from its founding to the present day? Or maybe you are a researcher wanting to map out the distribution of poverty in relation to toxic waste. These are a few examples of the uses for cartographic information - these are a few questions map librarians, curators and archivists face every day. And yet these do not begin to include the myriad of technical and professional tasks that need to be accomplished to begin to provide the answers, materials and assistance such questions demand.

Canada is, as we have all been taught, a "nation of too much geography, and yet too little history". It is a nation that, due to its size, developed a technology to manage the lands and protect the environment. That technology, Geographic Information Systems (GIS), is today a leading edge technology in areas such as law, medicine, emergency services, city planning, marketing, forestry, farming, transportation, and utilities. Almost 80% of the information we use today has some connection to a place or location - a "whereness". It is that element of 'where' which gives rise to the world of cartography and the need for cartographic information. However, as a nation that developed such vital tools (the fastest growth in the IT sector is GIS related), we are quickly losing our status as leaders in cartographic and geographic information.

The Association of Canadian Map Libraries and Archives (ACMLA) actively serves as the representative professional group for Canadian map librarians, cartographic archivists and others interested in geographic information in all formats. Since its inception in 1967, the achievements of the Association have been notable, including a vigorous publishing program, development of professional standards and international cataloguing rules, and efforts to increase national awareness of issues concerning spatial information and recognition of the contribution of map libraries and cartographic archives.

As the name of our Association suggests, we represent both elements of librarianship and archivship - the best of both worlds. The membership of the ACMLA is primarily drawn from those individuals and institutions in Canada who manage the map collections, libraries and archives that house the cartographic heritage of Canada. We are the individuals and institutions who provide reference, instruction, and public awareness programs relating to cartographic information in all its forms. We feel especially concerned about impacts upon those whom we serve in our libraries, collections and archives. We represent all those who use libraries and cartographic collections. Collectively, our user group is heavily reliant upon the information and services of both the National Library and National Archives.

ACMLA objectives include:

- * to promote high standards in the preservation and management of, and access to cartographic collections in Canada;
- * to engage in activities which further the Canadian research community's and public's awareness, use and understanding of cartographic materials;
- * to represent and promote the collective interests of Canadian cartographic users by establishing contacts with government agencies and by striving to influence policy decisions;
- * to create and maintain an active communication network for the exchange of information among members and the cartographic community; and
- * to support the research and professional

development activities of members through publications, conferences and seminars.

The report focuses on the National Archives of Canada, which has been responsible for cartographic materials for over 125 years and services as the de facto National Map Collection. However, considering recent changes at the Archives, our members are extremely concerned that not only is this 'traditional' status being eroded, but also there is a clear de-emphasis of cartographic materials.

Service

As librarians, curators and archivists, we are the very people most sensitive to the need for information providers and institutions, like the National Library and National Archives, to be responsive and pro-active with respect to public services. The mandates and service policies of both institutions make definitive statements about 'quality service' and 'respect for the public rights to access information'. However, our members, as well as the researchers served, have been noticing a measurable negative impact on reference service with relation to cartographic and geographic information. Again, this is not a comment directed towards individual service providers, but towards the organization as a whole.

In Issue 113 of *The Archivist* (p.44), discussion is made of the move towards more "self-service and researcher autonomy" whereby "clients can obtain the information they need with minimum intervention from staff". We consider this an example of the erosion of the more traditional high level of expert service which has been available within the National Archives. Recent retirements of staff with expertise and experience in specialist areas of cartography and Canadian cartographic history exacerbate such problems and highlight the need to review human resources. Also, the ability of researchers to find out what information or material is at the Archives is hampered by the lack of primary research tools: guides, finding aids, indexes, web based search engines, online catalogues and the like.

Again, this is not to say that staff are acting in a irresponsible manner with regard to the cartographic material heritage of Canada, or that

they view their reference duties as unimportant. On the contrary, our colleagues and members at the National Archives of Canada are concerned individuals with a high degree of professionalism and personal concern and expertise. However, even the internal Professional Institute of the Public Service of Canada (PIPSC) Historical Research Group survey indicated that the National Archives of Canada staff have serious concerns about a variety of issues related to reorganization and a deterioration in the level of reference service (see <http://www.fis.utoronto.ca/na-role/>). It is most disconcerting to the people who require the services of the Archives to have requests for assistance dealt with by persons who are not experienced with cartographic information.

This particular concern about the elements related to public services is based upon too frequent comments about delays in reference service, and the overall difficulty in obtaining use of cartographic materials within the Archives. There have been accounts of poor reference services - our Association continues to receive feedback regularly. We feel that the most significant contributing factor to such service issues is the decreasing availability of cartographic material specialists, compounded by the lack of access to the materials for both researchers AND reference staff. Add to this situation the fact that even the Archives, in its 1998-1999 Estimates Report (p.11) indicates there is a "gap between required expertise and knowledge to operate in an electronic work environment".

To highlight some of our concerns related to services, one need only compare the service policies of the National Archives with those of the National Archives and Records Administration (NARA) of the United States. For example, in Canada a reference inquiry with the Archives, for those unable to visit Ottawa, will be dealt with "within 30 days of receipt". Also, if one wishes to view the original records or materials, this is "done by appointment from Monday to Friday between 8:30 to 17:00 (except statutory holidays)" and "Clients should contact Archives staff well in advance to schedule appointments." There is no Internet reference; no fax service; no 'special fast lane for other librarians or archivists calling from other collections'.

However, at the NARA offices (see: <http://www.nara.gov/nara/vision/custplan.html>):

* You will receive the records you request for use in our research rooms within one hour of your request or, in research rooms that have pull schedules, within one hour of the next pull time. If a delay is encountered, you will be notified of the problem and given an indication of when the records will be available.

* You will receive the information or assistance you need on how to use our self-service holdings within 15 minutes of signing into a research room.

* You will be sent a response to your written request about our holdings within 10 workdays after we receive your letter. If we cannot provide a full response within that time, we will tell you that we have received your request and tell you how long we expect it will take before we can provide a full reply.

Most importantly, from our perspective as librarians and intermediaries at other institutions requiring and dependant upon the Archives for most information, we find the following very instructive:

* If a Federal Agency Requests Records on Your Behalf — Their request will be processed within 24 hours of receipt in the regional records services facility.

Recommendations:

* That appropriate subject specialists be assigned for public service responsibilities;

* That appropriate public service standards be defined in consultation with the user community;

* That improvements be made to make the collection more accessible to both researchers and the subject specialists providing service on the collection;

* That finding aids, guides, catalogues and digital surrogates be developed to improve access to cartographic materials and promote researcher self-sufficiency, both on and off-site and that such essential tools be made available through the Internet.

Access

The National Archives mission is to preserve the collective memory of the nation and the government of Canada, and to contribute to the protection of rights and the enhancement of a sense of national identity "by acquiring, conserving and facilitating access to private and public records of national significance, and serving as the permanent repository of records of federal government institutions and ministerial records". This section will focus on the Archives role with respect to facilitating access.

Specifically related to cartographic materials, there is an enormous need for high quality, online/print guides and indexes. The National Archives has been a world leader in the development of standards for describing cartographic materials. They were instrumental in producing *Cartographic materials: a manual of interpretation for AACR2*; RAD chapter 5 for cartographic materials, and the rules for geomatic records. They were one of the first map collections in Canada to catalogue their cartographic items. Yet, the public and most map libraries have not had access to these descriptions of the Archives cartographic holdings as a source of derived cataloguing or to locate an item in their collection.

We are pleased to note, however, that this situation is finally changing. Cartographic materials were included in the new National Library CD-ROM: *Canadiana*. As well, later this year the map records of the Visual and Sound Archives will be loaded into AMICUS, the union catalogue of the National Library. This will improve access to the cartographic heritage of our country, although it will not address the problem of the lack of resources within the Archives to describe newly received material or catalogue older important cartographic collections.

The lack of an accessible catalogue during the past two decades has been compounded in the 1990's by the virtual elimination of any active publication program in the Archives for cartographic materials. Despite the availability of desktop publishing and word processing software, and most recently web publishing tools, there are no printed or online sources of finding aids for paper or digital cartographic materials held in the Archives. The development of these tools, which promote the

collections and facilitate access, requires that the human resources available be directed towards these activities.

As professionals providing cartographic reference and information management service, we rely heavily upon our ability to access information quickly. We also need to be assured that our researchers (and ourselves - as we are researchers and authors too) will be able to locate and use the information with a fair amount of ease. Much of the difficulty we face, which has also been previously documented in comments and suggestions to the National Archives, is due to fewer people working in the reference service area who have a background in the field - that is not the fault or problem of those staff members, but more so of the overall organization which allows such a poor service situation to develop.

Some may argue that Internet access is so new and fast changing that an organization cannot adapt to its demands. And yet, by way of comparison between the Internet access points of the National Archives of Canada and NARA in the United States one is struck by several noticeable differences. The U.S. site includes the term "cartographic materials" on their front page. They also provide links to access tools and information regarding cartographic information and projects other agencies are carrying out in the same field. Of particular note are the efforts to promote the access to and use of cartographic and geographic information via the Library of Congress Internet sites. No similar effort is being made on the part of the National Library or National Archives of Canada - not because of a lack of raw information, but more so due to a lack of emphasis on the part of the organization.

Furthermore, the collection is presently separated from researchers. Cartographic materials are by their definition visual in nature and no catalogue record or finding aid can ever substitute for the real item. Projects such as colour microfilming help, but it is time to use newer technology (scanning) so that the items can be viewed through the Internet. This would serve several purposes: a scanned image might be a reasonable substitute for the public to view as opposed to the real thing, thus decreasing the need for use of the physical item (preservation); it increases self sufficiency (remote or on-site); and in some cases, a scanned image increases the level

of analysis not possible with a paper map.

As mentioned above, the examples and experiences within other nations in these initiatives seem to require more support and resources. This is the case, but what should also be considered is that such access has proven, in the long term, to reduce onsite demand. Most significantly, for the Canadian context, is that it also creates more equitable access to the collections across the country.

Recommendations:

- * That adequate resources be allocated for the description of the cartographic holdings of the National Archives and the development of other researcher guides and finding aids;
- * That the Archives work with the National Library and ACMLA to look at other cooperative models for describing and making known the cartographic heritage of the country;
- * That the Archives undertake an active digitizing project for their cartographic material and make the images readily available via the Internet.

Collections

On another matter, there have been ongoing discussions between our association and the National Library and National Archives relating to the important issue of the legal deposit of maps. We fully understand and appreciate the views of our colleagues at the National Archives who feel they provide adequate coverage and collection of Canadian produced mapping without the need to implement a legal deposit system. While we agree that such a legal deposit can be a strain on resources, we are uncertain if the present situation means gaps are developing in the collection of Canadian produced cartographic information. Another concern is that no legal deposit would be able to cover all material, and that gaps would still develop under such a deposit system. This is true. However, with legal deposit there is an enforceable mechanism to rectify any gaps; under the status quo such a legal route does not exist and gaps in collections go on unchecked.

However, an interesting possible solution exists to such a dilemma. It is within the power of the Minister

responsible to request legal deposit of maps through the National Librarian under the definition of "book" in the National Library of Canada Act. The act clearly states that "a 'book' means library matter of every kind, nature and description and includes any document, paper, record, tape or other thing published by a publisher, on or in written, recorded, stored or reproduced". It is our contention that, with the proper legal consultation and action by the Minister responsible for the Act (and such action is allowed under the act), a legal deposit could be established for cartographic materials of all types and formats (electronic and paper). This would require a shift of some resources towards cartographic information and an extension of the cooperation between the National Library and National Archives. However, the opposite situation is, in our view, untenable - we cannot stand by and allow there to be no complete collection of cartographic materials produced in and about Canada, or at least a recognized system for establishing such a national collection as the "library of first and last resort" for researchers and the public at large. This would be too serious a gap in our heritage, and future generations will simply ask why we did not feel cartographic materials to be important or valuable enough to be included.

Recommendations:

- * Investigate a legal mechanism for ensuring that the cartographic output of our country is collected and preserved, either through a centralized or decentralized model;
- * Develop an active digitization program for cartographic materials to give access to all Canadians to our cartographic collection.

A Digital World

As stated at the outset of this brief, Canada was responsible for the development of Geographic Information Systems. We have a tradition of placing resources into the field of managing information about our land and people. Now there is a move amongst the geographic information providers and users to build a Global Geospatial Infrastructure that will in essence become an international cartographic and geographic information library. It is becoming the norm to read about and view digital library projects developed specifically for the

use of geospatial and cartographic information. Sadly, in this country, there is less than a proportional amount of development related to integrating the work of libraries, archives and GIS developers within the context of a geospatial infrastructure. This does not mean work is not being carried out - it is and it is of high caliber. What is meant is that librarians and archivists are on the periphery, while in other nations they are at the core of these projects.

We were leaders; we are now followers; we may become buyers and beggars trying to recover our technology and skills. Our librarians and archivists are moving to take over jobs requiring highly skilled professionals to work in exciting map and geographic information environments. Additionally, the demographics indicate that we cannot keep pace with the current rate of loss of experts in the field of cartographic and geographic information.

Data archives, data libraries, and information infrastructures require major coordination and public input. Canadian information goes unused. We have gathered more information than a country our size would suggest we could. But we have failed to manage it properly so that the public at large (or researchers and students in particular) can fully utilize it.

As a nation we sign agreements for the protection of the environment; for military enforcement of UN resolutions; for the promotion of learning and the advancement of technology, health, human rights. Yet we fail to provide a basic element of the infrastructure needed to carry out these actions - the system to manage, preserve, protect, promote and provide access to geographic data and cartographic information. This demands a more coordinated effort to establish a National Map and Geographic Information Collection which includes services in preservation and archiving, equally with those of access, cataloguing, and reference.

Within our community of cartographic information experts there exists the human resources to carry out this development. We have proven our leadership in cataloguing cartographic materials; in providing reference services with historic collections; and in developing technologies to fully utilize the information within these uniquely valuable formats. Therefore, we would strongly urge that there be

consideration given to the creation of a National Map and Geographic Information Collection (MAGIC) - the mandate of which would be determined based upon a review panel of experts from across Canada and abroad.

The ACMLA would be happy to assist in facilitating such a process of renewal. We feel that the skills, values, and service orientations of libraries could benefit from the expert level of care and professionalism with which the archivists view cartographic information, both focussed within a single National Map Collection. This concept is not without international example. Within the Library of Congress, there is a Geography and Map Division which also contains a Center for Geographic Information.

The Center is an industry group formed in 1995 and dedicated to the support of the Library of Congress's Geography and Map Division in its transition to the digital world. Through hardware, software, and expertise donated by member companies the Center helps develop effective methods for scanning and disseminating the Library's cartographic holdings. This support supplements the Geography and Map Division by the Library's National Digital Library Program for cartographic material. (Source: <http://lcweb.loc.gov/rr/geogmap/gmhists.html>)

What should also be mentioned is that the above Center does not exist, nor was it developed, in a vacuum. Were it not for the concerted efforts of cartographic and geographic information specialists within the Library of Congress, the National Archives and Records Administration and the user and library community, such a centre would not have been possible. Within the current structure and administrative climate in Canada, such an initiative to benefit access and overall promotion of cartographic and geographic information could not take place. In short, the human and physical resources are scattered, and the vision and commitment (financial as well) are lacking. Such an initiative for a national collection would go far in alleviating many of the issues related to collections and services we have briefly related to this consultation.

The establishment of a national organization capable of dealing with issues related to the

transition from paper to digital mediums is vital. There is a sense of apprehension about moving in this direction, but it is also an area where we, as an association and with the partnership of related societies and professional groups, are willing to provide direction and assistance. In our call for a data archive and cartographic information collection, we recognize that as funds decrease, cooperation will be more critical. This will also require much in the way of promotion and fund-raising which demands time, energy, and people committed to a vision - an improvement on the present, but rooted in the best traditions of a proud past.

Recommendations:

- * A National Map and Geographic Information Collection (MAGIC) be formed to regain the expertise, quality services and professional example once evident at the national level;
- * Partner with other federal agencies involved in the creation of geospatial data to ensure equitable access to geospatial information and ensure its preservation for future generations;
- * Provide leadership, coordination and training in the area of preserving cartographic information in digital form;
- * The concern indicated in the Professional Institute of the Public Service of Canada (PIPSC) Historical Research Group report be noted and looked at as an area of emphasis for the administration of the National Archives;
- * The recommendations put forward by the Canadian Association of Public Data Users (CAPDU), especially the call for a more focussed effort regarding data, be supported;
- * An in-depth review of cartographic materials be undertaken, using national and international experts to provide a truly accurate analysis of the state of cartographic and geographic information management within the archival and library systems at the national level;
- * As it relates to this consultation and any potential changes relating to the management of and access to cartographic materials within either the National

Library or National Archives, we would respectfully request that the ACMLA be provided an opportunity to extend consultations and input with regard to any proposals or recommendations.

Conclusion

Our members did not have an opportunity to meet with Dr. English during our annual conference in London, Ontario at the end of May, so we would enjoy an opportunity to add to our input in future planning or reviews. Furthermore, our Association and individual members are always ready to provide assistance to our colleagues in both the National Archives and National Library. The degree of expertise and experience that makes up the membership of the ACMLA is both wide and extensive - we consider ourselves a resource for the development and implementation of improved collections and management of cartographic information and materials in Canada. Also, it should not be ignored that we have extensive connections and involvement with other associations and institutions on an international level which affords our Association the opportunity to be involved in some of the most significant leading edge programs and technologies.

The issues, concerns and ideas presented briefly above are not new discussions. We do not face a shortage of potential technological solutions or contributions. Nor do we lack the understanding and knowledge to deal with these situations - we have the people, the ideas and the tools. Unfortunately, these are not in one place. Yes, we do live in a period of networking whereby activities and actual work can be done electronically and without concern for distance or time (at least that's the theory). However, having one collection, with one mandate, and a staff with the tools to do the job, creates a critical mass that can be more innovative and forward looking. This synergy is vital for the potential of such an enterprise (like a National MAGIC); to extend our reach and be leaders; to gain support and raise awareness; to promote, educate and become active in life long learning; to leverage what is within that system to gain added private and public sector support and input.

Our cartographic heritage is being lost. It is not just due to the physical media being left uncollected,

Summary of Recommendations

but due to the lack of public use and decreasing access. We still find Canadian students using U.S. data and U.S. information about our nation and the world. We still know of researchers and members of the public at large who cannot find the cartographic information they need, and have a right to, simply because we have not deemed it important enough. It is all well and good to have beautiful buildings and well crafted mission statements or strategic plans. However, without the knowledgeable and trained staff, and tools, these other resources are left half used. A heritage half known is a heritage unknown.

In the end, there is no overall plan or vision for geospatial data or cartographic materials, either by the National Archives or National Library - we don't even see mention of that media in as public a way as for other G-7 nations. We have a short window of opportunity to muster the collective expertise and energy to focus on this area. After all, this is an information age and an information economy. But while we see information all round us, we remain information poor.

We are given flags in the mail courtesy of our tax dollars, but we cannot see an image of our constitution or historical maps on the Internet. The United States has an American Memory Project which has placed all the draft versions of the U.S. Constitution on the Internet (among numerous other items such as railroad maps and civil war photos) and yet we cannot see even one original image of ours.

In 1999 Canada will host the Congress of the International Cartographic Association. The ACMLA is a co-sponsor of this important event. Although it is impossible to present to that group (most important and learned cartographic professionals) a final plan, it would certainly be the most opportune time to publicly announce a renewed commitment towards building a truly active, vibrant and visionary National Map and Geographic Information Collection. The time for such a revitalization has come.

- * That appropriate subject specialists be assigned for public service responsibilities;
- * Appropriate public service standards be defined in consultation with the user community;
- * Improvements be made to make the collection more accessible to both researchers and the subject specialists providing service on the collection;
- * Investigate a legal mechanism for ensuring that the cartographic output of our country is collected and preserved, either through a centralized or decentralized model;
- * Develop an active digitization program for cartographic materials to give access to all Canadians to our cartographic collection;
- * Finding aids, guides, catalogues and digital surrogates be developed to improve access to cartographic materials and promote researcher self-sufficiency, both on and off-site and that such essential tools be made available through the Internet;
- * That adequate resources be allocated for the description of the cartographic holdings of the National Archives and the development of other researcher guides and finding aids;
- * That the Archives work with the National Library and ACMLA to look at other cooperative models for describing and make known the cartographic heritage of the country;
- * That the Archives undertaken an active digitizing project for their cartographic material and make the images readily available via the Internet;
- * A National Map and Geographic Information Collection (MAGIC) be formed to regain the expertise, quality services and professional example once evident at the national level;
- * Partner with other federal agencies involved in the creation of geospatial data to ensure equitable access to geospatial information and ensure its preservation for future generations;

* Provide leadership, coordination and training in the area of preserving cartographic information in digital form;

* The concern indicated in the Professional Institute of the Public Service of Canada (PIPSC) Historical Research Group report be noted and looked at as an area of emphasis for the administration of the National Archives;

* The recommendations put forward by the Canadian Association of Public Data Users (CAPDU), especially the call for a more focused effort regarding data, be supported;

* An in-depth review of cartographic materials be undertaken, using national and international experts to provide a truly accurate analysis of the state of cartographic and geographic information management within the archival and library systems at the national level; and

* As it relates to this consultation and any potential changes relating to the management of and access to cartographic materials within either the National Library or National Archives, we would respectfully request that the ACMLA be provided an opportunity to extend consultations and input with regard to any proposals or recommendations.



James Boxall, as ACMLA President, penning the submission to the English Commission, 1998.

Appendix A

May 8, 1998

Dr. John English
HH 141
Department of History
University of Waterloo
Waterloo, Ontario N2L 3G1

Dear Dr. English:

I write on behalf of the Association of Canadian Map Libraries and Archives (ACMLA). Our association actively serves as the representative professional group for Canadian map librarians, cartographic archivists and others interested in geographic information in all formats. Since its formation in 1967, the achievements of the association have been notable, including a vigorous publishing program, development of professional standards and international cataloguing rules, and efforts to increase national awareness of issues concerning spatial information and recognition of the contribution of map libraries and cartographic archives.

We wish to express our opinions for your consultation process on the National Archives and National Library. The National Archives has had the responsibility of collecting maps, whether as part of an archival collection or not, for over 125 years, rather than the National Library. Our association, since its inception in 1967, has had a close cooperative relationship with the National Archives.

We are concerned, however, about the recent move to "self-service and researcher autonomy" in the public services of the National Archives with their "aim" of a "research environment in which clients can obtain the information they need with minimum intervention from staff," as noted in *The Archivist* no. 113, 1997, p. 44. At a meeting on April 17, 1997, with Lee McDonald, then Acting Assistant National Archivist; Elizabeth Hawkins, Special Projects Officer, Policy Branch; and Kathleen Owens, Policy Officer, Policy Branch of the National Archive; Grace Welch, ACMLA First Vice President, and I expressed this concern. We pointed out that they need to have staff on hand who know the collection and have expertise in subject specialities, such as cartography and geography; this knowledge

of the collection cannot be replaced by catalogues and computer finding aids. When we inquired as to how they determined the policy, we were told that it was through a survey of users of all their "media". However, this consultation did not include any members of our association. At the moment, there are only a few staff members who have experience with cartographic materials in the public service area. However, they are not the only staff who assist users and may not always be available. This situation has been exacerbated by the recent retirement of a senior staff member with expertise in the history of cartography and early Canadian cartography. He has not been replaced. In addition, all the maps, atlases and globes of which he was the curator were moved permanently to a building about 15 km away. Another storage area for maps is in Renfrew, about an hour away by car.

We have had ongoing discussions concerning legal deposit of maps. Unlike books, this is not mandated by law. Our association is cooperating with the National Archives to ensure that they are able to collect maps of Canada and Canadian produced maps on a regular basis. Discussions in this area continue with the Archives and National Library.

The National Library has met with our association on several occasions to explore the possibility of expanding their CIP program to include maps. This dialogue will be continued at our annual meeting later this month.

While there has been considerable activity in standards setting for the bibliographic control of cartographic materials by the National Archives, there has not been analogous output of catalogue records comparable to that available for books. We hope that this is about to change after more than 30 years of ACMLA trying to establish a national union catalogue for cartographic materials with the inclusion of map records in the National Library AMICUS database and on the *Canadiana* CD-ROM. This was begun by including information from the National Archives' Carto-Canadiana records. Members of ACMLA have participated in the beta testing of the new CD-ROM product.

Because cartography has begun to move into the digital realm, we also have concerns for the archiving of spatial data and related digital statistical data that can be used in conjunction with

it. As a result, we support the efforts of the Canadian Association of Public Data Users and others to establish a national social science data archive. It is not clear to us what the National Archives is able to acquire and preserve in terms of electronic mapping. The National Library does not collect much in the area of electronic atlases, as current depository legislation does not cover electronic publications.

At our meeting last April, we asked about ways in which we could be incorporated into the consultative structure of the National Archives. The National Archives Advisory Board no longer exists. We were told of the Researchers Forum which meets regularly to discuss topics of concern. We thought that this might be an avenue for input from ACMLA and have indicated our interest in nominating a representative should a vacancy occur. However, it has not happened to date.

We would appreciate being included in the consultative process. I would welcome the opportunity to speak with you about how this consultation could best be accomplished.

Sincerely,

Alberta Auringer Wood
President

cc: ACMLA Board

Editor's Note:

Thanks to Ed Dahl who, in his CARTO 2001 conference presentation and in his paper (page 37), reminded me that the ACMLA Submission to the English Commission had never been published in the *Bulletin*.

Comments on Ed's paper are welcome, and will be published as "Letters to the Editor" in the next issue (October 15th).

PRIX D'EXCELLENCE 2001 - PIERRE LÉPINE

Translated by Martine Rocheleau
and presented in French by Pierre Roy

Au nom de l'Association des cartothèques et archives cartographiques du Canada, il me fait plaisir de présenter à M. Pierre Lépine notre prix de l'excellence en reconnaissance de ses nombreuses contributions à l'association ainsi qu'aux professions de cartothécaire et de conservateur.

Pierre a embrassé une longue et dévouée carrière à la Bibliothèque nationale du Québec. En 1966, il a débuté en tant que catalogueur après avoir obtenu son baccalauréat en bibliothéconomie de l'Université de Montréal. Il fut le premier responsable du Bureau du Dépôt légal de la BNQ en 1969. En 1972, Pierre devient cartothécaire. Il obtiendra en 1974 le poste de responsable du département des cartes et plans pour ensuite accéder, en 1997, à celui de chef de la division des collections spéciales. Il a récemment complété (2001) un certificat en andragogie à l'Université du Québec à Montréal.

Au niveau du catalogage, Pierre a utilisé In-Magic pour créer une base de donnée incluant des dossiers «maîtres» (*parent records*) de séries de cartes à une époque où cette pratique était toute nouvelle dans les bibliothèques. Son apport de pionnier au catalogue collectif (Union catalogue), plus particulièrement à celui du Québec, a encouragé plusieurs de ses pairs à faire de même.

Il fut un membre actif de l'ACACC depuis au moins 1974. Il a fait parti, entre autre, du comité de contrôle bibliographique et du comité des prix et mérites. Il a été l'un des représentants de l'ACACC sur le comité de catalogage de l'AACR2 (Règles de catalogage anglo-américaines) dans les dernières étapes menant à l'élaboration de la section dite «Cartographic Materials». Ses nombreux résumés et analyses de livres, atlas et cartes parues dans le *Bulletin* de

l'Association ont permis de faire connaître le matériel cartographique québécois à tous nos membres. Le département des cartes et plans de la BNQ a parrainé la publication de trois cartes fac-similés de la collection de l'ACACC, et tout dernièrement, la carte couleur de Montréal de la série «Villes du Canada : vues à vol d'oiseau».

Pierre a aussi régulièrement participé à des conférences en tant que présentateur et organisateur. Il a invité et rassemblé à plusieurs reprises les cartothécaires et archivistes à Montréal. Tout récemment, il présidait le sous-comité sur l'implantation de la géomatique dans les cartothèques québécoises, sous la responsabilité de la CREPUQ.

Pierre a publié plusieurs ouvrages pour la Bibliothèque nationale incluant: *Documents cartographiques depuis la découverte de l'Amérique jusqu'à 1820: inventaire sommaire* et *Cartes anciennes: cartes originales ou reproduites*. Il a également écrit de nombreux articles pour le *Bulletin de la Bibliothèque nationale du Québec* et pour d'autres publications, et publié en 1980, un fac-similé de la «Carte topographique de la province du Bas-Canada» de Joseph Bouchette (1815).

Plus récemment, Pierre s'est concentré sur le développement du site Internet «Cartes géographiques» de la Bibliothèque nationale, <http://www2.biblinat.gouv.qc.ca/cargeo/accueil.htm>. Ce site remarquable est une source d'information précieuse pour les chercheurs à travers le monde. Il contient des images numérisées de cartes publiées au Québec entre 1632 et 1950.

Pierre a pris sa retraite jeudi dernier le 24 mai 2001. Mis à part ses réalisations, ses collègues

vont s'ennuyer de son sens de l'humour et surtout du précieux don qu'il avait de susciter de riches discussions entre différents intervenants de manière à ce que chacun participe activement et ensuite, d'établir un consensus.

La famille est pour Pierre l'une des choses les plus précieuses à ses yeux et plus d'une fois il nous a vanté les réussites et les succès de ses enfants. Finalement, Pierre apprécie la vie et nous sommes certains qu'il profitera pleinement de sa retraite.

De la part de tous tes amis et collègues, nous te souhaitons la plus bénéfique et enrichissante retraite qui soit.

De ma part, je tiens à souligner le réel plaisir que j'ai eu à travailler avec toi sur des dossiers communs. Plus le temps passait et plus j'appréciais notre collaboration. Malheureusement, toute bonne chose a une fin. Par contre cette fin présage de la naissance d'une nouvelle vie pour toi.

Amicalement. De la part de tous les membres de l'ACACC et de tous tes amis...



Honours Award winner Pierre Lépine (left) is congratulated by Awards Committee chair Lori Sugden (centre) and Pierre Roy (right).

HONOURS AWARD 2001 - PIERRE LÉPINE

Presented in English by Lori Sugden

I am very happy to present this award on behalf of the Association of Canadian Map Libraries and Archives, to Pierre Lépine in recognition of his many contributions to the Association and to the professions of map librarianship and curatorship.

Pierre has built his career at the Bibliothèque nationale du Québec. He began as a cataloguer in 1966 after receiving his B.L.S. from the Université de Montréal. He became the first Chief of the Bureau du Dépôt légal of BNQ (Legal Deposit Office) in 1969. He became Map Librarian in 1972, Chief of the Département des Cartes et Plans in 1974, and Chief of the Division des Collections spéciales in 1997. He recently completed a Certificat en Andragogie (Education and training for adults) (UQAM 2001). And, sadly for us, but happily for Pierre, he has just retired.

In cataloguing, he used In-Magic to create a database including mother-daughter records for major map series at a time when this was new to libraries. His contributions of map cataloguing records to union catalogues, especially Quebec's catalogue, encouraged others to do the same.

Pierre has been a member of ACMLA since at least 1974, and his contributions include participation in both the Bibliographic Control Committee and Awards Committee. He was one of ACMLA's representatives to the Anglo-American Cataloguing Committee for AACR2 in the final meetings that worked out content for *Cartographic Materials*. His reviews of atlases, books and maps in the *Bulletin* helped inform others of Québec's maps. The Département des cartes et plans sponsored six ACMLA facsimile maps from originals in the collection, and has just sponsored the Montréal colour bird's-eye view. Pierre has consistently participated in conferences both as presenter and organizer.

He has brought together map librarians and archivists in Montréal for regular meetings, most recently chairing the Sous comité sur la géomatique, which has involved most of the map librarians, and all of the universities in Québec, in its consultation process.

Pierre's publications for the Bibliothèque nationale include *Documents cartographiques depuis la découverte de l'Amérique jusqu'à 1820: inventaire sommaire* in 1985 and *Cartes anciennes: cartes originales ou reproduites* in 1994. He has also written numerous articles for *Bulletin de la Bibliothèque nationale du Québec* and other publications, and published a facsimile of Joseph Bouchette's 1815 *Carte topographique de la province du Bas-Canada* (Map of Lower Canada) in 1980.

Most recently, Pierre has focussed on the development of the Bibliothèque nationale's excellent "Cartes géographiques" web page, <http://www2.biblinat.gouv.qc.ca/cargeo/accueil.htm>, containing scanned images of maps published in Québec or regarding Québec, published between 1632 and 1950, and also including some even older special maps. This is a very valuable resource for researchers worldwide.

With all of these achievements, his colleagues will most miss Pierre's humour and his way of fostering discussion in an inclusive manner that let all involved participate and feel their contribution was valued. His family is dear to his heart, and he often tells us about their achievements. He knows how to enjoy life, and we know he will enjoy his retirement.

Congratulations, Pierre!

HONOURS AWARD 2001 - VELMA PARKER

Presented by Lori Sugden

It gives me great pleasure to present this award to Velma Parker in recognition of her many contributions to the Association and to the professions of map librarianship and curatorship.

Cataloguing is the science of informing the world about your library's maps and how to find them. In order to do so, we conform to rules which ensure consistency and accuracy in our records. They are logical and clear because of the work of people like Velma.

In the last five years, the number of map records available online has reduced the cataloguing workload, but the work has become more complex, because there are so many more facets to cataloguing digital geospatial information. When we were beginning to automate library systems, systematic rules to create machine readable records (MARC) were the point of discussion. Now we talk about metadata and Dublin Core.

Velma's work in these areas has made her the key person in Canada to consult on the interpretation of cataloguing rules for maps and geographic data, and she has been tirelessly working to educate the rest of us. Luckily for us, Velma taught high school geography before earning her MLS at Western in 1973. She became a cataloguer at the University of Ottawa, then joined the National Archives of Canada. At the Archives, she began as a subject specialist, then head of the cataloguing unit, and now is a standards officer. Some of her achievements there include working on the harmonization of CAN MARC and USMARC fixed field codes for cartographic material, and working with the National Library committee to add maps to the Canadiana CD-ROM. She also worked on the Rules for Archival Description.

She is the National Archives' representative on the Anglo-American Cataloguing Committee for Cartographic Material. She was co-editor of the 1982 edition of *Cartographic Materials: a manual of interpretation for AACR2*. She is currently involved in editing its second edition. For the Inter-Agency Committee on Geomatics, she was editor in chief of Geomatic data sets cataloguing rules in 1994.



Honours Award winner Velma Parker.

As well as being ACMLA's Treasurer from 1983-1991, Velma has been a member of the Bibliographic Control Committee since about 1977, and has actively participated in all aspects of map and geomatic data cataloguing. She has gathered input from map librarians and curators on proposed changes to the rules, and kept us informed on those rules by writing articles for the *Bulletin* and other publications, and presenting reports and workshops at many conferences. Her workshops include those on cataloguing maps in general, early cartographic material, and geomatic datasets.

Colleagues who have worked with Velma respect her great attention to detail, the terrific work put into the first edition of *Cartographic Materials*, and her work on the revision of the LC "G" Classification section for Canada. She has also been commended for her cataloguing expertise and her in-depth knowledge of the rules for cataloguing cartographic materials. Her perseverance in drafting and re-drafting the revisions for "Cartographic Materials" is much appreciated and will benefit us all. Congratulations, Velma!

NOUVELLES REGIONALES

Pierre Roy

Western Association of Map Libraries (WAML)
Janet Collins
Janet.Collins@wwu.edu

La «Western Association of Map Libraries» tiendra sa prochaine rencontre du 9 au 12 mai à Provo Utah, à l'université Brigham Young. Richard Soares en sera l'hôte. Il y aura aussi une rencontre du 3 au 6 octobre à Portland, Oregon ; Elizabeth Winroth en sera l'hôte. «NACIS» se réunira durant la même période à Portland.

Alberta

Université d'Alberta
David L. Jones
david.jones@ualberta.ca

Behaim Globe : l'Université d'Alberta possède maintenant une reproduction du globe terrestre de Behaim. Ce globe conçu en 1492 par Martin Behaim est unique en ce sens qu'il représente la planète avant la «découverte» des Amériques. Basé sur la connaissance courante du monde et sur les concepts de Ptolémée, le globe montre clairement comment un voyage vers l'ouest, de l'Europe vers l'Orient pourrait être réalisé.

La seule autre copie disponible au Canada se trouve au Musée Stewart à Montréal. Ce modèle, plus luxueux, peut être vu sur le site Internet http://www.greavesandthomas.co.uk/facsimile/globe_behaim.html

L'autre grande nouvelle à la Cartothèque est l'accès, par serveur Web, au catalogue de notre collection de cartes. Cette base comprend les notices des cartes imprimées avant 1995. Les cartes plus récentes sont présentées dans le catalogue en ligne de l'Université d'Alberta. La base de la Cartothèque était déjà disponible par Telnet mais est maintenant accessible grâce à un fureteur ordinaire. Cette base fait partie du projet «TAL On-line», qui vise à offrir un guichet unique à l'ensemble des bibliothèques de l'Alberta.

Le catalogue de la « W.C. Wonders Map Collection

» est un peu difficile d'accès et l'URL est complexe. Voici un chemin pour vous y rendre : <http://www.TALOnline.ca> --> cliquer sur «Search TAL Online» --> choisir «Article Search» --> cliquer sur le menu déroulant --> choisir «The William C. Wonders Map Collection». Vous obtiendrez les meilleurs résultats avec la recherche par mots-clé.

Ontario

Université de Western Ontario
Cheryl Woods
cawoods@uwo.ca

Dale Smith a été engagé le 1 mai pour occuper le poste d'assistant de bibliothèque laissé vacant par le départ de Melissa Leitch. On peut joindre Dale à l'adresse de courriel suivante : dsmith3@uwo.ca.

Le transfert de 10 copies de chacune des reproductions de cartes historiques de l'ACACC de l'université McMaster à Western Ontario s'est effectué début juillet. Gordon Beck s'occupera de la vente de celles-ci début septembre et l'Université de Western Ontario gardera le dépôt de cette collection.

L'élagage des cartes périmées canadiennes et américaines est présentement en cours. Certaines cartes seront archivées et les autres redistribuées. L'acquisition de nouveaux documents est particulièrement active durant l'été. Notons, entre autres, l'achat d'une série de cartes topographiques de London datées de 2001 et à l'échelle du 1 : 2 500.

Un directeur intérimaire a été nommé au département de Géographie pour l'année qui vient, jusqu'au retour du titulaire principal présentement en congé d'études.

Cheryl représentera l'ACACC lors de la rencontre automnale du comité consultatif de l'Atlas national du Canada.

Ontario Council of University Libraries – section
Cartothèques
Shirley Anne Harmer (présidente)
harmers@post.queensu.ca

Le groupe «Cartothèques» de l'OCUL s'est réuni récemment à l'Université de Trent, à l'École polytechnique de Ryerson et à l'Université de Toronto, cumulant une moyenne d'assistance de 16 personnes.

Le site Internet du groupe à l'adresse <http://www.lib.uwaterloo.ca/ocul/oculmap.html> a été mis à jour et les comptes-rendus des réunions sont aussi disponibles. Marcel Fortin (Université de Toronto) nous a fait la démonstration d'un engin de recherche sur Internet qui peut être utile à la recherche en milieu cartographique. Le groupe, sur invitation de Marcel, a décidé d'utiliser ce site comme dépôt pour contribuer à une base centrale de liens significatifs. <http://www.library.utoronto.ca/maplib/>.

Nous avons eu droit à une démonstration des initiatives du ministère des ressources naturelles de l'Ontario concernant les données numériques, mais aucune décision n'a été prise pour permettre à nos membres d'accéder à ces ressources. Dans un premier temps, nous sommes intéressés à évaluer un échantillon de ces données.

Ressources naturelles Canada
Centre d'information sur les sciences de la Terre
Martin Legault
marlegau@nrcan.gc.ca

L'affectation d'Irène Kumar sera prolongée jusqu'à la fin de mars 2002. En son absence, Martin Legault sera responsable de la collection des cartes. Vous pouvez communiquer avec Martin au (613) 995-4177, télécopieur: (613) 943-1549 ou marlegau@nrcan.gc.ca.

Nous avons retenu les services d'Hélène Duquette comme catalogueuse de cartes. Hélène travaille à temps partiel à raison d'une journée par semaine. Beverly Chen s'est retirée en tant que chef du Centre d'information sur les sciences de la Terre. Pauline Kamel est présentement notre chef intérimaire et elle occupe également les fonctions de chef adjointe. Les interviews sont présentement en cours pour le poste de chef du CIST et nous devrions connaître ce nouveau chef avant l'automne.

Québec

Université McGill
Carol Marley
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HITSCHFELD GEOGRAPHIC INFORMATION CENTRE Faits saillants 2000-2001

La version française est un résumé du document original, en anglais :

Du point de vue des acquisitions, l'année s'est révélée fastueuse. Un projet mis en place il y a trois ans par un comité consultatif multidisciplinaire pour acquérir des données spatiales a porté fruit. Le but était d'acquérir en format numérique, des données de Montréal et sa région, à partir de 1950, lorsque le développement urbain s'accélère. Cette année, nous avons reçu ou attendons :

- SIURS, le SIG de la ville de Montréal (plus de trente couches d'information)
- Des fichiers AutoCad, contenant un supplément d'information sur le SIURS.
- La couverture d'orthophotos de 1994 a été mise à jour en 1999
- Nous avons acquis des cartes topographiques numériques à l'échelle du 1 : 20 000 et du 1 : 250 000 ainsi que des modèles d'élévation de terrain au 1 : 50 000
- Nous avons négocié une licence pour obtenir des cartes forestières numériques au 1 : 20 000
- Une série de cartes manuscrites datant de 1949, le premier cadastre officiel de Montréal (1868-70), deux cartes anciennes de Montréal (Adams, 1825; Cane, 1846), la majorité des atlas de plans d'assurance appartenant à McGill et les plans de fortifications de Montréal ont été numérisés et seront rectifiés pour s'intégrer au SIURS
- Le gouvernement canadien a commencé la distribution des orthophotos basées sur l'imagerie Landsat 7

Donc, le résultat de nos acquisitions représente une base de données spatiales numériques très riche pour Montréal, de 1825 à nos jours.

Malgré ou à cause de la somme des données récoltées, celles-ci doivent être documentées pour permettre une recherche efficace et une connaissance des métadonnées est pré requise à une utilisation optimale des fichiers. La plupart de notre collection de cartes papier reste non cataloguée et invisible dans la banque

MUSE. Il semble que ce sera malheureusement aussi le cas des données numériques. Nos catalogueurs n'ont pas l'expérience nécessaire au traitement des données à référence spatiale.

Cette année, nous avons résolu partiellement le problème avec l'aide d'une stagiaire de l'École de bibliothéconomie, et de deux spécialistes des SIGs. Une partie des métadonnées se trouvent maintenant sur notre site Web.

Le Centre est unique non seulement dans son organisation technologique mais aussi par la synergie que procure la participation des étudiants, professeurs et travailleurs dans un endroit commun.. Cette année, nous avons élargi nos partenariats :

- La licence institutionnelle négociée avec ESRI se prolonge pour deux autres années
- Un comité universitaire sur la géomatique incluant différents intérêts a été mis sur pied et comprend des représentants de l'École d'urbanisme, de l'École sur les sciences de l'environnement, du génie agricole, du Département de géographie et du Service des bibliothèques.
- Le projet Geoide MAP, un SIG historique de Montréal sous la direction du Sherry Olson, a apporté au Centre une grande quantité de données spatiales numériques sur Montréal
- Un projet commun a permis la numérisation des atlas de plans d'assurance permettant de reconstituer l'environnement bâti de Montréal à travers le temps
- Econet, un projet du Prof. Martin Lechowicz, financé par le FCI a contribué à l'enrichissement en données du Centre
- Safe Software a généreusement contribué en offrant des licences gratuites de leur logiciel de conversion FME
- Un comité national sur l'accès aux données dont Carol Marley est la représentante pour le secteur académique encourage la publication de données spatiales et de leurs métadonnées sur Internet.

Directions futures

Le Centre offre un ensemble unique d'espace commun et de technologie permettant aux étudiants de trouver, saisir, cartographier et modéliser des données spatiales. C'est un modèle de collaboration entre le Service des bibliothèques et différents niveaux d'enseignement, en particulier, la faculté des Sciences. L'École d'études environnementales se joindra au Centre cet automne et avec l'extension de la licence institutionnelle d'ESRI, il y a là l'opportunité de

placer une suite SIG sur chaque ordinateur de l'université.

La cartothécaire, Carol Marley, prendra une année sabbatique à compter de l'automne 2001 et il n'y a pas d'autre personnel permanent dans la section Cartothèque du Centre. Pour la première fois depuis plusieurs années, personne ne possédant une expérience de travail avec les cartes et la géomatique ne sera disponible. Pour l'instant, les demandes concernant la collection de cartes doivent être dirigées vers Bob Clarke, Directeur des collections spéciales (clarke@library.mcgill.ca). En cas de changement de situation, le tout sera publié sur CARTA et sur le site Web du Centre.

Terre-Neuve

Université Memorial de Terre-Neuve
Alberta Auringer Wood
awood@mun.ca

Après avoir émergé d'un hiver ayant apporté un record de neige pour Terre-Neuve, nous abordons un été plutôt frisquet et lent à s'épanouir. Malgré un des climats les rudes du pays, les habitants de St-Jean y trouvent l'inspiration pour vivre intensément et peut-être sont-ils plus aptes à apprécier une belle journée que le reste des Canadiens?

Grâce au programme de placement estival, nous avons engagé Keri Molloy pour la période du 25 juin au 31 août 2001. Un autre programme de placement, le MUCER, nous a permis d'engager quatre personnes à la Cartothèque jusqu'en avril prochain. En septembre 2001, Alberta prendra une année sabbatique; la personne qui assurera l'intérim n'a pas encore été choisie.

En juillet, nous avons reçu la visite de Louis Vagiannos, anciennement de l'université Dalhousie (Nouvelle-Écosse). M. Vagiannos a été bibliothécaire-consultant lors de la conception de la bibliothèque «Queen Elizabeth II» de l'université Memorial.

Un plan de réaménagement de la bibliothèque est en cours. Il est question de déplacer la Cartothèque du niveau 5 au niveau 2 (étage principal).

Alberta a été choisie pour participer au comité «J. R. Smallwood Foundation» de l'université Memorial. Cette fondation datant de 1955 a pour but de promouvoir et supporter la recherche en sciences sociales pour Terre-Neuve et le Labrador.

TOM NAGY PREND SA RETRAITE

En 1971, un imposant groupe de jeunes participants au programme des Travaux d'hiver s'amène aux Archives publiques. Parmi eux, un nouveau diplômé en sciences politiques de l'Université Carleton sera affecté à la Collection nationale de cartes et plans et plus tard (en 1972), nommé à un poste d'une durée indéterminée. Pour Tom Nagy, ce sera le début d'un remarquable parcours d'une trentaine d'années aux Archives nationales et dans le milieu professionnel, notamment au sein de l'Association des cartothesques et archives cartographiques du Canada.

Très vite, Tom s'implique dans les activités de l'Association des cartothesques canadiennes, d'abord comme rédacteur en chef des *Actes* de la conférence de 1975, puis à titre de secrétaire en 1975-1976, de vice-président de 1976 à 1978, et de président de 1978 à 1980, rôle qu'il assumera de nouveau en 1982-1983, joignant ainsi les rangs de ceux qui ont occupé le plus longtemps la présidence. Tom a aussi présidé le comité des subventions de voyage pendant de nombreuses années et, en collaboration avec Betty Kidd, a été rédacteur en chef des *Bulletins* 52 à 55 en 1984 et 1985. Aux conférences annuelles dont il est un participant assidu, souvent en compagnie de sa femme Gabrielle (Gaby), Tom présente de nombreuses communications, dont *Map Libraries and the Map User* (1975) et *and Disaster Contingency Planning for Map Collections: An Ounce of Prevention...* (1984) qui seront été publiées dans le *Bulletin*.

Même s'il est surtout connu aux Archives nationales (AN) pour son rôle de « conservateur » des documents cartographiques – responsable autant du soin physique que de l'entreposage ou la planification d'urgence –, Tom a touché à presque tous les aspects du travail archivistique de l'institution. D'abord catalogueur à l'ancienne unité de catalogage, section canadienne, il a ensuite dirigé le service des Références pendant quelques années. Il a aussi travaillé comme archiviste à l'acquisition et à la description de cartes et de plans, et a joué un rôle primordial dans l'élaboration du programme de microfilms de 105 mm. Il était un des divers archivistes qui a coordonné le cours archivistique. Son catalogue intitulé *Ottawa in Maps: A Brief Cartographical History of Ottawa 1825-1973/ Ottawa par les cartes: Brève histoire*



Tom Nagy, apparently enjoying the "Data for Dummies" workshop, ACMLA conference in London, 1998.

cartographique de la ville d'Ottawa 1825-1973 a été publié en 1974 et, le 10 janvier 1975, s'ouvrait à l'hôtel de ville d'Ottawa une exposition basée sur cet ouvrage, qui a par la suite été présentée en tournée dans plusieurs centres commerciaux.

Tom a été de toutes les étapes du projet du Centre d'archives de Renfrew, à partir de la conception initiale en passant par les travaux de rénovation et de construction, jusqu'au déménagement des archives dans les nouveaux locaux et au rodage des premières années d'exploitation. Lors de l'ouverture officielle, en novembre 1991, Heritage Renfrew lui a décerné un prix pour services rendus. Avec le fusionnement de la Division des archives cartographiques et architecturales et de la Division des archives audio-visuelles, en 1991, Tom devient le « conservateur » des documents audiovisuels. Au cours de cette période, il se rend à Londres pour négocier le transport aller-retour des régimes d'assurance Goad que la British Library veut faire microfilmer avec la technologie de 105 mm des AN.

En 1993, les AN procèdent à une réorganisation fonctionnelle, et Tom et son personnel passent de la Division des archives cartographiques et

audiovisuelles à la nouvelle Division des fonds. Tom assume encore la responsabilité des cartes et plans, et, en collaboration avec ses collègues, planifie le déménagement des fonds d'archives au nouveau Centre de préservation de Gatineau. Avec la création de la Division de la préservation des archives, en 1997, qui englobera une partie de la Division des fonds, les responsabilités de Tom s'élargissent à la circulation de tous les fonds d'archives. Ses précieuses connaissances et sa vaste expérience, jumelées à un style de gestion souple, ont grandement contribué à l'édification d'un système de circulation fluide, essentiel au bon fonctionnement d'une institution répartie dans plusieurs édifices. Pendant de nombreuses années, il sera l'un des trois conservateurs qui assurent en permanence la sécurité des archives, grâce à leur disponibilité « sur appel » pendant les heures de fermeture.

Au début des années 1990, le Canada entreprend des démarches pour poser sa candidature à la tenue de la conférence 1999 de l'Association cartographique internationale, et Tom représente les Archives nationales lors des discussions

préliminaires aux Ressources naturelles Canada. Le Canada ayant été choisi, Tom et d'autres membres du personnel des AN prennent une part active à la planification de l'exposition cartographique internationale au Centre de conférences du gouvernement à Ottawa, qui regroupera 1 683 cartes de 44 pays et donnera lieu à la publication d'un catalogue de 472 pages. Couronnés de succès, les travaux de l'équipe se sont mérités un Prix d'excellence du Secteur des sciences de la Terre de Ressources naturelles Canada en novembre 1999.

Tom a décidé de prendre sa retraite pour mieux faire face à la maladie qu'il combat vigoureusement et avec courage. Nous lui souhaitons tout le bonheur possible et de fabuleuses parties de golf. Nous savons qu'il pourra compter sur sa femme, ses enfants – Matthew, David et Corina – et ses parents pour effectuer une transition harmonieuse du monde du travail à celui des retraités.

Tom, tous les meilleurs voeux de tes collègues et amis t'accompagnent.

Betty Kidd



A "vintage" ACMLA group photo, with our friend Tom Nagy at his fun-loving best. Taken at the conference in Guelph in 1994. Tom's the one in the back row wearing the table cloth. (Photo Barbara Farrell)

REGIONAL NEWS

Pierre Roy

Western Association of Map Libraries (WAML)
Janet Collins
Janet.Collins@wwu.edu

The Western Association of Map Libraries met May 9-12 in Provo, Utah at Brigham Young University. Richard Soares was the host. Next meeting will be Oct. 3-6 in Portland, Oregon. Elizabeth Winroth will host. NACIS will also be meeting at the same time in Portland.

Alberta

University of Alberta
David L. Jones
david.jones@ualberta.ca

We have two significant items to report this time.

Behaim Globe. The University of Alberta now has a facsimile of the Behaim Globe. This facsimile of the 1492 globe constructed by Martin Behaim, the oldest extant terrestrial globe, is unique in that it shows the planet as it was understood before the 'discovery' of the Americas. The facsimile is constructed by Geaves and Thomas in the U.K. They have recently been featured in a article in *Mercator's World* [Vol. 5 # 4, July/August 2000, p 16]. Based on then current knowledge and Ptolemaic world view, the Behaim Globe clearly shows how practical a voyage west from Europe to the Orient would be.

The only other copy in Canada, that I know about, is at the Stewart Museum in Montreal. It is the deluxe edition on a wrought iron and brass stand, as pictured on the Greaves and Thomas website [see URL below] - needless to say, we could only afford the 'Student' edition.

http://www.greavesandthomas.co.uk/facsimile/globe_behaim.html

The other big news from The William C. Wonders Map Collection is the establishment of web access to the map collection database. This database contains records of the pre-1995 imprint maps. More recent monograph maps are recorded in the

U of A's online catalogue [www.library.ualberta.ca] along with a few older maps which have received full cataloguing. The bulk of the collection is in this DRA database with keyword access. This database has been available with Telnet access, but now is accessible through standard web browsers. The database is part of TAL Online, an initiative which provides single site access to the catalogues of almost all libraries in Alberta. The W.C. Wonders Map Collection Catalogue, is available as database. It's a little convoluted to access and the actual URL is quite complex, but here's the path: <http://www.TALOnline.ca> --> click on 'Search TAL Online' --> select 'Article Search' --> click on dropdown menu (default is 'Expanded Academic Index') --> select 'The William C. Wonders Map Collection'. Best results are from keyword searching.

Ontario

University of Western Ontario
Cheryl Woods
cawoods@uwo.ca

Dale Smith was hired May 1 into the Library assistant IV position that was vacated by Melissa Leitch. Dale's email is: dsmith3@uwo.ca.

The transfer to McMaster University of 10 copies of each ACMLA historical reproduction series map and view took place in early July. Gordon Beck will be taking over the sales of these in early September. The University of Western Ontario will continue to act as the warehouse for these maps and views.

Summer projects are underway to weed out dated material from the Canadian and United States current folders. Some maps will be relocated into the archival room and the rest will be redistributed to a variety of other institutions. The acquisition of new maps and atlases is ongoing but especially active during the summer months. A list of selected cartographic material acquired during the first 6 months of the year was distributed to the faculty members and other interested Ontario map collections, July 2. Most notable is the set of London

topographic maps 1:2500 dated 2001.

As London is hosting the Canada Summer Games in mid-August, a large map exhibit supplemented with Games merchandise is being displayed in the corridor cabinets until early September.

An acting chair has been appointed to the Geography Department for the next year (July 1, 2001 – June 30, 2002) until the former chair returns from study leave to resume his duties for another term.

Cheryl will be representing ACMLA at the fall meeting of the Advisory committee for the National Atlas of Canada. The date has not yet been confirmed.

Ontario Council of University Libraries – Map Group
Shirley Anne Harmer (Chair)
harmers@post.queensu.ca

The OCUL Map Group, which meets twice yearly, has held recent meetings at Trent University, Ryerson Polytechnic University and the University of Toronto, with an average attendance of sixteen.

The OCUL Map Group webpage <http://www.lib.uwaterloo.ca/ocul/oculmap.html> has been updated with a new version of a document giving background information about the Group. The round table reports are also found on the site. Marcel Fortin (University of Toronto) gave a demonstration of a searchable database to internet sites which are of reference value in map libraries. The Group, upon his invitation, decided to use this site as a repository for contributing to a central base of links: <http://www.library.utoronto.ca/maplib/>.

The Group had a demonstration of Ontario Ministry of Natural Resources digital initiatives, but no resolution has yet been reached on access for all members to these resources. In the meantime, we are interested in evaluating sample data.

Natural Resources Canada
Earth Sciences Information Centre
Martin Legault
marlegau@nrcan.gc.ca

Irène Kumar is continuing her assignment until the end of March 2002. Martin Legault will be responsible for the Map Collection in her absence.

You can reach Martin at (613) 995-4177, fax: (613) 943-1549 or marlegau@nrcan.gc.ca.

Hélène Duquette has been employed as a map cataloguer since February, she is working one day per week. Beverly Chen has now retired as the Head of the Earth Sciences Information Centre. Pauline Kamel is presently acting Head of ESIC while also taking care of the Associate Head duties. Interviews for the Head's position are presently ongoing and an appointment should be made before fall.

Quebec

McGill University
Carol Marley
marley@felix.geog.mcgill.ca

HITSCHFELD GEOGRAPHIC INFORMATION CENTRE Highlights 2000-2001

Information has been extracted from our annual report to provide and update on activities in the Hitschfeld Geographic Information Centre. From an acquisitions perspective, this has been a remarkable year. A plan set in motion three years ago by a geospatial data advisory committee (Prof. John Lewis, Geography Department, Prof. Jim Fyles, Natural Resources, Prof. David Brown, Urban Planning, Prof. Gordon Ewing, Geography Department and Carol Marley, McGill Libraries) has come to fruition, thanks to the generous support of McGill researchers and McGill Libraries' discretionary funds. The goal was to purchase data (mostly in digital format) for the Montreal Region, from 1950 when urban development accelerated, to the present. This year we have received or have on order:

- SIURS, the geographic information system (GIS) for the City of Montreal, contains over 30 layers of information about buildings and land use
- AutoCad files, upon which in part SIURS is based, contains information about building elevations, shapes, height of land, streets.
- Our 1994 orthophoto coverage of Montreal is being updated to 1999 and extended east past Mt. St. Hilaire and west and south, respectively, to the Ontario and US borders
- Our Canadian topographic coverage for the Montreal Region at the scale of 1:50,000 is being extended east
- For the first time we have acquired Quebec

topographic maps at the scale of 1:20,000 centering on the Island of Montreal and adjacent areas

- We are purchasing Canadian topographic maps at a scale of 1:250,000 along the St. Lawrence and south and east to the Gaspé
- We have negotiated our first license with Quebec for forestry maps, scale 1:20,000, for the Mt. St. Hilaire Region; this coverage will be extended from the area adjacent to the Macdonald campus to the Ontario border
- We are acquiring digital elevation models (DEMS) at scale 1:50,000 for some of McGill's field stations
- A 1949 manuscript map of Montreal land use has been imaged after which it will be rectified to match SIURS, making it possible to overlay information from different points in time
- The first official set of cadastral plans of Montreal, 1868-70, has been imaged and rectified to match SIURS
- Two early property ownership maps of Montreal (Adams, 1825; Cane, 1846) and all of McGill's major property insurance atlases of Montreal have been imaged and are being rectified to match SIURS
- Fortification survey imagery of the Montreal area ca 1865 (these maps are precursors of what has become the Canadian topographic map series) has been donated and is being rectified to match SIURS
- The Canadian government has begun work on distributing orthoimages based on Landsat 7 imagery

The result of this year's acquisitions is an incredibly rich geospatial dataset for Montreal and its region, extending from 1825 to the present. The data is being used by historians, architects, urban planners, biologists, geographers, engineers, epidemiologists, natural resources researchers and environmentalists.

Although we have amassed an exceptional dataset, the data needs to be documented so that students and researchers will be aware of our holdings. Most of our paper map collection is uncatalogued; therefore it is not included in MUSE. Unfortunately this is also the trend with our geospatial data. If no one knows what a library collects, it follows that its collections will not be used to capacity. In our special libraries at McGill, a great proportion of holdings remain uncatalogued. While librarians have experience with cataloguing standards for traditional formats such as books and journals which make up the collections of our large units, they lack experience in handling geospatial data, let alone in applying geospatial data standards to data documentation.

This year we concentrated on turning this situation around with the help of a McGill School of Library and Information Studies practicum student. Wei-Hin Lee, supervised by Marley, worked on improving our metadata (data about data) for our older GIS datasets. Lee documented some of our newly acquired datasets to Dublin Core standards. SIURS, the City of Montreal's GIS, has been documented by Rosa Orlandini (GIS research assistant on Prof. Olson's Geoide grant) to FGDC standards. This information is being mounted on our web page by Bérengère Vasseur, GIS specialist in Hitschfeld. We are among the first in Canadian university libraries to document our data to these exacting standards. We hope that the Libraries Technical Services can then create some kind of entry in MUSE to which our detailed metadata can be linked. As it is now, users have to be familiar with our web page to ascertain which datasets would be of use.

What makes the Centre unique is the synergy between students, professors, and staff as we work with information technology in a place where all can come together. Learning about maps and GIS is one kind of partnership in which we are engaged. This year other notable partnerships included:

- The first year of the campus-wide license for ESRI products is drawing to an end. The license continues for two more years.
- A university-wide geomatics committee has been struck to advise on the collection, maintenance and distribution of spatial data and related technology. Chaired by Prof. David Brown, Director, School of Urban Planning, there is representation from McGill School of Environment, Agricultural and Biosystems Engineering, the Geography Department and McGill Libraries.
- The Geoide MAP Project, an historical GIS for Montreal under direction of Prof. Sherry Olson, has contributed an impressive amount of historical digital on Montreal to the Centre.
- The Young Canada Works in Science and Technology Program, in cooperation with Blackader Lauterman Library and the McGill Digital Collections Project, enabled us to image all of McGill's property insurance atlases so that the built environment of Montreal can be visualized over time.
- Econet, a CFI grant spearheaded by Prof. Martin Lechowicz, is linking McGill's field stations and their data through a GIS and in the process contributing a significant set of topographical data and imagery

to the Centre.

- Safe Software has made a very generous gift of several licenses for their data conversion software, Feature Manipulation Engine (FME), with the proviso that students at McGill will have direct access to their product via computers in the library section of the Centre.
- A national level Access Node Advisory Committee to the national spatial data infrastructure, on which Marley represents the academic sector, has been responsible for encouraging the mounting of spatial data and supporting metadata on the web.

Future Directions

The Centre is a 'seamless' facility, offering a new pedagogy for students to find, capture, map and model new data resources. It is emerging as a model for collaboration between the Libraries and various faculty research networks, in particular, the Faculty of Science. The McGill School of Environment is joining the Centre this fall, bringing precious resources and solidifying a de facto partnership developed over the past two years. As McGill enters the second year of the campus-wide ESRI license, there are new opportunities for placing the entire ESRI suite on university computers.

The librarian, Carol Marley, will be taking a year's leave of absence starting Fall term. There is no other permanent position in the library component of the Centre, so for the first time in many years there is no one with a working knowledge of maps and geomatics to guide this library into the future. For the moment, inquiries to the map collection should be sent through Bob Clarke, Coordinator of Special Libraries (clarke@library.mcgill.ca). Should this situation change, further information will be sent out on Carta and put up on the Hitschfeld homepage.

Newfoundland

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After emerging from the snowiest winter on record for Newfoundland, we are having a late and rather cool summer. Total snowfall was approximately 645 cm or about 21 feet 2 inches. This goes along with St. John's already being declared by Environment Canada as the country's "Weather Champion".

According to their web site: "Of all the major Canadian cities, St. John's is the foggiest (124 days, next to Halifax's 122), snowiest (359 cm, next to Quebec City's 343), wettest (1514 mm, next to Halifax's 1491), windiest (24.3 km/h average speed, next to Regina's 20.7), and cloudiest (1497 hours of sunshine, next to Charlottetown's 1818 hours). It also has more days with freezing rain and wet weather than any other city. But the natives are proud of their climate, calling it character-building and invigorating. And they boast that their city happens to have one of the mildest winters in Canada (third mildest city next to Victoria and Vancouver). Perhaps Townies also happen to appreciate a fine weather day more than the rest of Canadians."

We were successful in obtaining a Summer Career Placement grant and hired Keri Molloy to work from June 25 till August 31. Her interests are in physical education teaching. In addition, we were successful in getting five Memorial University Career Enhancement Program grants for 2001-2002, four in the Map Library and one in the Media and Data Centre to cover through next April. Students being scarce this summer, we only managed to hire three. A search for a temporary replacement for Alberta is in process, as she will be on sabbatical for a year beginning in September. A decision is likely by the end of July.

Visiting the library in mid-July was Louis Vagiannos, formerly University Librarian at Dalhousie University. According to our University Librarian, Richard H. Ellis, he was the "conceptual architect of the Killam Library at Dal, and library consultant. Dr. Vagiannos was, in fact, the library consultant on the Queen Elizabeth II Library at the time of its design." In anticipation of making use of the space vacated by the bookstore on Level 1, plans are underway to redo areas of the library and move some units around. This includes the Map Library for which tentative plans call for a move from Level 5 to Level 2 (main floor) next to Circulation, Bibliographic Control Services, and Information Services. Additional plans anticipate construction of an Information Commons in the Bibliographic Control Services and Information Services area in the not too distant future depending upon funding being found.

Alberta has been appointed to the Board of the J. R. Smallwood Foundation of Memorial University. This

foundation (formerly the J. R. Smallwood Centre) was established in 1995 in promotion and support of research in Newfoundland and Labrador Studies in the humanities and social sciences, principally through the awarding of fellowships and research grants, but also through special projects. The Smallwood Foundation is therefore committed to the support of projects that contribute substantively to the knowledge of Newfoundland and Labrador. She replaces Joan Ritcey, Head of the Centre for Newfoundland Studies in the QEII Library, who had served on the Board since its inception.

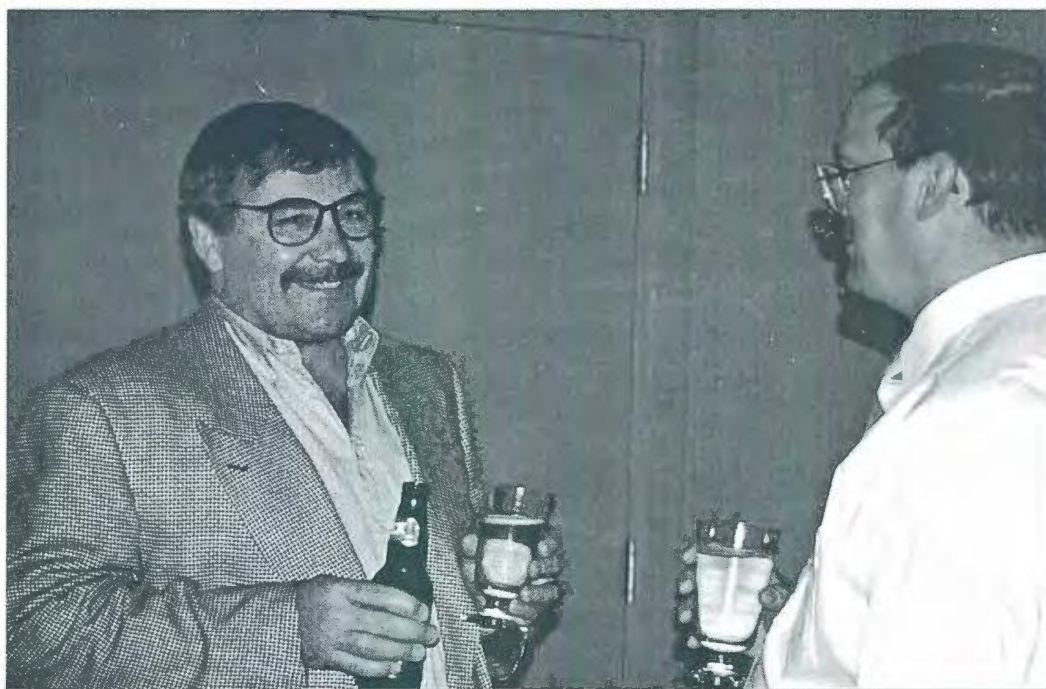
TOM NAGY RETIRES

In 1971, a young political science graduate from Carleton University came to the Public Archives as part of a large Winter Works contingent of young people and was assigned to the National Map Collection. For Tom Nagy, this temporary assignment would result in an indeterminate position in 1972 and would evolve into a career spanning some three decades, during which his contributions to the National Archives and the professional community - in particular, the Association of

Canadian Map Libraries and Archives - have been most significant.

Tom quickly became involved in the activities of the Association of Canadian Map Libraries, editing the *Proceedings* of the 1975 conference, and serving as Secretary in 1975 -76, as Vice-President from 1976 to 1978 and as President from 1978 to 1980. In 1982-83, he again assumed the presidency role - to date, he is one of the longest serving presidents. In addition, he has chaired the Travel Grant Committee for many years and with Betty Kidd, he edited *Bulletins* 52 - 55 in 1984 and 1985. Tom enjoyed attending the annual conferences - often accompanied by his wife, Gabrielle (Gaby) - and on many of these occasions, he presented papers and reports. Several which were later printed in the *Bulletin* include "Map Libraries and the Map User", 1975 and "Disaster Contingency Planning for Map Collections: An Ounce of Prevention...", 1984.

Although best known in the National Archives for his "custodial" role for cartographic records - that is, responsibilities encompassing physical



Tom Nagy (left) and Bob Moulder (right) chat about the Russian invasion of Hungary, and presumably other lighter matters, at the ACMLA conference in Guelph, 1994. (Photo Barbara Farrell)

care, storage and disaster contingency planning, Tom's career in the National Archives has actually touched on most aspects of the archival work of the institution. Tom started as a "cataloguer" in the old Cataloguing Unit, Canadian Section, NMC; he headed the Reference Unit for some years; he worked as an archivist acquiring and describing maps and plans; and he was a major player in the development of the 105 mm microfilming program. He is one of the archival staff who served as a coordinator of the Archives Course. In 1974, his catalogue *Ottawa in Maps: A Brief Cartographical History of Ottawa 1825 - 1973/ Ottawa par les cartes: Brève histoire cartographique de la ville d'Ottawa 1825 - 1973* was published and on 10 January 1975, the exhibition based on this was opened in Ottawa City Hall and later in several commercial sites.

Tom was actively involved with the Renfrew Archives Building Project from the concept stage through the renovation and construction phases, the moves of the archival records, and the first operational years; in November 1991, at the official opening, Heritage Renfrew presented him with an award in recognition of "services rendered". With the merger of the Cartographic and Architectural Archives Division and the Moving Image and Sound Archives Division in 1991, Tom assumed responsibility for the "custody" of audio-visual records as well. In this period, he visited the British Library to negotiate the physical transportation of the Goad insurance plans which were to be microfilmed using the 105mm technology at the National Archives before being returned to London.

In 1993, with the NA functional reorganization, Tom and his staff were moved from the Cartographic and Audio-Visual Archives Division to the newly created Custody of Holdings Division (CHD). There, he continued his responsibilities for the cartographic record and with his colleagues, planned and prepared the holdings for the move to the Gatineau

Preservation Centre. With the creation of the Archives Preservation Division in 1997 which encompassed a number of previous divisions, including part of CHD, Tom's duties expanded to include responsibility for the circulation of all archival holdings. In this position - he also retained his custodial responsibilities for maps and plans - his extensive knowledge and experience as well as his easy-going managerial style has resulted in a smoothly running circulation system, key to a distant multi-building archival operation. For many years, he has also been one of three custodians who have ensured the safety of the archival record, in all media, through their "on-call" availability during quiet hours.

In the early 1990s when Canada was considering bidding for the 1999 International Cartographic Association conference, Tom represented the National Archives at initial meetings at Natural Resources. Following the successful bid and for several years prior to the conference in Ottawa, Tom and a number of the NA cartographic staff became very involved in the planning of the International Cartographic Exhibition which was housed in the Government Conference Centre - 1,683 maps from 44 nations exhibited and a 472-page catalogue published. A truly team effort, the success of this endeavour was acknowledged by the Earth Science Sector of Natural Resources Canada which presented the team with Merit Awards in November 1999.

Tom's decision to retire is based on ill health, being borne with strength and courage; we wish him better times ahead and lots of great golf games. We know that his family - his wife, his children - Matthew, David and Corina - and his parents - will be the key to his transition from the work world to retirement.

With best wishes, Tom, from friends and colleagues.

Betty Kidd

NEW MAPS

Amy Chan

Ancient Egypt: great peoples of the past / produced by the National Geographic Maps for National Geographic Society. Scale 1:1,775,000. 1 in. = 28 miles. ; Simple conic proj. Washington, D.C. : National Geographic Society, c2001.

Atlantic Provinces : aboriginal communities and minerals and metals activities = Provinces de l'Atlantique : communautés autochtones et activité de l'industrie des minéraux et des métaux / produced by Legal Surveys Division, Geomatics Canada and Minerals and Metals Sector of Natural Resources Canada. Scale 1:2,000,000 or 1 cm. represents 20 km. ; Lambert conformal conic proj. standard parallels 49°N/77°N. [Ottawa] : Natural Resources Canada, c2001.

Canada: plant hardiness zones = Canada: zones de rusticité des plantes / Natural Resources Canada, Agriculture and Agri-Food Canada. Scale ca. 1:10,000,000. [Ottawa] : Natural Resources Canada, c2001.

Canada : Yukon Territory, Northwest Territories and Nunavut = Territoire du Yukon, Territoires du Nord-Quest et Nunavut / produced by GeoAccess Division, Canada Centre for Remote Sensing, Geomatics Canada, Earth Science Sector, Natural Resources Canada. Scale 1:4,000,000. 1 cm. = 40 km. ; Lambert conformal conic proj. Ottawa, Ont. : Geomatics Canada, c2000.

Central Africa Republic : political. Scale [ca.1:9,000,000] Lambert conformal conic proj. SP 8N/32N. [Washington, D.C. : Central Intelligence Agency, 2001]. "Base 802739 (B01340) 2-01".

Central Africa Republic : relief. Scale [ca.1:9,000,000] Lambert conformal conic proj. SP 8N/32N. [Washington, D.C. : Central Intelligence Agency, 2001]. "Base 802738 (B01340) 2-01".

Moldova : relief. Scale [ca. 1:1,000,000] ; Lambert conformal conic proj. SP 48N/45°40N. [Washington, D.C. : Central Intelligence Agency, 2001]. "Base 802720AI (C00097) 2-01".

North America / produced by GeoAccess Division, Canada Centre for Remote Sensing, Geomatics Canada, Earth Sciences Sector, Natural Resources Canada. Scale 1:10,000,000 ; Lambert conformal conic proj. centered at 45°N and 95°W. Ottawa, Ont. : Geomatics Canada, 2000.

North circumpolar region = La région circumpolaire-nord / produced by GeoAccess Division, Canada Centre for Remote Sensing, Geomatics Canada. Scale 1:10,000,000 ; Azimuthal equidistant proj. Ottawa : The Division, 2000. MCR 001.

Oil and gas infrastructure in the Caspian Sea Region. Scale 1:2,400,000 ; Lambert conformal conic proj. SP 47N/62N. [Washington, D.C. : Central Intelligence Agency, 2001]. "751972AI (R02051) 3-01".

Ontario : aboriginal communities and minerals and metals activities = Ontario : communautés autochtones et activité de l'industrie des minéraux et des métaux / produced by Legal Surveys Division, Geomatics Canada and Minerals and Metals Sector of Natural Resources Canada. Scale 1:2,000,000 or 1 cm. represents 20 km. ; Lambert conformal conic proj. standard parallels 49°N/77°N. [Ottawa] : Natural Resources Canada, c2001.

Prairie Provinces : aboriginal communities and minerals and metals activities = Provinces des Prairie : communautés autochtones et activité de l'industrie des minéraux et des métaux / produced by Legal Surveys Division, Geomatics Canada and Minerals and Metals Sector of Natural Resources Canada. Scale 1:2,000,000 or 1 cm. represents 20 km. ; Lambert conformal conic proj. standard parallels 49°N/77°N. [Ottawa] : Natural Resources Canada, c2001.

Québec : communautés autochtones et activité de l'industrie des minéraux et des métaux = Quebec : aboriginal communities and minerals and metals activities / produced by Legal Surveys Division, Geomatics Canada and Minerals and Metals Sector of Natural Resources Canada. Scale 1:2,000,000 or 1 cm. represents 20 km. ; Lambert conformal conic proj. standard parallels 49°N/77°N. [Ottawa] : Natural Resources Canada, c2001.

[Sri Lanka : political]. Scale [ca. 1:2,500,000] ; Lambert conformal conic proj. SP 0915N/0615N. [Washington, D.C. : Central Intelligence Agency, 2001]. "Base 802734AI (C00127) 3-01".

[Sri Lanka : relief]. Scale [ca. 1:2,500,000] ; Lambert conformal conic proj. SP 0915N/0615N. [Washington, D.C. : Central Intelligence Agency, 2001]. "Base 802735AI (C00127) 3-01".

Treasures of the world : lost – and found / National Geographic Society. Scale 1:57,000,000. 1 in. = 899 miles. ; Van der Grinten proj. Washington, D.C. : National Geographic Society, c2001.

Treaties and comprehensive land claims in Canada = Traités et revendications territoriales globales au Canada / produced by Legal Surveys Division, Geomatics Canada, Natural Resources Canada. Rev. June 11 2001. Scale 1:7,500,000. 1 cm = 75 km. ; Lambert conformal conic proj. [Ottawa] : Natural Resources Canada, c2001.

Zambia : political. Scale [ca. 1:8,000,000] ; Lambert conformal conic proj. SP 6S/30S. [Washington, D.C. : Central Intelligence Agency, 2001]. "Base 802736 (B00492) 2-01".

Zambia : relief. Scale [ca. 1:8,000,000] ; Lambert conformal conic proj. SP 6S/30S. [Washington, D.C. : Central Intelligence Agency, 2001]. "Base 802737 (B00492) 2-01".



Snapshots from the Banquet at the Carto 2001 conference in Montreal. Photo at left, Barbara Znamiorski (left) and Colleen Beard (right). Photo below, left to right, Hugh Larimer, Richard Pinnell and Tim Ross.



NEW BOOKS AND ATLASES

Martine Rocheleau

Anderson, Ewan W. 2000. *Global geopolitical flashpoints : an atlas of conflict*. [Chicago] : Fitzroy Dearborn. 500 p. \$95.00 US. ISBN 1579581374.

L'Atlas de l'Afrique. 2000. 2e éd. Paris : Jeune Afrique : Editions du Jaguar. 207 p. \$54.95 CDN. ISBN 2869503288.

Atlas de la province Extrême-Nord Cameroun. Folio size + CD-Rom. 2000. Paris : Institut de recherche pour le développement ; Yaoundé : République de Cameroun, Ministère de la recherche scientifique et technique, Institut national de cartographie. 171 p. \$162.00 CDN. ISBN 2709914441.

Atlas historique du Québec : Québec: ville et capitale. 2001. Direction Serge Courville et Robert Garon. Québec : Presses de l'Université Laval. 458 p. \$70.00 CDN. ISBN 2763776744.

Atlas of crime : mapping the criminal landscape. 2000. Phoenix, AZ : Oryx Press. 270 p. \$74.95 US. ISBN 1573562416.

Atlas of national historic sites, national parks and national marine conservation areas of Canada = Atlas des lieux historiques nationaux, des parcs nationaux et des aires marines nationales de conservation du Canada. 1999. [New ed.]. Hull : Parks Canada. (Unpaged). Free upon request through Parks Canada.

An atlas of Palestine : the West Bank and Gaza. [2000] Bethlehem, Palestine : Applied Research Institute - Jerusalem. 205 p. \$139.95 US. ISBN n/a.

The Atlas of world archaeology. 2000. Ed. by Paul Bahn. [New York] : Checkmark Books. 208 p. \$39.95 US. ISBN 0816040516.

Baines, John and Jaromir Malek. 2000. *Cultural atlas of Ancient Egypt*. Rev. ed. New York : Checkmark Books. 240 p. \$75.00 CDN. ISBN 0816040362.

Christopher, A. J. 2001. *The atlas of changing South Africa*. 2nd ed. London : Routledge. 260 p. \$34.99 US. ISBN 0415211786.

Ciment, James. 2001. *Atlas of African-American history*. New York : Facts on File. 224 p. \$85.00 US. ISBN 0816037000.

The Columbia gazetteer of North America. 2000. Ed. by Saul B. Cohen. New York : Columbia University Press. 1157 p. \$250.00 US. ISBN 0231119909.

Cribb, R.B. 1999. *Historical atlas of Indonesia*. Honolulu : University of Hawaii Press. 256 p. \$100.00 US. ISBN 0824821114.

The dictionary of human geography. 2000. Ed. by R.J. Johnston ... [et al.]. 4th ed. Malden, MA : Blackwell Publishers. 958 p. \$34.95 US. ISBN 0631205616.

The dictionary of physical geography. 2000. Ed. by David S.G. Thomas and Andrew Goudie. 3rd ed. Oxford ; Malden, Mass. : Blackwell Publishers. 610 p. \$39.95 US. ISBN 0631204733.

Duncan, Andrew and Michael Opatowski. 2000. *Trouble spots : the world atlas of strategic information*. Stroud : Sutton. 324 p. \$63.95 CND. ISBN 0750921714.

Everett-Heath, John. 2000. *Place names of the world : Europe : historical context, meanings and changes*. Houndmills, Basingstoke : Macmillan Press ; New York, NY : St. Martin's Press. 413 p. \$70.00 US. ISBN 033377759X.

Genest, Claude G. 2000. *Dictionnaire de géomorphologie*. Trois-Rivières: Société de géographie de la Mauricie inc. Éditeur. 437 p. \$340.00 CAN. ISBN 2980130370.

Geographical data acquisition. 2001. Yong-qi Chen, Yuk-cheung Lee (eds.). Wien ; New York : Springer. 265 p. \$62.00 US. ISBN 3211834729.

Harley, J.B. 2001. *New nature of maps : essays in the history of cartography*. Ed. by Paul Laxton. Baltimore, MD : Johns Hopkins University Press. 352 p. \$45.00 US. ISBN 0801865662.

ACMLA Bulletin Number 111

Harrison, Paul. 2001. *AAAS atlas of population and environment*. Berkeley : University of California Press. 216 p. \$29.95 US. ISBN 0520230841.

Konstam, Angus. 2000. *Historical atlas of exploration, 1492-1600*. New York : Checkmark Books. 191 p. \$35.00 US. ISBN 0816042489.

Muehrcke, Phillip C. et al. 2001. *Map use : reading, analysis, and interpretation*. Rev. 4th ed. Madison, Wis. : JP Publications. 647 p. \$ 55.00 US. ISBN 0960297855.

Nationalatlas Bundesrepublik Deutschland; bd. 9 : Verkehr und Kommunikation. 2001. Heidelberg: Spektrum Akademischer Verlag. 172 p. \$n/a. ISBN 3827409411.

Nationalatlas Bundesrepublik Deutschland; bd. 10 : Freizeit und Tourismus. 2000. Heidelberg: Spektrum Akademischer Verlag. 166 p. \$n/a. ISBN 3827409381.

Ontario road & recreational atlas. 2000. P.T.C. Phototype Composing Ltd. Updated 2nd ed. Victoria, B.C. : Informap. 154 p. \$19.95 CDN. ISBN 0968077234.

Parry, R.B. and C.R. Perkins. 2000. *The map library in the new millenium*. London : Library Association Publishing. 278 p. \$120.00 CDN. ISBN 1856043975.

Pelletier, André et Jean-Marc Lord. 2000. *Cartes, boussole & GPS*. 2e éd. Boucherville [Québec] : Broquet. 354 p. \$24.95 CDN. ISBN 2890004961.

Philip's certificate atlas for the Caribbean. 2000. 4th ed. London : George Philip. 160 p. \$14.99 CDN. ISBN 0540057010.

Spatial analysis, GIS and remote sensing applications in the health sciences. 2000. Ed. Donald P. Albert et al. Chelsea, MI : Ann Arbor Press. 217 p. \$69.95 US. ISBN 1575041014.

Sto:lo-Coast Salish historical atlas. 2001. Ed. by Keith Thor Carlson. Chilliwack, B.C. : Sto:lo Heritage Trust; Seattle : Dist. by University of Washington Press. 192 p. \$50.00 US. ISBN 0295980443.

Swift, Michael. 2000. *Historical maps of Europe*. London : PRC. 144 p. \$15.99 US. ISBN 0785812164.

Web cartography : developments and prospects. 2001. Ed. by Menno-Jan Kraak and Allan Brown. London ; New York : Taylor & Francis. 213 p. \$40.99 US. ISBN 074840869X.

World Bank atlas 2001. 2001. New York : Oxford University Press. 63 p. \$20.00 US. ISBN 0821349015.

World Travel Atlas : the atlas for the travel industry. 2000. 7th ed. London : Columbus Travel Guides. 246 p. \$57.00 CDN. ISBN 1902221354.



Snapshot from the Carto 2001 conference in Montreal. Joanne Perry (left) and David Jones at the BNQ reception.

REVIEWS

Tim Ross

Andrew, Paige G. and Mary Lynette Larsgaard, editors. *Maps and Related Cartographic Materials: Cataloging, Classification and Bibliographic Control*. Binghamton, N.Y.: Haworth Information Press, 1999. 487 p. \$50.00 U.S. ISBN 0-7890-0778-9 (hbk), 0-7890-0813-0 (pbk) (also published as *Cataloging & Classification Quarterly*, vol.27, 1999).

This is no random collection of "How We Do It Good!" articles; it is a thoughtfully planned survey of the reasons why cartographic materials ("geospatial data") place particular demands on the administration and practice of bibliographic control, and of how specialists meet these demands in academic and national libraries and archives. In the preparation of AACR2 twenty-five years ago, map cataloguers constituted the group of special-materials cataloguers best organized to present their common views to the Joint Steering Committee for AACR. Their JSC-sanctioned publication *Cartographic Materials: A Manual of Interpretation for AACR2* was published very soon after AACR2, stood as a model for other specialist-cataloguing groups, and is now being updated.

Of the twenty-two articles in this collection, written presumably in 1998, many must have been conceived as considered contributions to that updating. Will they be superseded by the new edition of *Cartographic Materials*, promised for mid-2002? Not entirely. Articles with a focus on topics outside the scope of AACR2 (classification, subject control, archival considerations, non-AACR metadata elements, and administration) constitute almost a third of the pages in this collection and such information is also found in several of the ones dealing primarily with bibliographic description.

The editors admit to four topics they would like to have received papers on, but which in the end are lacking: (1) the perpetual administrative disputes over how best to use "copy cataloguing"; (2) the issue of linking techniques, so awkward in the file structures typically used for MARC-formatted records; (3) expecting a cataloguer at some distance from the actual items to catalogue from surrogates

(photocopies, etc.); and (4) the familiar "multiple-versions" issue: to catalogue the original which one does not have, or the reproduction which one does? Indeed, everything else seems to be covered somewhere, well organized into sections on (1) an administrative overview of who does what, and where, to catalogue a map; (2) specific material types (even "geologic sections"), (2) early/historical items, (3) digital materials, (4) classified and subject access, (5) retrospective conversion and quality control, and (6) cartographic materials in the archival setting.

To this (elderly) reviewer, the most interesting chapters are the longest ones by far, on aerial photographs and other remote-sensing materials, and the ones on the new digital formats. They exemplify a desirable methodology followed also in most of the other chapters. Judicious explanation of how bibliographic issues are related to the content, format, and publication circumstances of the material in question is followed by pragmatic assessment of how these issues are resolved in the context of basic rules (AACR, etc.), of practices decided within consortia, and of choices among options which may be applied locally. More visually illustrated (two in full colour!) and fully worked-through examples are given than are possible in a rule-book - these alone make the collection a handy cataloguer's-desk guide and occupy a fair proportion of the almost-five-hundred pages of the book.

Especially in the section on handling early cartographic material, the reader gets some insight into the historical development of cataloguing practices. Anything this reviewer would have expected, and much else, is cited in the bibliographies/references; web-site citations are also numerous.

Canadian authors include staff of the National Archives and the University of Ottawa. Some European perspective and many European web-sites are offered by the map librarian at the National Library of the Netherlands. The Australian is now a private consultant after a period at the National

Library. The remaining sixteen authors are Americans: one from the New York Public Library and the rest from academic institutions. No representation from the Library of Congress!

This is a book for the library/librarian/cataloguer committed to full, detailed bibliographic control for integration into common databases. No shortcuts. The materials to be so treated are still changing; rules and practices are still evolving.

Ronald Hagler

Professor Emeritus, School of Library, Archival and Information Studies
University of British Columbia



Bassett, Thomas J. and Yvette Scheven. *Maps of Africa to 1900: A Checklist of Maps in Atlases and Geographical Journals in the Collections of the University of Illinois, Urbana-Champaign*. Urbana Champaign, Ill.: Graduate School of Library and Information Science, University of Illinois, 2001. xv, 317 p. \$35.- US ISBN 0-87845-118-8.

Africa has often been misrepresented on map sheets because of the various problems associated with map projection, ethnocentric reasons, as argued by some scholars, and finally, ignorance of the sheer size of the continent. Ignorance in this context means the lack of knowledge. Indigenous peoples, explorers, engineers, missionaries, military personnel, surveyors, cartographers and amateur mapmakers have been mapping Africa for centuries, all in a contribution to increase society's knowledge about the continent. The American Geographical Society's *Index to Maps in Books and Periodicals*, Y. Kamal's *Monumenta Cartographica Africae et Aegypti*, J. McIlwane's *Maps and Mapping of Africa*, O. Norwich's *Maps of Africa*, and J. Stone's *A Short History of the Cartography of Africa* are just some of the many volumes that have detailed the mapping and maps of Africa. In order to study the mapping and maps of Africa, we must know which maps exist. Of the above-mentioned titles, Norwich's *Maps of Africa* is probably the best known cartobibliography of African maps.

The latest entry of cartobibliographies of Africa is

Bassett and Scheven's *Maps of Africa to 1900: A Checklist of Maps in Atlases and Geographical Journals in the Collections of the University of Illinois, Urbana-Champaign*. This book is not necessarily a pretty-looking work; it only contains fourteen black and white map, or portions thereof, reproductions. As one can deduce from the title, *Maps of Africa to 1900* is not a prose history of the mapping of Africa, but a cartobibliography of the maps contained within the numerous atlases and journals at the Urbana-Champaign campus of the University of Illinois. According to the authors, the University of Illinois is the third largest academic library in the United States, and houses one of the best Africana collections in the U.S. It is fitting, then, for the authors to assume the monumental task of sifting through the collection in order to describe and detail the maps of Africa contained within the University of Illinois.

Both authors have an extensive background in the subject of the maps of Africa. Robert Bassett is an Associate Professor of Geography at the University of Illinois, and has written extensively on the mapping of Africa, while Yvette Scheven is Professor Emerita of Library Administration and former Bibliographer for African Studies at Illinois. Scheven has produced a number of bibliographies on Africana.

The previously mentioned American Geographical Society's *Index to Maps in Books and Periodicals* lists maps from approximately 75 journals and its time frame is from 1900 to 1968 with further supplements. *Maps of Africa to 1900* fills the gap, or begins to address the gap, of maps of Africa in earlier publications. Although *Maps of Africa to 1900* details *only* what is at the University of Illinois, it is quite impressive. In all, 2416 maps (Norwich's *Maps of Africa* lists 345 maps) are listed with cartobibliographic information such as the Authority (Author, Cartographer or Publisher) responsible for the map, Title of the map, Date of Publication, Map Dimensions, Scale, Maps Insets (if any), Source of the map (i.e. from which Atlas or Journal), Notes (if any) and the call number and location of the map at the University of Illinois, Urbana-Champaign. Although nearly 60 percent of the total 2416 maps come from the last two decades of the 19th century, approximately 275 atlases, and their various editions from the 16th to the 19th centuries, were scoured for their maps of Africa. The atlases themselves are listed in a separate

bibliography. In addition, 31 geographic journals were researched, although according to the authors, 55 percent of the journal maps came from three journals: the *Bulletin de la Societe de Geographie de Paris*, the *Journal of the Royal Geographical Society*, and *Petermanns Geographische Mittheilungen*. All the journals that were consulted are also listed in a separate bibliography.

Maps of Africa to 1900 is organised according to the Library of Congress regional classifications of North Africa, Eastern Africa, Southern Africa, Central Africa, and West Africa, as well as the continent as a whole, and a section on the islands of Africa. Because *Maps of Africa to 1900* also contains a Title Index of every map listed and a corresponding source, it could be used to help identify loose or misplaced maps. On the other hand, if the title of a specific map is not known, and even if the geographic regional classification of Africa that a map might be listed in is known, a researcher would need to sift through one of the regional classifications of approximately 400 plus entries of approximately 40 pages to determine if the map is listed.

Furthermore, the Title Index lists maps using their full title including various prefixes such as "*Carta delle...*", "*Carte de...*", "*Karte des...*", "*Itineraire...*", "*Originalkarte...*", "*Map of...*", "*Sketch Map of...*" etc. For example, if a researcher was looking for a map of Urbaragh, it is listed under "*Carta originale provvisora dell' Urbaragh*" which is difficult to locate in the Title Index. Although an excellent Authority Index (author, cartographer, or publisher) is included, an additional unified index of African place names and named ancillary persons other than the maps' creators, such as engineers, explorers, missionaries, could have been a very useful search feature. A place name Index for Inset Maps is included, however.

Additionally, if someone is searching for a map of a certain African geographic area, and in view of the many place name changes in Africa over time, an outside source like J. Stewart's *African States and Rulers* would need to be consulted in order to find alternative place names, because an index of cross reference place name changes is not included in *Maps of Africa to 1900*. This is understandably beyond the scope of *Maps of Africa to 1900*, and would require a considerable amount of work, which would have increased the size and price of

the volume.

Overall, *Maps of Africa to 1900* is an enormously valuable cartobibliography of 2416 maps of Africa that can, and no doubt will, assist and contribute to the further study of the mapping and maps of Africa. It will be of use in any university where historical research on Africa is conducted, and should be acquired by larger academic libraries.

Daniel Brendle-Moczuk
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McGrath, Gerald and Louis M. Sebert, editors.
Mapping a Northern Land: The Survey of Canada, 1947-1994. Montreal & Kingston: McGill-Queen's University Press, 1999. 668 p. \$80.00 ISBN 0-7735-1689-1

Let me reverse the normal procedure in a review and begin by stating at the outset that this book should be in every academic library and public library system in Canada. It should also find a home in academic libraries beyond our borders which cater to Canadian Studies programs. To go even further, let me suggest that this book should be a part of the personal library of those now serving as map librarians/curators and should be a part of a reading program for those hoping to enter this field in Canada. As the Collect for the 2nd Sunday in Advent in the Book of Common Prayer (Church of England, 1662, or Anglican Church of Canada, 1959 and others), this reviewer would suggest that such persons should "read, mark, learn, and inwardly digest" the contents of *Mapping a Northern Land*. This is a truly marvellous sequel to *Men and Meridians*, the late Don W. Thompson's three volume history of the survey and mapping of Canada up to 1947. Originally conceived as Vol. 4 to the series but later re-titled, it extends this history through a series of nineteen well organized and only partly overlapping topical chapters, and seven appendices, to 1994. That it works so well is a real tribute to the editors who have created an almost seamless flow in writing style, and eliminated what must originally have been considerable overlap in coverage of events. This has surely been done with

great care and consideration for the twenty three authors' original stories.

In the opening chapter, the editors, who also contributed individually authored chapters, note that the period covered by this volume "coincides to a large extent with the period of the Cold War". As war and the threat of war have long been known to be responsible for advances in mapping coverage, we should not be surprised that a similar pattern was followed in this case. Canada, virtually unmapped in any meaningful way beyond the settled southern fringe at the close of Second World War, and situated between the two preeminent world powers at that time, was viewed as a likely battleground in future warfare. A preemptive strike by the United States military led to a 127 sheet series of topographic maps of Canada north of the 74th parallel at a time when Canada had only an eight-mile series. That these 1:250,000 maps were simply enlargements of the smaller scale Canadian sheets and thus contained some rather large errors is at this time of less importance than that they prompted Canadian action to rectify this lack of native mapping. Combined with newly trained and experienced personnel returning from military service and newly provided funding, as well as commitments to international defence treaties, a new era in Canadian surveying and mapping was launched.

No work is perfect of course. There are minor errors noticeable to even a generalist, but they do not detract from the readability or enjoyment of the whole. For example, one of the partners in the 1992 expedition to resurvey the height of Mt. Logan is given as the Royal Geographical Society of Canada rather than its correct name (pg. 40). On page 62, the author says "Two locations along the boundary [with the United States] have been established as a symbol of the unbroken harmony between our two nations...", the International Peace Arch in British Columbia and the International Peace Garden in Manitoba, but he omits the first ever International Peace Park in the world, Waterton/Glacier International Peace Park, established in 1932. (*Canadian Encyclopaedia* 2nd ed., pg. 2238). In the chapter devoted to military surveys, attention is drawn to the mid-19th century Royal Engineers large scale military maps of forts in the St. Lawrence River Valley, but does mention the lesser known Esquimalt District map in at least five sheets at 1:10,560 prepared by the Royal Engineers in 1887-88.

Several of this reviewer's previously held understandings of whys and wherefores regarding changes to the National Topographic System alterations in format and other attributes have been changed by the reading of this book.

Comments regarding government interference in the marketplace are of interest because they show the fallibility of industry's so often repeated stand that government does not understand business. The author of the chapter which deals with "Canada's Private Sector Air Survey Industry" explains how, in the rapid expansion of aerial survey firms, bids on contracts dropped so low that government officials feared wholesale bankruptcies and lowered quality of product delivered, at which point they stepped in to encourage the formation of consortia to bid on these contracts. In this field, and later in the development of satellite remote sensing, great wisdom was shown on the part of both appointed and elected government officials in guiding and nurturing an industry which achieved both great international renown and economic success.

While admitting to a perhaps overdeveloped love of all things pertaining to maps and mapping, this reviewer believes that most people in the fields of maps and mapping will find this a compelling read. Much more remains to be said about this book, all of it complimentary, but the length of a review does not allow one to say all that one would like to say. It is now two years since the book was published and copies can be found in the used book market on-line, from as low as \$45.00 US to \$90.00 US but it remains in print at \$80.00 in either US or Canadian funds. Read it, enjoy it, and say thanks to those who put it together.

Ronald Whistance-Smith
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University of Alberta, Edmonton



Parry, R.B. and C.R. Perkins, editors. *The Map Library in the New Millennium*. Chicago: American Library Association; London: Library Association Publishing, [c2001]. 267 p. \$67.50 US ISBN 0-8389-3518-4 and 1-85604-397-5.

Bob Parry and Chris Perkins have gathered contributions from a Baker's Dozen of their colleagues on the status and future of map libraries and map librarians in this age of expanding use of electronic resources. The editors have sound credentials for putting together such a volume. They have just recently produced their second edition of *World Mapping Today* (a magnificent compilation of maps currently available), have presented papers at scholarly conferences worldwide, contributed to map library organizations, and served as map librarians/curators for many years. The other contributors to the work are from the United States, Canada, United Kingdom, The Netherlands, and New Zealand, and are geographers, cartographers, geomaticians, map publishers or dealers, and map librarians, including one Canadian - Carol Marley from McGill University. A listing of names, titles, and email addresses of contributors is given at the front of the volume. Each chapter has a list of references of items referred to in the text, including web resources. There is a seven-page index at the back of the volume. A handy three-page listing of acronyms used in the book is also provided.

In their introduction, Parry and Perkins trace the history and growth of map libraries and map librarianship, referring to other standard works in the field for further reading, such as Walter W. Ristow's 1967 "The Emergence of Maps in Libraries" in *Special Libraries* and Mary Larsgaard's *Map Librarianship: An Introduction* from 1987 and 1998. They indicate how critical a time it is and how important the map librarian/curator is to the process of making sure that the proliferating digital data will be around for generations to come. A distillation of topics covered by the other contributors is given. In addition, the editors each provide individual chapters, as well as a final one debating the future for map libraries in colleges and universities.

Parry's chapter covers "offline digital maps", primarily concentrating on those on CD-ROM. He notes their development and describes the kinds that are likely to be of interest to map libraries, as well as mentioning some of the issues involved, such as cost. The likely future of this

medium is postulated. Perkins also encompasses the digital arena in his chapter on "access to maps and spatial data". He notes that listing maps available to map libraries in paper format was possible in 1976, but many more format options were available by 2000. His conclusion is that the trend is toward access rather than acquisition.

Carol Marley's chapter focuses on the "changing profile of the map user", illustrated by sample reference interviews to prove her points. Nick Millea, Bodleian Library, UK, writes about "organizational change" and its impact on map library personnel and users. Patrick McGlamery, University of Connecticut, recounts the impact of technological advances on the map library, not only in terms of the materials acquired, but also in the methods of describing and controlling them, and advocates sharing of spatial data. Jennifer Stone Muilenburg, University of Washington, discusses the "changing role of GIS in the map room", based upon a survey distributed in 2000 on MAPS-L and GIS4LIB to which 67 map librarians responded. Michael Peterson, University of Nebraska, talks about "maps and the Internet", noting the establishment of the Internet as a major distributor of maps and the problems inherent in this. Menno-Jan Kraak, ITC, The Netherlands, notes the possibilities for map libraries in providing access to web resources, including metadata and linking traditional resources to web data, as well as the nature of maps on the web. Jan Smits, Koninklijke Bibliotheek, The Netherlands, delves more deeply into the topic of metadata, covering the different types, standards, and how they may interact. Christopher Baruth, University of Wisconsin-Milwaukee, comments in "old maps in a modern world" on reasons to preserve cartographic materials that are no longer current and methods by which to do this, noting the costs and time involved ("[if] the 13 to 15 million maps in the Library of Congress were all of a size capable of single-shot capture on the Library's present large flatbed scanner, the time required to scan the collection, assuming ten minutes per scan, and an eight-hour day, would be almost a thousand years!"). Robert Barr, University of Manchester, UK, discusses "spatial data and intellectual property rights" which may be one of the most significant issues facing map librarians in providing access to modern

mapping. Pip Forer, University of Auckland, argues the premise that "map libraries, in essence, are about developing and maintaining holdings of geospatial data rather than about spatial analysis or cartography alone" in his chapter on "taking care of business: map libraries and the new 'mapping' industry". Alan Godfrey, Alan Godfrey Maps, UK, gives "a map user's perspective" raising points of "censorship, the quality of digital mapping and cooperation between academic and local libraries..." as well as whether map user needs are being addressed. David Fairbairn, University of Newcastle, UK, provides "perspectives on map use and map users in the digital era" noting the uncertainty that map libraries continue to face about what users want and the administrative justifications required by map librarians about their services. Russell Guy, OMNI Resources, presents the changing context and methods employed by the "map dealer" in maintaining a successful business of providing individuals and map libraries with cartographic materials. The final chapter on debating the "future for the map library" is by Perkins and Parry, arguing from "opposite standpoints, drawing freely on points made by other contributors". They hope that this dialogue brings together the "complex arguments appearing throughout the book" and pose the question that "perhaps a resolution of this debate lies in the readers' hands?"

This volume is one that every map librarian will want to read and include in their collection, and it should be required reading for library school students interested in map librarianship or digital data. Library administrators will also find it of interest. It provides much "food for thought" for everyone involved in map librarianship and digital spatial data today.

Alberta Auringer Wood
Maps, Data and Media Librarian
Memorial University of Newfoundland

Next deadline for Reviews
and for Bulletin articles

October 15, 2001

Reviews Editor Tim Ross
has books, needs reviewers.

Bulletin Editor Cathy Moulder
has space, needs articles.



WELCOME NEW ACMLA MEMBERS

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INTERNATIONAL CARTOGRAPHIC ASSOCIATION (ICA) EXECUTIVE COMMITTEE MEETING REPORT APRIL 16, 2001

Prepared by Alberta Auringer Wood
(Vice President - Canada)

This meeting was held in London, England, from March 30 - April 1, 2001, at City University of London. In attendance were Bengt Rystedt (ICA President), Ferjan Ormeling (ICA Secretary-General and Treasurer), Michael Wood (Past President - United Kingdom), and ICA Vice Presidents: Milan Konecny (Czech Republic), Li Li (China), Elri Liebenberg (South Africa), Robert McMaster (United States), Takashi Morita (Japan), Kirsi Virrantaus (Finland) and myself. In addition, Anne Buttimer, President of the International Geographical Union (Professor, Department of Geography, University College Dublin, Ireland), participated in part of the meeting.

Announcements made were that Alexander Liouty died of a heart attack on March 25. Jack Estes died recently in Santa Barbara. Christopher Board is in the hospital.

An update on preparations for the conference in Beijing, August 6-10, was given by Li Li. The scientific program consists of an opening and closing ceremony, two plenary sessions, 65 oral sessions consisting of 370 presentations, and five poster sessions. Submissions have been received from 51 countries, 570 in total, including 140 from China. There will be two workshops and at least two meetings for commissions before the official conference opening. The Executive Committee will meet on August 4 and 5, with Commission Chairs meeting in the afternoon of August 5, and a meeting of representatives from member countries on August 9. Some figures were given in terms of numbers of papers accepted from various countries. She noted, for example, that Canada had 29 with 22 for oral presentation and seven for posters, 66 from the United States (59 for oral and seven for posters), Russia had 51 (27 as oral presentations and 24 as posters), China had 140 with 71 to be oral and 69 for posters, Germany with 22 (15 oral and seven posters), Poland had 21 (15 for oral sessions and six as posters), and Japan was 15 (11

as oral and four as posters). There were 28 different topics for paper sessions, such as history of cartography (with 24 papers, 17 as oral presentations and seven as posters) and children (16 papers, 11 for oral presentation and five for posters). Each oral session will have four to six presenters. The map exhibits will be open from Monday afternoon through Thursday, while the commercial exhibit goes through noon on Friday.

Anne Buttimer gave a presentation on the International Geographical Union (IGU). Of particular note is that they have a permanent office on the third floor in the building owned by the Italian Geographical Society in Rome. It has a 300,000 volume library and will be the location for their archives. Their archivist is sorting out guidelines for retention of paper and digital materials. Discussion ensued regarding possible areas of cooperation. A possibility will be to help organize a session on cartography for a regional IGU conference in Durban, South Africa, August 4-10, 2002, as well as to hold a joint Executive Committees meeting. The IGU Secretary-General and Treasurer is Ron Abler (Executive Director of the Association of American Geographers), while other officers are from Italy, Switzerland, Russia, China, Finland, South Africa, Mexico, and Japan. They have over 30 commissions or study groups. For many of them, the focus is on physical geography, but there are a number that might be of interest to those in ICA, such as Modelling Geographical Systems.

Reports from ICA commissions were considered. Some discussion was held on travel and other awards. Publications occupied a long time and lengthy discussion. A new publications contract had been negotiated and signed with Elsevier. A reminder needs to be sent to all commission chairs that all publications should be submitted to Elsevier prior to making other publication plans. They have the first right of refusal to all ICA publications. The

numbers of books coming out of commissions is low, which results in little income for ICA. Consideration is being given to restarting the international yearbook.

Reports were made on meetings attended on behalf of ICA by various officers of which there were about ten. Among them was the U.S. National Committee which met during the Association of American Geographers meeting in New York in early March. Funding amounting to \$30,000 (including \$15,000 from the National Science Council) has been obtained to assist in travel to the meeting in Beijing for those presenting papers.

Archiving of ICA materials was discussed. It was decided that only paper materials, not digital items, would be kept at this time, including original correspondence. Personal access would be limited to the Archiving Committee and the Executive Committee. The procedures presented by the Institut Geographique National were approved with several items to be noted. I am to notify them, circulate the procedures to the Executive Committee, Commissions, newsletter, and past presidents.

Progress on preparations for the 2003 ICA conference and general assembly in Durban, South Africa was reported by Elri Liebenberg, a member of the organizing committee, as well as ICA Vice President. A first circular is planned to be available in Beijing. Ken Lester is the Treasurer. The website is expected to be operational by June. They will have a booth in Beijing and a spot in the closing ceremony. Timetable is such that the Executive Committee will meet with the organizing committee in Durban in August 2002 (along with IGU), the deadline for abstracts and exhibit booths will be October 2002, and January 2003 will see publication of the final brochure and registration information. One of the IGU vice

presidents is also a member of the organizing committee.

It was decided to approve use of the ICA name in the sponsorship of several forthcoming cartographic events. Michael Wood is working on descriptions of responsibilities of officers. He is also working on a promotional brochure. Invoices for dues will go out to member countries soon. The achievements booklet is now on the web pages.

A memorandum of understanding with FIG (International Federation of Surveyors) is to be prepared by Kirsi Virrantaus to be reviewed by Bengt and then the rest of the Executive Committee. After additional discussion, Ferjan will send letters to the Beijing organizing committee with suggestions regarding the plenary sessions. Discussions regarding membership and a possible location for the 2005 technical conference closed out the meeting early Sunday afternoon. We had enjoyed the hospitality of City University of London and its Vice Chancellor David Rhind and his wife, Christine, at a reception on Friday night, and the musical *Les Misérables* on Saturday night on our own. It was a pleasant interlude with no snow, blooming daffodils, and flowering trees as compared to the still very much snow-covered Newfoundland, with St. John's up to 612 cm (over 20 feet) of snow for the winter as of April 13.



Left to right: Robert McMaster, ICA Vice President (USA), Alberta Auringer Wood, and David Rhind, Vice Chancellor, City University of London, at the reception at Dr. Rhind's house.

**INTERNATIONAL MAP TRADE ASSOCIATION
IMTA OF THE AMERICA'S ANNUAL
CONFERENCE AND TRADE SHOW
WASHINGTON, D.C. - APRIL 19-21, 2001**

Joanne M. Perry
Maps Librarian, Pennsylvania State University

I was fortunate to be able to attend this, the first regional meeting of IMTA of the America's, in Washington, DC. IMTA is a trade organization for map producers and dealers. While the exhibit hall is the primary reason for a librarian to attend, as it provides an opportunity to see new products and speak with the producers and distributors, for those involved in the wholesale and retail end of cartographic production it is a time to negotiate with business partners and learn where the market is going. As is true of nearly every conference, there were concurrent programs (workshops) offered, so I will only be able to report on those that I attended.

**Tour to U.S. Geological Survey,
Reston, VA**

It takes nearly an hour to travel from downtown Washington to Reston so, although this visit was scheduled to take four hours, half of that time was traveling along the DC highways. As a result, the tour was brief, although quite informative.

The U.S. Geological Survey employs 10,000 persons nationwide, with 2,000 being at the Reston site. Funding support has been eroding for quite some time and the Survey is trying to find ways of improving their financial situation.

Barbara Ryan, Associate Director/Geography, accepted her current position in October 2000, and was the first speaker. She noted that a task force has been examining the state of U.S. topographic mapping. They determined that the topographic maps represent a \$2 billion investment over the past 75 years. There are 55,000 sheets for the lower-48 states, many are 23-24 years old with the oldest being 56-57 years old. It was also noted that the Forest Service (FS) and the National Imagery and Mapping Agency (NIMA) were not meeting their customers' needs.

Chip Rowe, the 13th Director of the USGS, was

introduced and spoke of the need for business partnerships, a program which is now 25 years old. The USGS lacks name recognition, a fact that exacerbates their congressional funding problems, because commercial entities are able to republish Survey information due to the lack of copyright protection. Plans are underway to "brand" the Survey's publications so that they will be identifiable, but no change in the copyright position is anticipated.

We walked through the building to the printing plant where Doug Thompson spoke to us. This is the largest civilian printing plant in the U.S. and produces maps for USGS, FS, BLM (Bureau of Land Management), NIMA, & NOAA (National Oceanic and Atmospheric Administration) on its three presses. There are two 60" two-color presses that are 35 years old and one five-color press that was built in-house in 1975. The largest sheet that can be run is 44 x 58 inches. Fifteen years ago there were three shifts per day but now, due to the drop off in workload and the lack of trained personnel, there is only one shift per day. The lack of personnel makes it difficult to add a second shift in times of emergency, such as last year during the wildfires in the west.

The Survey runs a "green" printing environment: using soy-based inks and recycling the press plates and using paper that is 30% recycled. When printing, four different topographic sheets are run (on the same press plate) at a time to promote efficiency. The press plates are recycled rather than kept because the chances of the same four quads being reimpressed at the same time are unlikely. Approximately 3,500 titles are printed per year.

On the two-color press, they run black and red inks for three days, register and run brown and blue inks for three days, and then register and run the green for three days. They can do 3-4 jobs per day on these presses (6-8 when they run the green). It takes 6-9 days for one complete product to be printed.

On the five-color press, they are able to print a full map in 6-9 seconds. There are 3-4 pressmen running the press and they take 45 minutes to prepare a run ("make ready"). The run itself takes only 15 minutes.

We then visited CINDI, the Center for Integration of Natural Disaster Information (URL: <http://cindi.usgs.gov>). It was established in 1997 to promote research for hazards response and mitigation and to disseminate information on disasters that are anticipated, occurring or that have occurred. Hazards would include wildfires (<http://geomac.usgs.gov>), earthquakes, volcanoes, tornados, hurricanes, floods, landslides/avalanches, drought, geomagnetism and wildlife disease.

The last stop was the National Mapping Division's reference collection and historical map collection. Here they have collected copies of the USGS topographic maps but as there is no master list of what is available, there isn't an easy way to know if they indeed have copies of every version of every map. There is no ILL service but the collection is open to the public. A project to scan the maps has begun but is not progressing very rapidly.

U.S. Census Bureau Products and Services

Tim Trainor, USCB, Geography Division

The Census Bureau conducts 100 censuses per year with the decennial census used for redistricting purposes. Check out <http://factfinder.census.gov> for the schedule of Census 2000 data releases and their American Fact Finder site where data sets similar to the summary tape files can be downloaded. Information about the American Community Survey (ACS) can also be found at this site. The ACS is intended to be an annual updating of census information that will replace the long form of the decennial census and is in test mode at this time, with planned implementation in 2003.

The new geography for the 2000 census:

- The Census Designated Places (CDP) were eliminated
- Block Numbering Areas (BNA) were eliminated
- Zip Code Tabulation Areas (ZCTA) were added as there were no Zip Code boundaries established. These boundaries are from the master address file and based upon Census 2000 blocks. ZCTAs are in Summary File 3, contain characteristics based on long form (release est. June-Sept 2002).

- Urban/Rural criteria in Federal Register on March 28, 2001. URL: <http://www.census.gov/geo/www/ua/ua2k.html>
- Metropolitan areas – new concept of Core Based Statistical Areas (CBSA). URL: <http://www.census.gov/population/www/estimates>
- On demand maps for metropolitan areas, URL: <http://www.census.gov/geo/www/tiger/>
- Plotting guidelines at <http://www.census.gov/geo/DR/plotting.pdf>
- Maps coming out soon that will compare the 1990 and 2000 census boundary files.

For those who are interested: the center of population for the 2000 Census is Edgar Springs, Phelps County, Missouri.

The Future of Mapping Sciences

Bobbi Lenczowski, Deputy Director, NIMA

The sub-title of this presentation was, not so jokingly given as "Why mapping, charting and geodesy became Geospatial Information and Services" with the NIMA vision, "Guaranteeing the Information Edge".

NIMA needs to provide materials that fulfill military specifications, provide accurate position, reliable navigation, and situational understanding (what's relevant in my area of interest).

In 1997, NIMA modified its approach to its products, moving from its traditional products (aeronautical and nautical navigation charts which are resource intensive and not adaptive to emerging technology) to information and services to support planning (readiness) and action (responsiveness).

There was reference to the Foundation Data Concept, apparently a system whereby they collect a high density of information suitable for a 1:50,000-scale map which is plotted on a 1:250,000-scale base. There was mention of "CROP" common relevant operational pictures, which supports tailored environmental needs of customers. Using a computerized database, they can provide spatial products as complete as needed by the customer with an ability to update quickly. This helps to "de-conflict" multiple reports, establishes spatial relationships, allows coordinated and collaborative responses to situational events, and identifies egress and access routes to any point on imagery or computer maps. As an example of this process, they showed materials they used during the

2001 Presidential Inauguration. There were 13 police organizations that needed to be coordinated, so instead of using radios as in the past, they used laptops to update and stay in touch with the changing situations. They used all commercially available products: Internet gaming tools, ArcView 3.2a, Terra Explorer.

USGS Future Directions

Hedy Rossmessl, USGS

Barbara Ryan, Chief Cartographer

In the 1990s, the USGS completed mapping the U.S. at the 7.5-minute scale; 55,000 topographic maps covering the lower-48 States. Alaska is not yet mapped at the 7.5-minute scale.

Joint topographic mapping with Forest Service is underway and a draft of the map symbol standards should be on the USGS Website (<http://www.usgs.gov>) by May 1st (searching under *map symbols* yields a *Digital Cartographic Standard for Geological Map Symbolization* also available as OFR-99-430).

Forest Service maps are now available for purchase from Denver rather than from each of the 9 FS regions. A press release and ordering information can be found at <http://rockyweb.cr.usgs.gov/forestservice>. The main USGS Web site is at <http://mapping.usgs.gov>.

Cuba – Cartographically Speaking

Juan Jose Valdes

National Geographic Cartographer

In February 2001, National Geographic's Adventures Office organized a tour to Cuba of 39 tourists and asked Mr. Valdes to be tour leader. Mr. Valdes had left Cuba as a young boy and this was his first opportunity to return. As a cartographer, he was interested in seeing how maps were used in the Cuban landscape because in Miami's Little Cuba maps are regularly used as a reminder of the land that was left behind.

Upon their arrival in Cuba, he noted that there were no maps to be seen at the Havana airport, but once in the city he found an inlaid map of Cuba on the patio of the hotel, a kiosk in Old Havana showing the historic district, and a map store selling government produced maps (in English, Spanish, French, and Italian) for \$5.95-7.95. There were also 3D postcards recycled from maps and t-shirts with maps. Of particular interest was a scale model of Havana at

1:10,000 that was color-coded: red for the old, pre-revolutionary extent, tan for the republican expansion, and light tan for the post-revolutionary development. I believe this scale model was at the City Hall, which had numerous other cartographic products, including an inlaid map of Cuba as part of a compass rose.

Subtle representations of Cuba were also seen in other locations – at the botanical Gardens there was a planting of cactus that was actually a representation of the Island of Cuba. And contemporary artists include Cuba in their works, in one slide of a landscape the clouds were in the form of Cuba.

Mr. Valdes also mentioned that in 1989 1,600,000 tourists visited Cuba, 3,026 were from the United States. On his tour, 90% of the travelers brought travel guides with them (Michelin was the number one choice) and all brought maps rather than buying them in Cuba. Most had purchased the American Map Co. Cuba map, a few had the Streetwise Map, the Map Easy Cuba, and the Insight Map were also in evidence.

Mr. Valdes experienced a great deal of trouble getting his visa and was required to carry a Guest Card that was issued to him at his hotel which was a different color than those issued to the other (non-Cuban) participants. He recommended traveling to Cuba in a group rather than independently at this time.

Multi-Media Presentation

On Friday evening, April 20, there was a pre-banquet program given at the National Geographic Society. Sam Abell, long-time National Geographic photographer, spoke on his life as a photographer and showed more than one hundred slides spanning his career. It was an amazing, beautiful, and wonderful presentation. Mr. Abell took photographs for articles on the Australia, Appalachian Trail, the Pacific Crest Trail, the Lewis and Clark expedition, Yellowstone National Park, and on Japan's Imperial Palace (yes, he actually shook hands with the Emperor on the very last day of his assignment). In all those years, of all the many thousands of photographs, he only had one "cover" for *National Geographic Magazine* and some articles required thousands of photographs be taken for the 20 or 30 that actually were published. He has published, as author or as joint-author/photographer, numerous books; the latest of which is *He's Just My Dad* in 2000.

President's Message (continued from page 2)

application of copyright to maps. We are grateful for all of their fine work on our behalf. David Jones will be acting chair of the Historical Maps Committee and the Publications Committee until new chairs can be appointed and the mandate of the Publications Committee re-assessed. Richard Pinnell will replace Carol on the Copyright Committee.

Membership: It seems that at every conference recently, we must say goodbye to retiring members. This year we bid farewell to Pierre Lepine who has a long and distinguished career at the BNQ, beginning in 1966. Pierre's many contributions to our Association were acknowledged with the presentation of an Honours Award (see page 54 in this issue for the text of the speech for Pierre's award). After the conference, we were also saddened to hear of the retirement of two friends and colleagues from the National Archives, Betty Kidd, former Director of the Visual and Sound Archives and Tom Nagy (page 59), who both worked hard to develop and maintain a strong national map collection.

On a more positive note, it is encouraging to see our membership renewed; there were several new faces at our conference and I hope that this will be the first of many that our new members will attend.

At the Annual General Meeting, the membership approved an increase in membership dues to \$45 for full and associate members and \$65 for institutional members. This is the first increase in many years.

Depository Services Program and Maps: An agreement in principle was announced at the conference between Natural Resources Canada and the Depository Services Program (DSP) of Public Works and Government Services Canada to include paper and digital topographic maps in the Program. The agreement will apply to those libraries who already have depository status with Natural Resources Canada. Map products from the Geological Survey of Canada will also be part of this new agreement. The final details will be worked out over the summer and as soon as I have concrete information, an announcement will be made on CARTA.

National Archives: The Executive is following up on several action items identified during the May 30th meeting with the new Director-General of the Government Records Branch, Marilyn Osborne.

Marley, présidente du comité des droits d'auteur (Copyright Committee), a su nous garder au courant de la législation et des développements reliés aux droits d'auteur et à leurs applications envers les documents cartographiques grâce à des communiqués et des ateliers. Nous sommes des plus reconnaissants de tout leur précieux travail au nom de l'Association. Nous verrons David Jones à la présidence intérimaire du comité des cartes historiques et du comité des publications jusqu'à la nomination de nouveaux présidents et la révision du mandat du comité des publications. Richard Pinnell, pour sa part, remplacera Carol à la tête du comité des droits d'auteur.

Membres: Il semble que depuis les dernières conférences, nous devons dire au revoir à certains de nos membres qui prennent leur retraite. Cette année nous avons dû faire nos adieux à Pierre Lépine dont la carrière distinguée à la BNQ a débuté en 1966. Les nombreuses contributions de Pierre à l'Association ont été reconnues lors de la présentation du prix d'honneur (voir le texte du discours de remise du prix d'honneur à la page 53 dans ce numéro). Suite à la conférence, nous avons été également attristé d'apprendre la retraite de deux amis et collègues des Archives nationales; Betty Kidd, ancienne directrice des archives visuelles et sonores et Tom Nagy (page 65) qui ont travaillé tous les deux intensément à développer et maintenir une collection nationale de cartes de prestige.

D'un autre côté, il est encourageant de constater que la liste des membres n'arrête pas de s'allonger, plusieurs nouveaux visages ont été aperçus à la conférence et j'espère que ces nouveaux membres participeront à plusieurs autres événements.

L'augmentation des cotisations de membre a été approuvée par les membres lors de l'assemblée générale annuelle. Les frais seront maintenant de 45.00 \$ pour les membres titulaires ou associés et de 65.00 \$ pour les institutions. Il s'agit d'une première augmentation depuis plusieurs années.

Cartes et programme des services de dépôt: Un accord de principe entre Ressources naturelles Canada et le programme des services de dépôt (PSD) de Travaux publics et Services gouvernementaux Canada a été annoncé à la conférence. L'accord suggère d'inclure les cartes topographiques de format papier ou numérique dans le programme déjà existant. Cette entente s'appliquera aux bibliothèques qui ont déjà le statut de dépositaire avec Ressources naturelles Canada. Les produits cartographiques de la Commission géologique du Canada seront également inclus dans cet accord. Les derniers détails

Further re-structuring of the Government Records Branch was announced internally on June 28, but we are still awaiting the official version of the re-structuring. We are encouraged by the recent interest in extending legal deposit for maps on the part of both the National Library and National Archives.

The Executive Summary of the Final Report of the Canadian Geospatial Data Policy Study is now available on the GeoConnections web site (<http://www.geoconnections.org/english/>). The study was undertaken by the Policy Node of GeoConnections "to describe and evaluate current government policies on the creation and distribution of government geospatial data holdings, and to examine the impacts of these policies on data users such as governments, the private sector, and society at large". Feedback from the community is now being solicited on the contents of the study.

The Year Ahead: I am always amazed by what a dynamic, active association we represent and that, despite our small size, we have a very strong voice which we use to ensure access to and preservation of Canada's cartographic heritage, be it in paper or digital form. During the next year, I would like to see our Association continue its efforts to improve access to geospatial data; develop a mentoring program to encourage and support our new members; and articulate a business plan so we are clear on our priorities and how they can best be achieved. And lastly, I want to encourage communication among all our members and its Executive. We want to hear from you!!

Grace Welch

ACMLA President



seront figués au courant de l'été et un communiqué sera envoyé sur CARTA aussitôt que j'aurai reçu des informations concrètes.

Activités de liaison: Le comité directeur de l'Association fait suite à une série de points prioritaires identifiés lors de la rencontre du 30 mai avec la nouvelle directrice générale de la Direction des documents gouvernementaux, Mme Marilyn Osborne. La Direction des documents gouvernementaux a annoncé à l'interne, le 28 juin dernier, la venue d'une restructuration au sein de la division. Nous attendons toujours l'annonce officielle de cette restructuration. Nous sommes néanmoins encouragés par le récent intérêt de la Bibliothèque nationale et des Archives nationales à prolonger le dépôt légal des cartes.

Le résumé du rapport final de l'étude des politiques relatives aux données géospatiales canadiennes est disponible sur le site web de GéoConnexions (<http://www.geoconnections.org/francais/>). Cette étude, sous la direction du Noyau sur les politiques de GéoConnexions, avait pour but "de décrire et d'évaluer les politiques gouvernementales actuelles portant sur la création et sur la diffusion des données géospatiales détenues par le gouvernement et d'en examiner les incidences sur les utilisateurs de données comme le gouvernement, le secteur privé et la société en général". La communauté est maintenant sollicitée, par l'entremise du site web, à émettre ses commentaires sur les résultats de l'étude.

L'année à venir: Je suis toujours étonnée par le dynamisme et les actions de l'Association. Malgré notre modeste taille, nous possédons une forte représentation qui nous permet d'assurer l'accès et la préservation du patrimoine cartographique canadien que ce soit sous forme papier ou sous format numérique. Durant la prochaine année, j'aimerais voir notre Association poursuivre ses efforts à améliorer l'accès aux données géospatiales. J'aimerais également développer un programme de mentorat pour encourager et supporter nos nouveaux membres ainsi que mettre en place un plan d'activités qui permettra de clarifier les priorités de l'Association et énoncer les moyens de les atteindre. Finalement, je veux encourager la communication entre les membres et le comité directeur. Nous voulons vous entendre!

Grace Welch

Président d'ACACC

Directory of Canadian Map Collections, 7th ed., by Melissa S.A. Leitch, Published by the Association of Canadian Map Libraries and Archives, c/o Visual and Sound Archives Division, National Archives of Canada, 395 Wellington Street, Ottawa, Ontario K1A 0N3, August 1999, ISSN 0070-5217, price \$20.00

A directory may seem like the last kind of publication that would deserve mention or recognition in the form of a book review. However, the *Directory of Canadian Map Collections* is no mere directory – offering listings, telephone numbers and addresses. It is an invaluable listing of locations across Canada that serve as repositories for map and cartographic material. The reason for its value and importance will become apparent from what follows.

Previous directories (including the 6th edition published by the same organization in 1992), offered a listing of contacts and mailing addresses. For surveyors and other land information professionals, this was important to have as a compilation. It served in much the same manner as a telephone or postal code directory. However, little descriptive detail of the collections has been published before and, short of calling or writing to the various repositories, one would be hard pressed to know what materials to expect in advance of arriving. Likewise, if a certain product was of particular research interest, directories of the past stopped short of being useful tools.

This directory is a significant improvement and departure from past versions. It lists some 91 collections or repositories of mapping and related information – including the URL of the repository's Web site and the name and e-mail address of the contact person there. The hours of operation are listed, including summer hours, if different from the rest of the year. Months of highest and lowest use are listed – important if uninterrupted concentration is sought. The nature and availability of reproduction facilities are identified. A breakdown of chronological composition is listed and the presence of any special collection is described. Noteworthy listings include an extensive microfilm copy of field books and diaries of Ontario Land Surveyors at McMaster University and manuscript-quality maps related to the fur trade between 1709 and 1870 at Hudson's Bay Company Archives in Manitoba. Their value to surveyors in

retracing boundaries and to researchers in documenting the extent of historical hunting and fishing by First Nations need not be mentioned.

Some interesting statistics also emerge from the appendices. For example, the largest collection of aerial photographs is located at the University of Alberta in Edmonton (1.5 million), which surpasses the collection at the National Archives of Canada (200 000) by more than sevenfold. On the other hand, NAC has the largest collection of printed maps (1.2 million), with the University of Alberta as runner-up at 465 000. The most significant collection of fire insurance plans can be found at libraries on university campuses, including McGill, Queens, Waterloo, Western and McMaster.

Several appendices appear at the end of this publication, one of which lists "non-participatory collections" (Appendix 4). The explanation for this "black list" can be found in the preface in which the author wrote,

"...collections which have been disbanded, merged or no longer exist as in their previously recorded state are listed in an appendix as are the collections which failed to respond to any request."

The omission from the directory of several significant collections is a shame. Included in the appendix are the University of Guelph library and the Provincial Archives of Alberta. This reviewer has attended at both locations and found excellent and invaluable historical maps, plans, field notes and records. Perhaps future editions will be more successful in enlisting the participation of all repositories to permit a full cataloguing of the collections.

This publication would be a bargain at twice the cost. Anyone who undertakes serious research of mapping, survey, and land-related information will find this publication a welcome tool in their work. It is highly recommended.

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(Review reprinted from *Geomatica* Vol. 54 #2, 2000, pp. 195-196, with the permission of the Canadian Institute of Geomatics. See inside back cover for ordering information.)

Directory of Canadian Map Collections

Répertoire des Collections Canadiennes de Cartes



*Great Review!
See page 84*

Association of Canadian Map Libraries and Archives
Association des cartothèques et des archives cartographiques du Canada

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