

# Evolution in the Mapping of Canada and Southern Ontario

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## Introduction

The first printed map showing a significant portion of what is now southern Ontario was published in 1632. Since then, the mapping of Ontario as a distinct physiographic region evolved with increased exploration and more accurate surveying methods. Since much of southern Ontario is bounded by Lakes Huron (including Georgian Bay), Erie and Ontario, not to mention the St. Lawrence and Ottawa Rivers, some (mainly older) geographers refer to the region as the 'Ontario Peninsula', but is generally identified as southern Ontario.

Later, as settlement increased in the interior, geographic Townships were surveyed and administrative districts and their boundaries evolved as well. This administrative evolution, despite an interval of about one hundred years, re-emerged in the 1970's with the designation of Regional Municipalities and several other new municipal structures. This evolution has continued into the late 1990's with many municipal amalgamations such as Toronto's new 'mega city', and now into the twenty-first century with new single

tier municipalities such as the 'new' Counties of Haldimand and Norfolk emerging from the former Regional Municipality.

The intent of this article is to provide a brief and somewhat selective introduction to the evolution in mapping the Ontario peninsula from the mid 1600's to the early 1900's, and to trace the evolution of one particular administrative district - Wellington County, and one prominent topographic feature - the Niagara Escarpment - over this period of significant exploration and development. This evolution can be divided into two distinct phases - French exploration and mapping until 1763, and the British colonization until Confederation. Evolution of distinct administrative districts took place in this latter phase. In addition, some comments about antique maps and surveying, with selected local examples, will be made.

*NOTE : This article follows the standard mapping convention of using diagonals (/) to indicate a new line of the map's name as inscribed in the cartouche or title block of the map itself.*



## Initial Mapping of Canada and the Ontario Peninsula

John Cabot was the first European recorded to have made landfall in what is now Canada, likely near or on Cape Breton Island, in June of 1497. Cabot apparently then sailed north to the northern tip of Newfoundland before returning to England. The earliest known cartographic depiction of the New World was a manuscript sea chart or portolan by de la Cosa, dated 1500 (Burden, 1996), which illustrated Cabot's findings from his first voyage. This chart can be considered the earliest known map, based on actual explorations, of any part of Canada.

The first known printed map to depict America was published in 1506 by Contarini - Roselli, and the first to use the name 'America' was published a year later by Waldseemuller (Burden, 1996). The first map devoted to the New World appeared in 1511 (Burden, 1996). One of the earliest maps to depict the name 'Canada' was published in 1582 by Lok (Kershaw, 1993). For the remainder of the 16th century, the eastern coast of Canada and the St. Lawrence River, as well as the Arctic, were actively explored and mapped.

The first European to explore the interior of the Ontario peninsula was Samuel de Champlain in 1615 - 16. In 1632, Champlain published a map (no title) based on his explorations; the first to delineate, however crudely, the lands north of Lakes Erie and Ontario, east of Lake Huron, south of Georgian Bay and west of the Ottawa River. The



FIGURE 1





FIGURE 2

only inland waterways depicted were those we know as the Trent - Severn system, on which Champlain travelled during his return trip to Quebec.

Nicolas Sanson's famous map of 1656, 'LE CANADA, ou / NOUVELLE FRANCE, &c./ ...,' in both large and small (1657) formats, was the first to depict all six of the Great Lakes (although the shorelines of Lakes Superior and Michigan were not enclosed). Sanson's map also identified Lakes 'Ontario' ('ou Lac de St. Louis'), 'Erie' ('ou du Chat') and Superior ('Superieur') for the first time. Several inland waterways within the Ontario Peninsula were also delineated but not identified (FIGURE 1 - this particular example is the Dutch 'piracy' version of 1683). However, several settlements were identified - St. Pierre, St. Francois, St. Michel, St. Joseph, Alexis and so on. Sanson was the Royal Geographer to Louis XIII. Francesco Guisepppe Bressani's map of 1657 ('Novae Franciae Accurata / Delineatio 1657'), also made an attempt to delineate, but did not identify, several major inland watersheds, one of which was likely the Grand

River. The Bressani map also included an inset map of the south shore of Georgian Bay and the Bruce Peninsula, showing the location of Ste-Marie Among the Hurons. Also shown is an engraving of the martyrdom of Brebeuf and Lalement. Sanson and Bressani were among the first cartographers to use descriptions of missionaries and traders, most frequently the Jesuit Relations or annual reports, to update and improve their maps of Canada's interior.

With the exception of Coronelli's map ('PARTIE OCCIDENTALE / du CANADA / ...') first published in c1685, Guillaume del'Isle's 'CARTE / DU CANADA / ...,' (first published in 1703) was the first to show enclosed shorelines of the Great Lakes, and to position them correctly in their geographic relation to one another (Kershaw, 1993). Del'Isle's map of Canada, which evolved through nine separate states over a period of 130 years, is generally considered to be one of the outstanding maps of Canada in the 18th century. FIGURE 2 is the ninth and final state (c1798) of del'Isle's map; notable is the removal of all traces of royalty (crown, fleurs-de-lis, and del'Isle's title of 'Premier Geographe du Roy') as a result of the French revolution,

and establishment of the French republic in 1792.

Jacques-Nicolas Bellin's maps of the Great Lakes ('PARTIE OCCIDENTALE / de la / NOUVELLE FRANCE / ou du / CANADA / ...' - large format, and CARTE DES / LACS DU CANADA / ... - small format), first published in 1744, were among the first larger scale maps of the Ontario Peninsula. Bellin's large format of the map (the 1755 version is shown on the cover and adjacent to the title of this article) is particularly notable because it is believed to be the first to identify the Grand River ('R. d'Urse ou la Grande Riviere'). On this map, Bellin identified Lake Simcoe as 'Lac Toronto' and indicated the location of an indian village ('Tejajagon' or 'Tejaiagon') on the site of Toronto. In 1757, Bellin published the first maps to identify 'Ft. Toronto' in its present location. Refer to FIGURE 3.

Persistent cartographic errors form an intriguing insight, not only into nav-



FIGURE 3 (1757 version of small format)

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*Les Terres pointillées dans ce Supplément sont les Découvertes attribuées à un Amiral Espagnol nommé De Fonte ou De Fuente. Note les avons tracées d'après la Carte de M. Joseph Delisle publiée en 1753, sans cependant les adopter, à moins que dans la suite elles ne deviennent authentiques.*

**FIGURE 4**

igational and mapping accuracy, but also into politics and competition. Some antique map collectors base their collections on such errors. One of the best known examples is 'California as an Island'. However, there were sever-

al prominent and persistent errors in the mapping of Canada as well.

In the early 1740's, for example, Jacques - Nicolas Bellin interpreted the reports of two Jesuit missionaries describing the same two islands in Lake Superior (Isle Royale and Isle Maurepas, now called Michipicoten Island) with sufficient variation that he concluded that there were four larger islands in Lake Superior, and included them in his maps. Refer, for example, to FIGURE 3. The 'phantom' islands were named Isle Philippeaux [Isle Minong] and Isle Pontchartrain. Given Bellin's stature as a cartographer, and particularly as the King's 'First Geographer', other cartographers (Bonne,

Robert Vaugondy, et al) accepted his error without question, and included the phantom islands on their own maps for several decades afterwards.

Another Canadian cartographic error was the 'discoveries' of Admiral de la Fuente in the 1640's. The

Admiral was alleged to have discovered the "Western Sea" ('Mer de l'Ouest') in what is now central British Columbia / Alberta, and at least one north-west passage from the Pacific Ocean, through what is now the Alaska panhandle towards the north-east and on to the Arctic Ocean. De la Fuente's notes were apparently rediscovered in the 1740's. While some cartographers accepted these 'discoveries' with little question, and added them to their maps, others noted the 'discoveries' but questioned their authenticity (Didier Robert de Vaugondy, for example - refer to FIGURE 4). It appears that Admiral de la Fuente was a figment of someone's imagination, since the Spanish government had no record of the Admiral's voyage or even of the Admiral himself!

With the defeat of the French and the signing of the Treaty of Paris in 1763, the British colonization of the Ontario Peninsula's interior, and the active surveying of Townships, was soon to commence.



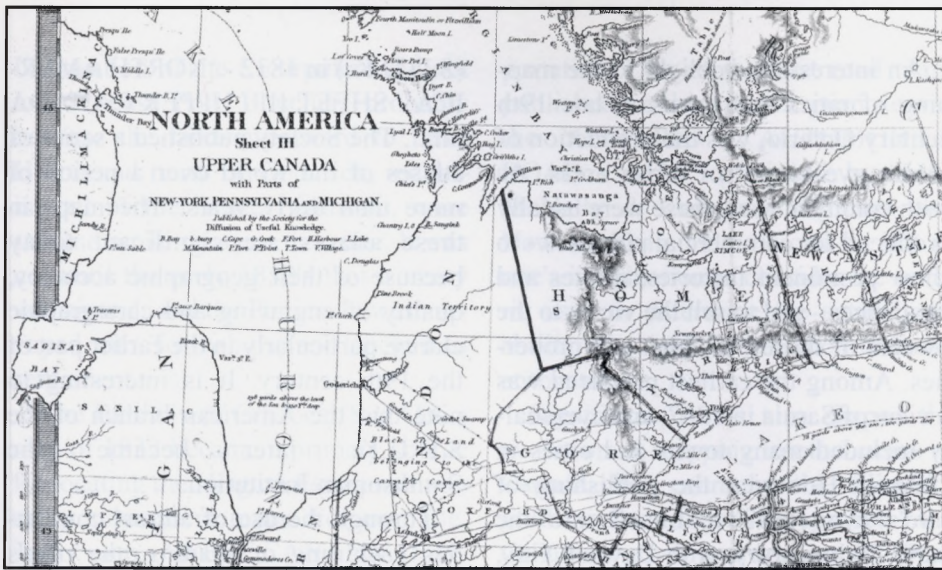


FIGURE 5

### Mapping of the Wellington County Area

The lands comprising Wellington County, as we know it today, were included in the Western and Home Districts of Upper Canada established in 1791, and in the Home District as realigned in 1798. Nichol Township was the first of Wellington's local municipalities to be established (in 1816).

The first plans of townships located in what is now Wellington County were published in 'DIAGRAMS / OF THE / Townships / IN / UPPER CANADA, / SHEWING THE LOTS PURCHASED / FROM HIS MAJESTY'S GOVERNMENT . / BY THE / Canada Company' in 1827 - 28 (Winearls, 1991). Volume II (Home and Western Districts) of this publication identified plans for Erin, Garafraxa (sic), and Eramosa Townships. Also in this 1827 - 28 period, J. McDonald, a surveyor from Guelph, published maps of his completed survey of the lands acquired by the Government from the Chippewa Indians in 1825. These maps included the laid out Townships of Guelph and Nichol, as well as a town plot of Guelph.

The Wellington District was established in 1837. Prior to this, much of the region was included in the Gore District (see FIGURE 5). The County of Wellington itself was established in

1849, but it was 1854 before the present County boundaries were finalized (Morley, 1972). The map of WEST / CANADA by John Tallis & Co., published in 1851, indicates quite clearly the boundaries of Wellington District and Wellington County prior to 1854. (FIGURE 6). These boundaries excluded part of Puslinch Township, but did include Waterloo, Wellesley and Wilmot Townships of today's Waterloo Region; Mornington Township of Perth County; Amaranth, East Luther, East Garafraxa and Melancthon Townships of Dufferin County; and Normanby, Egremont, Proton, Bentinck, Glenelg, Holland, Derby and Sullivan Townships of Grey County to the waters of Owen Sound.

The first map of Wellington County, as the distinct administrative unit we know today, was published in 1855. The 'MAP / of the County of WELLINGTON / Province of Canada West,' was compiled by E.H. Kertland, a civil engineer and land surveyor, printed by Maclear & Co., Lithographers of Toronto (Winearls, 1991). Copies of this map are held in the National Archives of Canada, Archives of Ontario, British Library and the Metropolitan Toronto Reference Library.

The Kertland map identifies the survey grid, gravel and other roads, town plots, taverns, and railways.

Wellington County was fortunate to have had two separate County atlases published; the time span of almost thirty years (1877 and 1906) between them, provides an opportunity to compare development in the County during the period. County atlases were produced primarily for commercial purposes - to identify factories, offices, residences and land holdings of subscribers, and to provide space to advertisers.

The first Wellington County atlas, "Topographical and Historical Atlas of the County of Wellington, Ontario, ..." was published by Walker & Miles of Toronto in 1877. In addition to a map of the entire County, maps of all the Townships, and plans of ten towns and villages, were included in the atlas. Amaranth, East Luther and East Garafraxa Townships were still depicted as part of Wellington County in this atlas. The Township maps and plans are significant since many identify property owners for both the rural and urban lots. The division of farm land among subsequent generations of orig-



FIGURE 6 (entire map shown on page 31)



inal or early land owners can frequently be inferred if not substantiated by reviewing these maps.

The 1906 Wellington County atlas, "Historical Atlas of the County of Wellington, Ontario" was published by the Historical Atlas Publishing Co. of Toronto, and is considered by some to be superior to Walker & Miles' 1877 version (Morley, 1972). Certainly the seventy-one page 'Historical Sketch' was more comprehensive than the previous version. In addition, a total of thirty-four plans of villages, towns and the City of Guelph were included in this later version. Both versions were reprinted in 1972, but even the reprints are now quite expensive. It is interesting to note that a number of 'national' atlases (for example, the "Illustrated Atlas of the Dominion of Canada", published by both Belden and Parsell in 1881) were 'customized' for increased sales regionally by including maps of specific counties and townships.

An interesting sidelight to the mapping of cities and towns in late 19th century Ontario, was the production of 'bird's eye views' of urban areas. As with county atlases, these were usually produced for commercial purposes - to show prominent factories, offices and residences - and to sell the views to the owners of those buildings and properties. Among the earliest produced was a view of Sarnia in 1867, and eventually included many towns and cities in Ontario. However, the publishing of bird's eye views continued into the early 20th century, with Dawson City, Yukon, in 1902.

### **Mapping of the Niagara Escarpment**

Among the first printed maps to more or less correctly delineate the Niagara Escarpment as a major topographic feature was one published by Baldwin & Cradock of London for the Society for the Diffusion of Useful Knowledge

(S.D.U.K.) in 1832 - 'NORTH AMERICA / SHEET III / UPPER CANADA / ...'. The Society published a series of atlases of the world over a period of more than thirty years. The maps in these atlases are significant today because of their geographic accuracy, quality of engraving and cartographic clarity, particularly in the earlier part of the 19th century. It is interesting to note that the American branch of the S.D.U.K. later became the Smithsonian Institution.

Through the use of almost continuous hachuring or shading, the map's engravers (J. & C. Walker) identified but did not name the Escarpment from Grimsby westwards to Hamilton, and then northwards to Port Boucher on Natawasauga (sic) Bay. FIGURE 5 shows the Niagara Escarpment and also clearly indicates the name of the Blue Mountains and the line of hills (Oak Ridges Moraine) running perpendicular to the Escarpment and meeting it near the source of the Credit River.



Delineation of the Escarpment did not extend past Port Boucher, probably because the lands westward to Lake Huron and north of Goderich, including all of the Bruce Peninsula, were still Indian Territory at this time. It was not until the early 1850's that a treaty was signed, and the Peninsula was surveyed into Townships, and opened to settlement.

The Baldwin & Cradock (S.D.U.K.) map of 1832 became a primary source for locating the Niagara Escarpment on many subsequent maps. For example, Tallis' map - 'WEST CANADA' (FIGURE 6), published in several atlases in the 1850's and 1860's faithfully rendered the S.D.U.K. shading of the Escarpment and Oak Ridges Moraine, albeit at a smaller scale. Tallis maps are, however, notable for being among the last highly decorative engraved maps, and for their pictorial vignettes such as the 'Falls of Niagara'.

The evolution of mapping in Ontario forged ahead as the automobile became an established mode of trans-

portation. One of the first road maps published for this specific purpose was the 'ONTARIO / AUTOMOBILE ROAD / MAP' produced by Rand McNally & Company (Chicago and New York) in 1918. It can be left to one's imagination to consider the criteria used to determine the actual suitability of a road for automobile travel at this time.

Significant events also shaped the evolution of mapping in other areas of Canada. For example, the Klondike gold rush of 1898 spurred the Canadian government to survey both international and territorial boundaries in order to prevent American incursions into Canadian territory. One such map (FIGURE 7 - detail) indicates the major trails from the Pacific tidewater (Skagway, Dyea and Haines Mission) towards Dawson City - the Chilcoat, White Pass and Dalton Trails. While the international boundary is somewhat ephemeral (only a provisional boundary point at the summit of the White Pass is indicated), the primary territorial boundary, the 60th parallel

of latitude, is delineated by almost one hundred survey monuments erected by Arthur Saint Cyr, D.L.S. and George White - Fraser, D.T.S. The map was prepared by the Topographical Surveys Branch of the Department of the Interior in 1900, and is signed by E. Deville, Surveyor General.

It is likely that this map was also used to advance the Canadian case during the Alaska Boundary dispute, which was settled (to Canada's disadvantage, as a result of the British representative siding with the United States) in 1903. While many surveys were undertaken, the definition of the boundary had originally relied on the verbal descriptions of explorers, traders and missionaries. The boundary was still in a considerable state of flux when the Russian Empire sold Alaska to the United States in 1867. The discovery of gold in the Klondike, and the desire to control access to the interior, made accurate determination of the international boundary a priority.

Teddy Roosevelt's famous 1901 statement, "Speak softly and carry a

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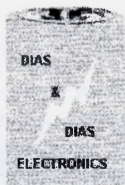
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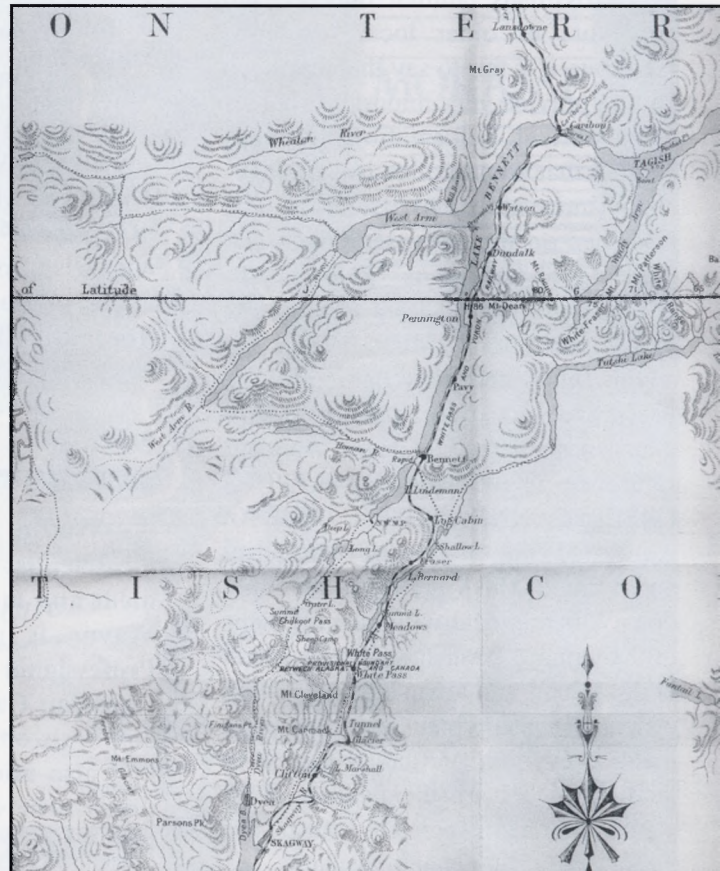


FIGURE 7



big stick,” was made, at least in part, as a veiled threat that, if the negotiations for the finalization of the Alaska - Canada boundary did not go in favour of the United States, invasion might not be out of the question.

## Conclusions

The evolution of mapping for any region provides interesting insights into the exploration and development of that area. As explorers pushed into Ontario's interior, rivers, lakes and shorelines were delineated. As municipalities were surveyed in preparation for settlement, town plots were also established. Villages grew and flourished, and sometimes disappeared with little trace. For example, Wellington County is no exception. Among the villages in Wellington County identified as late as 1918 were Corwhin, Gourock, Living Spring, Dracon, Conn, Farewell, Goldstone, Wyandot, Lebanon, Derrynane, Hollen, Mosborough, Stirton and Egerton. Little remains of these except, perhaps, as a crossroads familiar only to land surveyors or older local residents. However, it is fair to say that maps can and do provide very important sources of historical information; perhaps sources that are too often overlooked.

An interesting and useful general reference on the early settlement and mapping of Ontario is “THE SHAPING OF ONTARIO from Exploration to Confederation” (Mika, 1985). For anyone interested more particularly in the provenance of maps, surveys or plans in southern Ontario, a standard reference is Winearls' “MAPPING UPPER CANADA 1780 - 1867: An Annotated Bibliography of Manuscript and Printed Maps” (1991). Not only does Winearls deal with general maps of the Ontario Peninsula, but also with cities, towns, and townships (including official Township plans based on original surveys). Of particular interest to land surveyors are the listings of all subdivision plans registered during the period, and official nautical charts of the Great Lakes shorelines.



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