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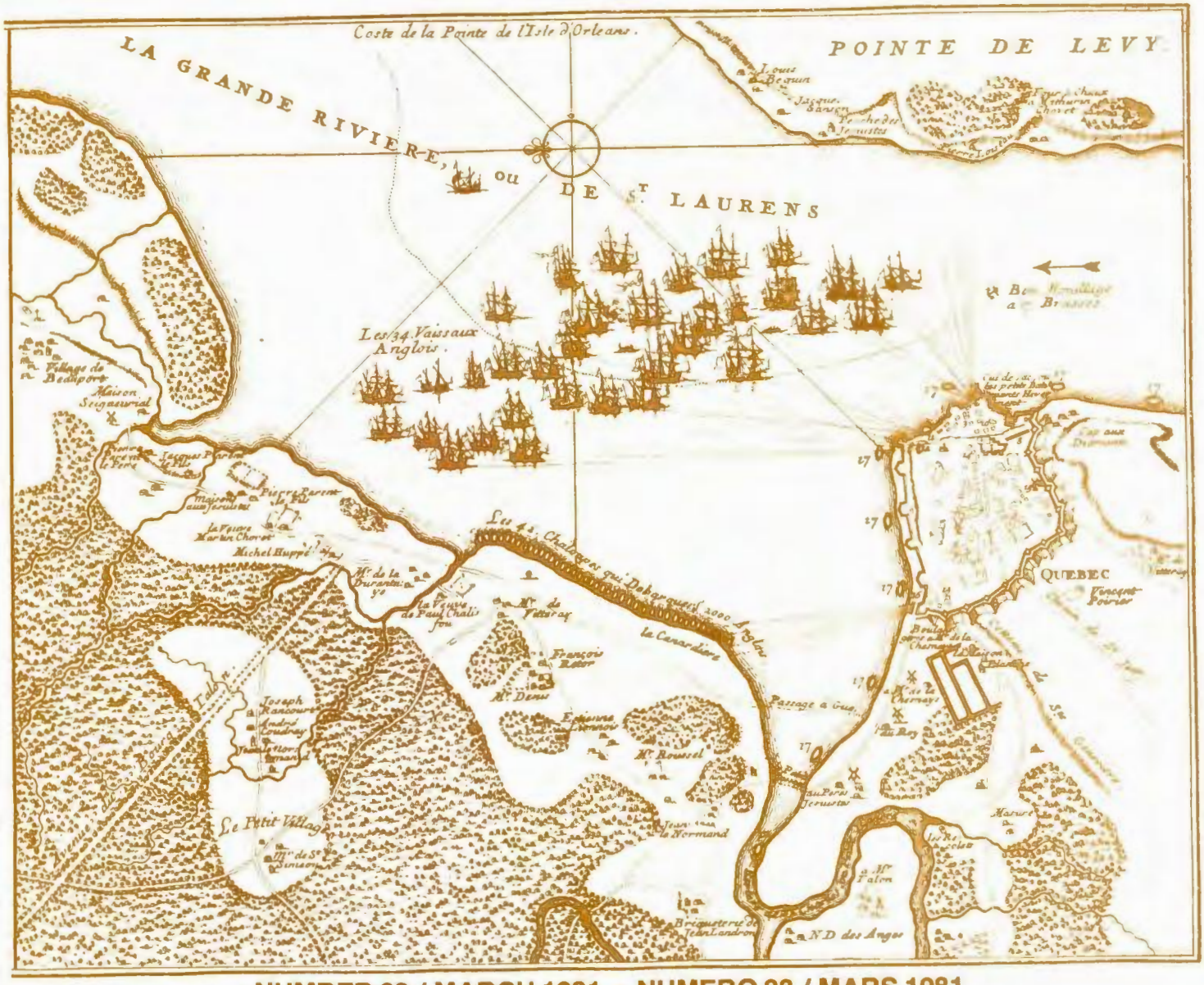
ASSOCIATION OF CANADIAN MAP LIBRARIES

BULLETIN

ASSOCIATION DES CARTOTHEQUES CANADIENNES



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ASSOCIATION OF CANADIAN MAP LIBRARIES

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Views expressed in the Bulletin are those of the contributors and do not necessarily reflect the views of the Association.

ASSOCIATION DES CARTOTHEQUES CANADIENNES

Peuvent devenir MEMBRES de l'Association des cartothèques canadiennes tout individu et toute institution qui s'intéressent aux cartes ainsi qu'aux objectifs de l'Association. La cotisation annuelle est la suivante:

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Le Bulletin, journal officiel de l'Association, est publié trimestriellement.

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

COVER/COUVERTURE

This map shows the Phips attack on Quebec in 1690. Nicolas de Fer, Paris, 1694. The map has been reproduced as Facsimile Map No. 69 by the ACML and is available from the Association for $3.00.

La carte a été reproduite en fac-similé (carte no 69) par l'ACC et est disponsible de l'Association au coût de $3.00.

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[a]Papers presented at the 14th Annual Conference, Edmonton, 1980.

BULLETIN STAFF/COLLABORATEURS

REPORT FROM THE PRESIDENT

The Board met informally after the Annual Business Meeting on June 26, 1980 in Edmonton, and then again on October 24, 1980 in Montreal and in Ottawa on April 14, 1981. At the June meeting the Board reviewed activities of the past year and discussed plans for the Halifax Conference. A report of the October meeting is included in this Bulletin. The April meeting was called to discuss the Guide for a Small Map Collection, and final approval to print this publication was given. We are hoping it will be available at the Halifax Conference.

Other activities of the Board included sending a letter to the Hon. Francis Fox, Secretary of State, on July 30, 1980, strongly rejecting the recommendations included in the report The Future of the National Library of Canada (Ottawa: NLC, 1979). We received a favourable acknowledgement to our letter on October 9, 1980.

Then on October 9 and 10 Serge Sauer went to Ann Arbor, Michigan, to represent the ACML at a meeting of SLA Geography and Map Division, Committee on Standards.

Early in November the Directory of Canadian Map Collections (4th edition) was published. Thanks are in order to Serge Sauer for preparing the cover artwork, but we are sorry that the printer did such a disappointing printing job on the cover.

In January 1981 a Nominations and Elections Committee was appointed, with Kate Donkin as Chairman and Mary Armstrong and Olga Slachta as members. The results of the current Board elections will be tabulated by the committee and announced at the Annual Business Meeting in Halifax.

In March 1981 printing of the Bulletin was moved from Ottawa to Waterloo. This will result in a substantial financial savings to the Association and will free the NMC from a lifetime mailing job! In April the Bulletin Editor was replaced, and also the Secretary of the Board.

During the week of April 27 to May 1 the Anglo American Cataloguing Committee for Cartographic Materials held its final meeting at the Library of Congress in Washington, D.C. The ACML was represented by Pierre Lépine and Joan Winearls. The Manual which has been prepared by this group will be published by the American Library Association late in 1981.

This brief report summarizes the activities of the Association for 1980/81. I look forward to seeing you at the Halifax Conference and will be pleased to discuss further any of the topics touched upon here.

Lorraine Dubreuil
President, ACML

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EXPLORATION AND SURVEY OF THE KOOTENAY DISTRICT 1800-1918

Frances M. Woodward
Historical Map Collection
Special Collections Division
University of British Columbia Library

Paper presented at the
14th Annual Conference,
Edmonton, 1980.

The aim of this paper is two-fold: first, to encourage map librarians to take a good look at maps and map catalogues from the point of view of a user; and second, to encourage the compilation of cartobibliographies. In order to fulfil this aim, several questions must be answered for each map. Why was this map made? What does it actually show? For what purposes might it be used, either when it was made or today? When using a map catalogue, is it possible to identify with certainty a particular map? Can that same map be identified with equal certainty in the catalogues of other collections? Is it possible to determine what map collections hold a specific map?

As a case study we will look at the exploration and survey of the Kootenay District of British Columbia between 1800 and 1918 as shown by the cartographical record of that period.

This project began as an essay for a course in Historical Geography. The first problem was to determine what maps had been made showing the Kootenay District. A search was made first of the University of British Columbia map collections, then the Provincial Archives before turning to the published catalogues of the National Map Collection, the Bancroft Library, British Library, etc., for maps up to 1918. A number of problems were encountered with inadequate information being given in catalogues; for example, an entry may have the same title, date, etc., but the cartographer or engraver are not named. Is this a different edition of the map, or did the cataloguer forget to record the names? If a map is listed as undated, can one assume, if all else is the same, that it is another edition of a map which clearly has a date?

The next step was to examine as many of the maps as possible. After a visit to Victoria some problems were sorted out, leaving others to be resolved by correspondence with, and some photocopies from, other institutions further away. It was then determined that there were over 200 maps of the whole or large parts of the Kootenay District (excluding city and fire insurance plans) held in seven different institutions. A few more maps have been found since the initial search.

Once the cartobibliography was compiled the maps were sorted by type, and studied from the point of view of the cartographer's background, skill, purpose in making the map, success in achieving his goal, the significance of the map in the cartography of the District, the development of geographical knowledge and technology, and the relationship to the country and the world at large. A selection was then made of the maps to illustrate all of this.

The Kootenay District, in the southeastern corner of British Columbia, is a long wedge-shaped area consisting basically of two connected rivers in narrow valleys, surrounding an island of mountains, bounded by mountains. It is the source of the Columbia River, one of the major river systems in North America. Much of the early exploration of this region is a search for routes, both over

the mountains and down the rivers, first south to the mouth of the Columbia, and later to the mouth of the Fraser River.

Once settlement began, it became increasingly important to know what was under the surface of the earth, both for mining and for agriculture, and geological mapping was begun. The railway brought in miners and settlers, and in the 1890s there was a mining boom in the southern Kootenays which created a flurry of surveying and mapping activity. More geological surveys were required, and both federal and provincial governments had parties in the field. Prospectors and developers wanted to know where the mining areas were, and where the claims had been staked. To meet the demand, a more sophisticated version of the "gold rush" guide map was produced, mainly by skilled civil or mining engineers and land surveyors, and some of the maps were bought and distributed by the provincial government, which could not meet the demand with its own resources.

The mining boom created other problems in mapping. Mining claims had to be filed, new towns were being created, settlers were taking to the land, and records had to be kept. As British Columbia has no counties (except for judicial purposes) the province is divided into a variety of administrative districts, with the land district being the most important as it was the earliest and most stable. The Kootenay District is a land district, often divided into two sub-districts or divisions, East and West Kootenay. To cope with the mass of mining claims and the need for speed in registering them, smaller mining districts were established, with a number of recording offices located in even smaller sub-districts or divisions. The mining districts and divisions changed as the pattern of mining changed. All of these districts and boundaries had to be publicised, and a number of maps were issued depicting the various administrative districts.

The mining boom drew more railways to the Kootenay District. Some of the railways received land grants from the provincial government, as the C.P.R. had earlier from the federal. The demand for agricultural and timber lands grew, and the provincial government began printing copies of the reference maps in the Surveys Branch, which showed surveyed lands. Maps were published to show railway grants, farms, Indian reserves, etc.

In 1914 the mining boom was over. World War I broke out, and many things changed. The topography of the Kootenay District was fairly well known. Much of the manpower had gone overseas, and those left behind were doing essential jobs. The mines required to support the war economy continued to operate, and most of the surveying done was concentrated in the mining areas.

The year before the War saw the International Geological Congress held in Canada, and tours were arranged by rail across the country. The Geological Survey of Canada spent much of the previous year in preparing guides for the tours, in addition to their regular duties. New surveys were made, but much thought was given to the meaning of what was found. It was a time for reflection, and provided a milestone in the geological survey of Canada. Both the north and south Kootenays were covered, and such questions as the origins of the Cordillera were considered, thus the work prepared for the Congress forms a milestone in the survey of the Kootenay District.

The first record of white men in southern British Columbia is the crossing of Howse Pass into Kootenay District by David Thompson's men, La Gassi and Le

Blanc in 1800. Little is known of these men or their activities in the Kootenays on this trip. Another of his men made the crossing in 1806, to be followed by Thompson himself that winter. Thompson was a wintering partner in the North West Company in search of new fur trade areas, and ultimately a route to the Pacific Ocean. In 1810 the fur trade brought Joseph Howse of the rival Hudson's Bay Company across the same pass on a similar mission. The following year Thompson found a new route over Athabasca Pass, which became the main fur trade route across the Rocky Mountains, and journeyed to the mouth of the Columbia River, completing his mission.

Thompson kept a detailed journal of his many observations about the country, the flora and fauna, and the people he encountered in his explorations, as well as making sketches and maps which were not published until a century later. Thompson had travelled the length of the Columbia River and explored some of its main tributaries, establishing the communication route from the Oregon Territory to the fur trade districts east of the mountains, and the headquarters in the east.

Thompson was born 30 April 1770 in London of Welsh parents. His father died in 1772, and at the age of seven, Thompson entered the Grey Coat School, a charity school near Westminster Abbey, where he was "taught mathematics in preparation for entering the navy".[1] In 1783, however, naval recruitment was cut, and Thompson was articled to the Hudson's Bay Company for seven years apprenticeship. In the fall of that year, at the age of fourteen, he was sent to Churchill Factory. He became the pupil of "Philip Turnor, the first scientific surveyor in the Canadian West, and a master of his trade,"[2] in 1790, and seven years later he left the Company and joined the North West Company. From 1807 to 1812 he explored, mapped and established trade in the Oregon country. From 1816 to 1826 he was a surveyor with the International Boundary Commission along the Ontario section, then entered private practice. He perfected versions of his Oregon maps in 1843 for the British government, which paid him £150 and turned the maps over to the Arrowsmith firm. From 1846 to 1850 Thompson worked on his "Travels", based on his journals, which are full of astronomical observations and calculations, directions and distances of traverses, observations on topography, geology, vegetation and animal life, daily meteorological notes, and information on people. He had to stop work as his bad eyesight and poor health worsened, and in 1857 he died. His "Travels" and his now famous map were not published until 1916, when J.B. Tyrrell, formerly with the Geological Survey of Canada, edited them for the Champlain Society.

One map which Thompson made for the North West Company occupied a prominent place in the Company's headquarters at Fort William. Copies of this map, which contained the mythical Caledonia River, were used by various mapmakers from a political pamphlet of 1817[3] to a Japanese map of 1854.[4] Thompson had heard stories from the Indians which led him to depict a river west of the Okanagan which flowed south and entered Puget Sound. This river does not appear on the map published by Tyrrell, nor on the 1843 maps. This North West Company map, with Caledonia River soon deleted, became the basis for maps by the Hudson's Bay Company's cartographer in London, John Arrowsmith.

On the map published with his "Travels," Map of the North-West Territory of the province of Canada from actual survey during the years 1792 to 1812: this map made for the North West Company in 1813 and 1814 and delivered to the Honorable William McGillivray then agent embraces the region lying between 45 and 65 degrees north latitude and 84 and 124 degrees west longitude comprising

the surveys and discoveries of 20 years namely the discovery and survey of the Oregon Territory to the Pacific Ocean the survey of the Athabasca Lake, Slave River and Lake from which flows Mackenzies River to the Arctic Sea by Mr. Philip Turnor the route of Sir Alexander Mackenzie in 1792 down part of Frasers River together with the survey of this river to the Pacific Ocean by the late John Stewart of the North West Company by David Thompson astronomer and surveyor [sgd] David Thompson, Thompson is concerned with portraying the country as accurately as possible. He shows the rivers, indicating their direction, tributaries, unnavigable sections and carrying places. He gives their Indian names, and marks the Indian territories. His "N.W.Co." posts are located, and well-established trails, such as the Kootenay Road, are marked. Places where he took observations are marked "obs." The height of land is shown, and the most distinctive features, the mountain ranges, which Thompson depicts in an old "hairy caterpillar" style.

His 1843 map, A map of the Oregon Territory by David Thompson from his surveys of the Rocky Mountains and to the Pacific Ocean British Dominions / United States, shows the area from the Rockies west on a larger scale, with additional notations. The width of rivers is indicated, and the character of some river banks is noted, such as, "all high rocks". More trails are shown, and variations in mountain heights are indicated by notes such as, "very high hills". At the south end of the Arrow Lakes, on the east side, are "painted rocks". An untitled map of western Canada in 1843 covers almost the same area as the 1813/14 map, and had additions and notes similar to those on the Oregon map. Some mountain peaks, such as Mount Nelson, are named, and woods and plains are indicated. A third manuscript map, simply entitled The Oregon Territory, shows a similar area. All three maps are in the British Library Manuscript Division.

Thompson said, after his arrival at Fort Astoria in July 1811,

> Thus I have fully completed the survey of this part of North America from sea to sea, and by almost innumerable Observations have determined the positions of the Mountains, Lakes and Rivers, and other remarkable places of the northern part of this Continent; the Maps of all of which have been drawn, and laid down in geographical position, being now the work of twenty seven years.[5]

Many fur traders passed through the Kootenay District in the following years until the establishment of the border in 1846, some of whom kept journals, such as Alexander Ross, Ross Cox, Gabriel Franchere, and the energetic governor Sir George Simpson, who published a narrative which included descriptions of the Kootenay country. Few, however, seem to have drawn maps. Alexander Ross drew a map of the Columbia River Basin in September 1821. Ross was born in Scotland in 1783, came to Glengarry, Upper Canada in 1805, founded Fort Astoria on the Columbia River in 1810 for the Pacific Fur Company, remained through the amalgamations, first with the North West Company in 1813, then the Hudson's Bay Company in 1821, finally retiring to Red River in 1825, where he became Sheriff of Assiniboia. He was a member of the Council of Assiniboia, 1835-1850, and wrote several books based on his experiences. On August 1st, 1849, he extended and annotated his map of the Columbia, stating that: "It is a matter of surprise, that a country so long in possession of the whites, as the Oregon has been, that the map of the Columbia R. should be still so incorrect".[6] On his map Ross shows rivers, lakes, falls, trails, forts, Indian settlements and territories, giving wherever possible the original

Indian names. He states that "the names of the respective tribes are also the names of the rivers they live on". Two significant routes shown are the "Long Portage" and "Alexr. Ross's Route 1816". His interest in social history is shown by his many historical notes, ranging from the dates of founding of forts to sites of battles, and deaths by drowning and murder.

Some of the most interesting maps of the Kootenays, perhaps because they are quite unlike the rest, are those of Father De Smet. Pierre-Jean De Smet was born in the diocese of Ghent, Belgium, January 30, 1802, the son of "a merchant of considerable means".[7] His early education was at home, and in various colleges, and at nineteen he entered the Petit Seminaire at Mechlin. In August 1821 he sailed for the United States, where he entered the noviciate at White Marsh, a Jesuit estate near Baltimore. In 1823 he was transferred to Florissant near St. Louis, where he was ordained September 23, 1827. He was a prefect at St. Regis Seminary, a school for Indian boys, 1824-1830, and was treasurer of what became St. Louis University. Much of the rest of his life alternated between his missionary work and trips to Europe seeking funds. His first trip west was 1840-1842. In 1844 he returned via Cape Horn, arriving at the Columbia River on July 31. From August 1845 to June 1846 (when he met Warre and Vavasour twice crossing the Kootenays) he journeyed among the Blackfoot, then returned to St. Louis. From 1851 to 1870 he was in the Upper Missouri assisting the United States Government with Indian treaties. In 1851 he presented a map of a large portion of western North America to Col. D.D. Mitchell of the U.S. Department of the Interior,[8] and in 1859 the U.S. Army published two of his maps.[9]

In 1845 en route to the Blackfoot country Father De Smet came across a Hudson's Bay Company brigade heading for Fort Vancouver with Lieutenants Henry James Warre and Mervin Vavasour. Warre and De Smet had a lengthy conversation with considerable information exchanged on both sides. De Smet showed Warre some of his "drawings and likenesses of Indians"[10] along with "a map of the country drawn by himself, from Indian information, which he said would prove to be more accurate than those in use at that time."[11] This map may have been the one later redrawn and published with De Smet's Oregon Missions in 1847.

In a letter to Col. Mitchell dated July 1, 1857, De Smet said of his map making

> During the ten years I spent in the Indian country I occupied myself occasionally in drawing maps of the countries through which I passed. I availed myself of the best information I could obtain from trappers and intelligent Indians who were acquainted with the mountain passes and the course of the rivers. Not having had instruments with me, the maps were necessarily only an approximation to the true position.[12]

De Smet's maps are reminiscent of a mediaeval style. His main interests are the native people and how to reach them, which then meant travel by rivers and lakes. He shows the various missions, Indian villages and forts, and notes the number of "souls baptised" at some of the Indian missions he visited or established. Some maps show trails as dotted lines, others show only his route. Occasionally minerals and rock formations are shown, such as "Fe minerale" on a map showing Demers' missionary work in 1842-1843, but mountains are rather vague. The Rocky Mountains are named "Montagnee rocheuses" on the Demers map, but two manuscript maps in 1846 show them as two parallel lines, which are altered to resemble a "hairy caterpillar" on the published map of 1847. Some

prominent peaks are named. The Slocan River is shown. De Smet's symbols are often pictorial, such as a church or a cross for a mission. The maps of the sources of the Columbia, and of the Flathead, published in the Belgian edition of Oregon Missions have pictorial relief, which Wheat described as "curious drawings of mountains, with great pyramids and castellated peaks".[13]

Among the travellers who accompanied Hudson's Bay brigades through the Kootenay District between 1840 and the establishment of the boundary in 1846 were the "spies" Warre and Vavasour. Lieutenants Henry James Warre, 14th Regiment, and Mervin Vavasour, Royal Engineer, were on a secret mission, sent by the British Government at the instigation of Sir George Simpson of the Hudson's Bay Company, to determine the actual state of affairs in Oregon Territory and the possibilities for defence if war should break out with the Americans. They were to "proceed as private travellers",[14] but the government was anxious for information as soon as possible, and Simpson, for whom travel was a challenge to be overcome with the greatest possible speed, and in this case a demonstration to the British government of the ease in which troops could be transported overland in the defence of Oregon, had suggested a date for their arrival in Fort Vancouver. Although many observations of the country are made in their official report, and more in Warre's private journals and memoirs, their main interest was the feasibility of the transport of troops, and their goal was Oregon Territory. Warre's sketches and watercolours fitted in well with their guise of travellers, but map making was kept to a minimum, both in numbers and in detail. They were instructed

> To save time and trouble much pains need not be spent in the preparation of drawings, outline sketches will suffice for illustrating your views, but the scale, compass bearings and peculiarities of site must be particularly shown.[15]

Warre and Vavasour, and those responsible for their mission, seem to have been unaware of the maps made by Thompson and Ross, or for some reason chose to ignore them. Warre and Vavaour show little beyond the routes taken on their general maps.

Although A.C. Anderson's final map of 1867, Map of a portion of the colony of British Columbia, compiled from various sources, including original notes from personal explorations between the years 1832 and 1851, by Alex. C. Anderson, 23rd May 1867, does not strictly belong to this period, his earlier maps do, and this map was based on his earlier work. Alexander Caulfield Anderson was born in Calcutta in 1814, educated in England, and joined the Hudson's Bay Company as a clerk in 1831. After a year in Montreal, he went to Fort Vancouver and was with the parties which established the posts in Milbank Sound and on the Stikine. From 1835 to 1839 he was at Fort George and Fraser Lake in New Caledonia, then was in charge of Fort Nisqually until 1841 when he went to Fort Alexandria. In 1846 and 1847 he explored various routes to Fort Langley. In 1848 he went to Fort Colvile, and from 1851 to his retirement in 1854 he was at Fort Vancouver. In 1858 he went to Victoria to enquire into the gold discoveries on the Fraser, and was recruited by Governor Douglas. The same year he explored the Harrison-Lillooet route. In 1876-1878 he was one of the commissioners to settle Indian land differences. His Map, and his history of the Northwest Coast were compiled in 1867 from the various sketches and notes he had made since his arrival on the Pacific Coast. H.H. Bancroft made use of Anderson's history in compiling his own histories. The Map is believed to

have been exhibited at a fair, possibly the Centennial Exhibition at Philadelphia. Anderson died in Victoria in 1884.

Anderson made use of the latest government surveys as well as his own and other surveys in compiling his Map. The Kootenay portion was based on his Sketch of the Upper Columbia &c Colvile to Jasper's House 1842 and other years; N.B. as [?] copied from the fragments of my old maps 1st Feby. 1866, but probably includes information from the first season of the Columbia River Exploration as well. The Sketch shows the mountain ranges, rivers and routes around the Big Bend gold fields, and gives the distance to Ogden City. The Map shows mountains, rivers, lakes, trails, settlements, and telegraph lines. A.L. Farley calls the Map

> a remarkable achievement .... The innumerable statements and explanatory notes alone provide a valuable summary of geographic knowledge at the time, ... a culmination of the cartographic accomplishments attributable to the fur-trade in British Columbia ... [with] liberal additions to knowledge of the country as a result of mining activities, and as a result of official explorations and surveys undertaken up to 1866.[16]

but the Kootenay-Columbia drainage was not as accurate as that of Thompson's Map, and in some respects the maps of De Smet.

By 1857 the Columbia-Kootenay circuit was known, plus the routes to four passes through the Rockies: Athabasca, Howse, Simpson, and White Man, and trails from the Kootenay River and the Arrow Lakes to the fur trade forts south of the border. This was the extent of the geographical knowledge retained from the efforts of the fur traders and travellers in the Kootenays. Except for two southern passes, little new knowledge had been gained since Thompson, and much of his precise knowledge has been lost.

In general, the exploration and mapping from 1800 to 1867 was done by amateurs with no formal training. Although Warre and Vavasour had formal training, they were in a hurry to reach their destination, and their map shows little beyond the routes taken. The notable exception was David Thompson, who had been apprenticed to Turnor, and was a gifted observor in many fields. Each of these map makers had a variety of interests, including natural history, people, and curiosity about new country, and map making is a graphic example of the variety of interests. In each case, with the exception of Anderson's 1867 Map, the map was made by one person, and is a product of that person.

Among the travellers on the American plains in the 1840s were a number of young English and Irish gentlemen who enjoyed the sport of buffalo hunting. One of these gentlemen was John Palliser, whose Solitary Rambles and Adventures of a Hunter in the Prairies was published in 1853. In 1856 he decided that

> failing any sign of official interest in the matter, he would constitute himself a one-man expedition to explore the British prairies to the north of the border and to find out whether there were practicable passes for a route through the wall of mountains at the western extremity and on to the Pacific.[17]

On November 24, 1856, he was elected to the Royal Geographical Society, and put

his plan before the Society, which agreed to the proposal but insisted that it must be a scientific expedition led by Palliser. The Colonial Office took interest in the expedition, and offered £5000 for two seasons, providing the Colonial Office had control. An additional £1500 was granted February 17, 1858 at Palliser's request, for a third season.[18]

On May 16, 1857, the Palliser Expedition, officially the British North American Exploring Expedition, composed of John Palliser, in charge, James Hector, geologist-naturalist-medical man, John W. Sullivan, astronomical observor-secretary, Lt. Thomas Blakiston, R.A., magnetical observor, and Eugene Bourgeau, botanical collector. Lt. Blakiston went by water with his instruments, to meet the others at Fort Carlton, their intended winter quarters. In the next few years the Expedition worked its way west across the prairies and mountains into British Columbia, and the reports and maps were published by the British government in 1858, 1860 and 1863, with the final map appearing in 1865.

In 1858 the expedition was divided into small parties (partly to separate Blakiston from the others, with whom he had been quarrelling), with Palliser and Sullivan exploring the eastern flank of the mountains south of the Bow, and Hector crossing Vermilion Pass to the upper Kootenay and north to Kicking Horse Pass (where he had his famous accident, from which the river and pass were named), then east across the pass and north up the Bow to cross Bow Pass. After a final quarrel with Palliser, Blakiston explored the North and South Kootenay Passes and returned to Edmonton. Palliser crossed into the Kootenays by the North Kananaskis Pass and returned by North Kootenay Pass. The following summer Palliser and Sullivan again crossed North Kootenay Pass and explored the southern Kootenays for a route to the coast within British territory, going as far as the American Boundary Commission camp near Midway. As the boundary surveyors and Lt. Palmer, R.E., had covered the country to the north and west, Palliser ended his exploration here. Hector crossed Howse Pass and travelled up the Columbia, then followed the Hudson's Bay Company route to Fort Colvile, where he met Palliser and Sullivan, and started for the coast and home.

Irene Spry has summarized the work of the Expedition, stating

> the explorers have achieved a knowledge in depth of the country that had not been contemplated in the original plan and which laid the foundation for the Expedition's comprehensive summing up of the character of the whole enormous sweep of plain between the Red River and the Rockies as far north as the Athabasca. Moreover they had crossed the Rockies, not just by one southern British pass, but by six.
>
> Moreover, ... the Expedition's observations were recorded in detail and published.[19]
>
> Perhaps the most important addition made by the Expedition to an understanding of the geographic features of British North America was that, besides defining its six passes, it mapped the southern mountains for the first time with some degree of accuracy ... the basic structure of the Rocky Mountains south of the Athabasca Pass was made clear. As well, the importance of the mountain masses to the west of the upper Kootenay and Columbia River systems was established.[20]

Two maps extending into British Columbia appeared with the Palliser Expedition's Further Papers in 1860, and a general map illustrating the route appeared in the Royal Geographical Society's Journal the same year, but the final map was not produced until 1865. Because the Arrowsmith firm was taking too long, the British government asked Stanford's to complete the map, with the result that it is very difficult to determine what information comes from the Expedition, and what was added by one or the other of the publishers from other sources.

The Sketch map showing the routes of Captn Palliser & Mr. Sullivan during 1859, drawn by Sullivan, shows the area along the border from Kootenay River to Boundary Camp No. 12, showing routes, trails, camps, mountains, and notes on navigation, and is the second map to show the Slocan River, the first to so name it (spelled Shlocan). Hector's Saskatchewan Rivers & Rocky Mountains shows the various summer and winter routes 1858-1860, with Indian settlements and territories, glaciers, and topographical notes, and a geological section at the bottom. Much of the Columbia's Big Bend and Arrow Lakes are shown by dotted lines. The final map was beautifully executed, with notes on terrain, mineralization, flora and fauna, and expedition routes, but, except for the Rockies, British Columbia lacks the detail and precision of the remainder of the map, although it is the most accurate of Kootenay District since Thompson's.

At the same time as the Palliser Expedition was working its way west towards the Rockies, the British and American boundary surveyors were working east along the 49th parallel, which had been accepted as the boundary in 1846. Although the first Article of the Treaty called for a survey to locate the actual boundary, nothing was done until 1856 when Congress authorized the appointment of a Commission. The American Northwest Boundary Commission began surveying at Point Roberts in 1857. The British North American Boundary Commission was divided into a Water Boundary Commission under Captain J.C. Prevost, R.N., and a Land Boundary Commission under Captain J.W. Hawkins, R.E., with six officers and 56 non-commissioned officers and men of the Royal Engineers. The survey was completed in the fall of 1862 when the crest of the Rockies was reached. The British Commission returned to Victoria before leaving for England.

Information was exchanged between the Palliser Expedition, the Boundary surveyors, and the Royal Engineers of the Columbia Detachment under Col. R. C. Moody, stationed at New Westminster.

The British North American Land Boundary Commission returned to London in 1862, and work continued towards the preparation of the final atlas, which was produced in 1869. Following a meeting of the Joint Commission in Washington, revisions were made, and the final atlas was released in June 1871, with the imprint "Photozincographed at the Ordnance Survey Office, Southampton, under the superintendence of Capt. Parsons, R.E., F.R.A.S.: Col. Sir Henry James, R.E., F.R.S., etc., director, 1869." Lt. C.W. Wilson, who had been with the Commission in British Columbia, was suggested by Hawkins as the logical person to make the required corrections to the maps. Wilson, by this time a captain, was director of the Topographic Depot of the War Office, under Col. James.

Five copies of the British atlas were planned (one each for the United States and British Columbia governments, and three to be retained in London, by the Colonial Office, the Foreign Office, and the Topographic Depot of the War Office),

but it is now uncertain how many copies were produced and what became of them. One copy was delivered to Washington, June 23, 1871, and is now in the National Archives (R.G. 76). The Public Record Office has Hawkins' original atlas from the Foreign Office, with what appears to be a bound set of working maps, and one copy of the final bound atlas from the Colonial Office Library. One bound atlas, and possibly seven unbound sets of maps were sent to Canada in June 1871 (British Columbia joined Canada officially on July 19). The bound atlas is now in the National Map Collection, but the unbound sets have not all been traced. The Royal Geographical Society in London has an unbound set of the maps, which may be one of the seven.

A description of the final atlas is found in a note pencilled on the fly-leaf of the Colonial Office atlas (C.O. 700 Canada no. 122) dated June 8, 1871, to the Under Secretary of State, Colonial Office from E. Hammond, Foreign Office, in which he refers to the ten copies sent to the Colonial Office, saying:

> One of the copies is handsomely bound in Morocco for presentation to the Government of Canada.--another bound copy is intended for the Library of the Colonial Office. Those two copies contain each; a set of the 7 Maps of the Boundary signed by the British and American Commissioners, Colonel Hawkins and Mr. Campbell;--and, in addition 2 Index Maps, 2 sheets of Photographs, 1 sheet of Tables of Latitudes and Longitudes, 6 Maps of the Boundary on a scale of 1 inch to a mile. A general Map in 3 sheets, on the smaller scale of .0528 inch to a mile.
>
> The eight other copies are in sheets, and embrace the same Maps, with the exception of the general Map in three sheets, which would be expensive to print, and of little practical use.
>
> It is to be distinctly borne in mind that the only Maps which are of authority are the seven in each set bearing the signatures of both the British and American Commissioner. The others have been prepared by the British Commissioner alone for the use of his own Government.[21]

The general map appears to have been reduced photographically in eighteen exposures, and the atlases have the actual photographs mounted on three sheets. Hawkins noted in his own atlas (F.O. 925/1621) the American numbers of the seven official maps, as the American set was numbered from East to West, while the British followed the order of survey from West to East.

The final American atlas was never published, due to the expense, but the seven sheets of the land boundary were lithographed and printed in a limited edition by the New York Lithographing, Engraving and Printing Company some time before 1900.

The work of the British Boundary Commission was made available almost at once to their colleagues at the Royal Engineers Camp, New Westminster, while the work of the latter is acknowledged on the index maps in the Boundary atlas. Colonel Richard Clement Moody was the Chief Commissioner of Lands and Works, and his men were responsible for surveys and mapping in the colony, as well as town planning and road building. The first group of the Detachment arrived in the fall of 1858, and the force was disbanded in 1863, leaving most

of its men as civilians in the colony, including most of the personnel of the Survey Office and Printing Establishments. One of the assignments of the officers was an expedition along the Hudson's Bay Company's brigade trail through southern British Columbia to Fort Colvile, which was undertaken by Lieutenant Henry Spencer Palmer in 1860. This expedition took Lt. Palmer further east than any other member of the Detachment, although several of the ex-Royal Engineer surveyors worked in the Kootenays in later years.

The maps made by the Royal Engineers of the Columbia Detachment show little of the Kootenay District, but the general map, which has neither title nor imprint, but was produced about 1864, is based on work done by the Engineers, and as some of the same men remained in the Lands and Works Office, it can be considered as largely the Engineers' work. The emphasis is on the rivers and lakes, with rapids and canyons marked along the Big Bend and on some tributary streams. Mountains are indicated by name, such as "Selkirk Range," or general statement, as "Low mountains" and "Watershed of the Saskatchewan River." Settlements, forts, Indian lodges, camps and fisheries are shown, and trails are marked including "Proposed route to Wild Horse Creek." The boundary region is taken from Palmer and the North American Boundary survey, but some information from Palliser is missing, both in the Rockies and the southern Kootenays. The Slocan Valley has been lost. The outline of the Columbia-Kootenay circuit is shown with the major tributaries, but without the gold streams of the Big Ben.

Some of the Royal Engineer surveyors who remained in British Columbia worked at times for the Government, and for private interests ranging from individuals to the Canadian Pacific Railway. One major survey in the Kootenay District during the colonial period was the Columbia River Exploration. On July 8, 1865, the Chief Commissioner of Lands and Works, Joseph W. Trutch, wrote to Walter Moberly,

> The recent discoveries of Gold on the Columbia River, above the Arrow Lakes, and on the head waters of the Kootenay River, having rendered it of immediate importance to determine and lay out the best line for a Waggon Road from the Lower Fraser to the New Mining Districts, you have been selected to conduct a reconnaissance of the Country lying to the Eastward of the Okanagan and Shuswap Lakes, and between the Columbia River north of the Upper Arrow Lake, and the passes of the Rocky Mountains, in the vicinity of the sources of the Columbia and Kootenay Rivers.[22]

The surveyors were Walter Moberly, Ashdown Green, and James Turnbull. In the two seasons of 1865 and 1866 the trio surveyed the Columbia-Kootenay system for possibilities for water and land transportation to the gold fields around the Big Bend and in the Wild Horse Creek region. The reports of the Columbia River Exploration were published in 1865 and 1866, with a combined report appearing in 1869.

Moberly was born in Ontario in 1832, and trained as an engineer in Toronto. In 1858 he came to British Columbia to search for an overland route, and worked as a civilian surveyor and engineer for the Lands and Works Department under Col. Moody. In 1864-1865 he was a member of the Legislative Council for Cariboo West, and in 1865-1867 was assistant Surveyor General. After four years of exploring and railway building in the United States, Moberly returned to British Columbia in 1871 as engineer-in-charge of the railway surveys between

Shuswap Lake and the Rocky Mountains. In 1915 he died in comparative poverty in Vancouver. Turnbull arrived in British Columbia in 1858, also, as a sapper with the Columbia Detachment of Royal Engineers. He served as a surveyor and draughtsman in the R.E. Survey Office, and formed a partnership with fellow sapper, John Maclure, as surveyors and engineers in New Westminster when the Detachment disbanded in 1863.

Turnbull drew the Expedition's map, Plan of the Columbia district, showing the routes explored by Messrs. Moberly, Green & Turnbull. The printed map varies slightly from the manuscript, which is without title. Farley says of this map: "Moberly's surveys ... together with those of his associates, provided the basis for the first comprehensive delineation of the Kootenay country".[23] Careful attention to detail is shown in the depiction of the rivers with their tributaries, rapids, portages, lakes, and notes on navigation, and the settlements, H.B.C. store, depots, stopping places such as "Capt. Houghton's", missions, customs, hot springs, minerals and trails. Relief is portrayed by shading, with passes shown, and some altitudes given, and there are topographical notes, such as "low hills" and "low valley", Turnbull's Plan, with its clean linework and fine hand lettering, is probably one of the most sophisticated maps of the Kootenay District.

The work of the Columbia River Exploration was incorporated into the Guide map to the Big Bend Mines (on the Columbia River) showing the route, drawn by J.B. Launders, another ex-Royal Engineer, at the Lands & Works Office, New Westminster, February 5, 1866, under the direction of Joseph W. Trutch, Chief Commissioner of Lands and Works and Surveyor General. A statement beneath the title states that: "The portion of this map in British Columbia, is compiled chiefly from government reconnaissances and recent surveys, and is in its main points correct." The scale is 1:1,584,000.

Launders made further use of the work of the Columbia River expedition when compiling his map of British Columbia in 1870. Now commonly referred to as the "Trutch Map," The Map of British Columbia to the 56th parallel is regarded as a remarkable accomplishment, accurately depicting the state of geographical knowledge of British Columbia at the time of compilation. The map was completed in Victoria, May 9, 1870, additions were made to January 1871, and it was published in London by Edward Stanford on October 8, 1871.

In the fourteen years from 1857 to 1871 the geographical knowledge of the Kootenay District had increased greatly. The southern boundary was known in considerable detail. Six new passes were explored south of Howse Pass. The Columbia-Kootenay system with most of its lakes and tributaries was known. The major areas yet to be explored were the Purcells, and the southern Selkirk and Monashee Mountains. The route had been found from Kootenay Lake via Trout Lake, to Arrowhead, and to the site of the present Nakusp, but the Slocan Valley had disappeared from general knowledge. With the exception of the Slocan Lake, the Trutch map of 1871 does not, at first glance, appear to differ greatly from maps of today.

Exploration and surveying between 1857 and 1871 was accomplished mainly by "professionals", whether scientists, engineers or cartographers. With the exception of Palliser, the surveyors had formal training or apprenticeship, and had the technical skill to use the latest survey instruments. Others were scientists in other fields, such as Hector and Bourgeau. The various expeditions

and commissions were the beginnings of field survey parties whose cooperative efforts result in maps. The maps were not products of individuals alone, although one man might be responsible for the final work, and other sources might have been drawn upon for the final compilation.

In 1871 British Columbia joined the Canadian Confederation and entered a new era. One of the Articles in the Terms of Union called for a trans-continental railway. Almost immediately several survey parties were sent out to look at the various possible routes through British Columbia. Most of the railway surveyors were authorized Land Surveyors or Civil Engineers. One party, led by Walter Moberly, surveyed the Howse Pass area before being moved north to the Athabasca and Yellowhead. Finally a decision was made to use the Kicking Horse Pass, and Major A.B. Rogers explored the pass through the Selkirks.

The Geological Survey of Canada had field parties out looking primarily for coal deposits which could be mined to operate the trains, and also for economic minerals which could generate business for the railway company. The Geological Survey concentrated on the proposed northern route until about 1875, when the southern route was decided upon. The Dominion Land Surveyors were busy in British Columbia, also, mapping the areas near the line, and surveying the British Columbia Railway Belt.

Another of the Terms of Union required the federal government to provide a geological survey of British Columbia. In 1871 the director of the Geological Survey of Canada, Dr. A.R.C. Selwyn, made an exploratory trip across British Columbia. In 1875 G.M. Dawson began his survey of the southern interior of British Columbia, and in 1883 he began his work in the Kootenays. As almost no topographic maps had been made, the geologists had to make a topographical survey and prepare a map on which to place the geology, which made much extra work, and slowed the progress of the Survey. The Geological Survey added a topographical specialist to the survey teams, and produced topographic as well as geological maps.

The first map of the district produced by the Geological Survey was Publication 223, the Reconnaissance map of a portion of the Rocky Mountains between latitudes 49° & 51° 30' geologically coloured, by George M. Dawson, published 1886. George Mercer Dawson, son of Sir William Dawson, principal of McGill University, is regarded as one of Canada's most outstanding scientists. Born in Pictou in 1849, he was educated at McGill, and at the Royal School of Mines in England, and served on the North American Boundary Commission under Major D.R. Cameron before joining the Survey in 1875, to work initially in British Columbia. His map of the southern interior of British Columbia published in 1877 was, according to Don Thomson, one of the first Canadian maps on which the hachure technique was employed.[24] Dawson was a field geologist and explorer in British Columbia until he became director of the Survey in 1895, and served in that position until his death in 1901. He was

> not only an eminent geologist but as well a foremost naturalist, ethnologist and paleontologist, in addition to being a prolific collector of specimens ... His reports, maps and papers are models of careful description and lucid exposition.[25]

In fact,

> Any map by Dawson had the reputation of being as good as a 'well-defined trail, a literal photograph of the country and containing information phenomenally complete and accurate'.[26]

In British Columbia he became a legend in his own time,

> the patron saint of the prospector and the developer, whose sentiments were expressed in [an] ode to 'Dr George' by Captain Clive Phillips-Wolley, published in the British Columbia Mining Record for April 1901.[27]

The Reconnaissance map, on a scale of 1:380,160, shows railroads, trails, settlements, Indian villages, surveyed townships, topography and geology, and contains many notes, such as "Lightly wooded or open country", "Rough wooded hills", and "Not seen owing to smoke (1883)". Relief is shown by contours, with peaks and ranges named, with some specific altitudes of peaks and generalized heights of ranges. Sources from which information was taken are named, including surveys of the Dominion Lands Branch and the Canadian Pacific Railway, Palliser 1865, Dawson and Tyrrell 1883, White 1884 and McConnell 1885. This was the first of many geological maps of the district.

In 1883 the British government sent Arthur S. Farwell and Gilbert Malcolm Sproat to the Kootenays to report on a number of subjects, including the mining, agricultural and timber resources of the district. The provincial government produced its first Map of the Kootenay District in British Columbia in 1885. This map, with a scale of one inch to ten miles, included an inset of a "Reduced plan of canal in upper Kootenay, from plan made by Leslie C. Hill M.I.C.E. for Kootenay Syndicate (Lim.)" at one inch to 3000 feet.

As the mining boom developed, the government supplemented its own map production with maps selected from among the numerous efforts of individual engineers and surveyors. One of the finest of these maps was one produced by Charles E. Perry, on a scale of approximately six miles to one inch, called Perry's mining map of the southern dist. West Kootenay, compiled and drawn by T.P. O'Farrell, Nelson, B.C. The map was published March 1893 at Nelson by "C.E. Perry & Co. P.L.S. civil & mining engineers," and is stated to be the first edition. Many Canadian maps were registered in the Dept. of Agriculture, Ottawa, and some were copyrighted in Washington, and even London, as well. Perry's map, however, was "Copyright, 1893, by Rand, McNally & Co." The map is a composite, with a centrally-placed general map, in colour and with relief, of the southern district, showing roads, railroads, both projected and completed, trails, steamer routes, settlements, and mineral areas. Pictorial symbols are used for mountains and trees. The topographical details include the "Painted Rocks" seen earlier on Thompson's maps. Around the general map are detailed insets of Trail Creek Mining Camp, Ainsworth Mining Camp, Kaslo-Slocan Mining Camp, and Nelson Mining Camps, plus a small map showing "Our position on the planet," and General References. In the lower corners are compasses for Slocan and Nelson. The insets show mining claims in gold and silver, as well as townsites, tunnels, springs and mills. An interesting feature of the general map is the indication of a tourist industry, with notes such as "C. & K. Tourist Route" and "Tourist Fishing Camps." This map must have had a wide distribution, through Perry's connections with Rand, McNally, the British Columbia government, and the Columbia and Kootenay Steam Navigation Company.[28] Many of the provincial government's maps were distributed in England, as well, through the British Columbia Agent-General.

In 1896 W.S. Drewry produced an experimental map which is one of the milestones in the mapping of British Columbia. William Stewart Drewry was born in Ontario in 1859, and apprenticed under three of the leading surveyors, Edward Gaston Deville, Surveyor General and "father of photogrammetry in Canada",[29] Otto Klotz and William F. King, later Assistant Chief, and Chief Astronomer of Canada, respectively. Drewry came to British Columbia in 1890, and in 1892 began work in the West Kootenay District. His Topographical map of part of West Kootenay District 1896 illustrates the first major phototopographical mapping in British Columbia. Triangulation and camera stations, the first of which were established in 1891, are clearly indicated. An effective combination of contouring and hill shading gives the map a remarkably "visual appearance".[30] This was

> the first contoured map of any part of British Columbia on which colours were used to portray various types of topographic information.[31]

The British Columbia Crown Land Surveys report for 1894-95, and 1896, contain Drewry's reports on the "Photo-topographical survey of West Kootenay", and the Surveyor General reported in 1896 and 1897 on the progress of the map, and said,

> The information on the map having been plotted from photographic plates obtained from known points in a systematic triangulation must necessarily be reliable, and doubtless will prove of great advantage to engineers, road builders, prospectors and others, besides giving a much more accurate idea of the character of the country than can be obtained from any maps heretofore published.[32]

The Colonist Printing and Publishing Company forwarded the map to an Ottawa firm which did similar work for the Dominion Lands Branch of the Department of the Interior. The first proof was quite unsatisfactory and had to be redrawn. Kains was not happy with the final product, as

> The character of the lithographic work is not first-class, and is certainly not equal to similar work performed by the same firm for the Dominion lands branch of the Department of the Interior.[33]

Several hundred of the 5000 copies printed (in 4 colours) were forwarded to the Agent-General in London. On a scale of one inch to one mile, with 250 foot contours, the Topographical map shows roads, railroads, trails, surveyed lots and mineral claims, townsites, smelters, wharves and glaciers, as well as the triangulation and cairn stations, and there are "Reference Lists" to claims in Toad Mountain, Ainsworth and Blue Bell Mining Camps.

In 1901-1902 A.O. Wheeler carried out a photo-topographical survey of the Selkirk Range, the story of which is recorded in his two-volume work, The Selkirk Range, published by the Department of the Interior in 1905, which contains detailed descriptions of the camera survey operations and many fine photographs. Arthur Oliver Wheeler was born in Kilkenny County, Ireland, in 1860, and came to Canada with his parents in 1876. After an apprenticeship in Collingwood, he qualified as an Ontario Land Surveyor in 1881, a Public Land Surveyor in Manitoba and a Dominion Land Surveyor in 1882, and was commissioned as a British Columbia Land Surveyor and an Alberta Land Surveyor in

1891. He began surveying Canadian Pacific Railway townships in the west in 1882, and thereafter worked on the Prairies and in British Columbia. In 1901 he was instructed to prepare a map of the Selkirk Range. The Canadian Pacific Railway line was used as a survey base line, and using triangulation, camera stations were fixed and peaks located. From 1906 to 1912, Wheeler was one of the surveyors in the British Columbia Railway Belt, and in 1913 he became the British Columbia Commissioner in the Interprovincial Boundary Survey.

The Topographical map of part of the Selkirk Range British Columbia adjacent to the Canadian Pacific Railway is one of the most attractive maps of British Columbia produced by the federal government. A four-sheet coloured map on a scale of 1:60,000 with a contour interval of 100 feet, the relief is shown very effectively using a combination of contour lines and shading, with some hachure lines. There is an inset "Index map of the Dominion of Canada, showing the position of the Selkirk Range, B.C.". The map was signed officially by E. Deville, Surveyor General of Dominion Lands, on June 15th 1905, and shows the railway with stations and snowsheds, trails, glaciers, green timber, surveyed townships, and triangulation and camera stations.

As part of the agreement between British Columbia and the federal government to construct the transcontinental railway, the Terms of Union, confirmed by later Act, gave a strip of land 40 miles wide, extending 20 miles either side of the Canadian Pacific's projected main line, from the Alberta border to New Westminster, and containing 17,150 square miles, to the Dominion. The land, known as the British Columbia Railway Belt, was retained by the Department of the Interior, along with the Peace River Block, until 1930 when both were returned to the Province. Disputes between the federal and provincial governments over the limits of the Belt hampered survey, but a final agreement was reached in 1907. In the same year, the Department of the Interior produced the first editions of two sets of maps. The two-sheet British Columbia Railway Belt; James White,F.R.G.S., geographer; special edition prepared under the direction of R.E. Young, D.L.S., Superintendent of Railway and Swamp Lands, showing lands disposed of, also timber berths, corrected to July 1st 1907, with a scale of 1:500,000 was issued in colour, in a preliminary edition. The eastern sheet includes the Kootenay District. The map shows roads, railraods, trails, surveyed lands in the Railway Belt, homestead and sold lands, Indian and Forest Reserves and Parks, and timber berths. A second edition was issued, corrected to July 1st 1909, and a third edition corrected to January 1st 1911. A fourth edition corrected to January 1914 was issued with the title altered to Southern British Columbia: map showing disposition of lands, with an inset of Southern Vancouver Island, and a table of elevations above sea level. In addition to the British Columbia Railway Belt Surveys, the Department of the Interior began, also in the 1890s, the Topographical series of maps, the forerunners of the National Topographic System maps.

At the same time a series of maps of the various sections of the Railway Belt were issued, on a scale of 1:190,080. The two Kootenay sheets of the series, each sheet of which bore the main title British Columbia Railway Belt, are sub-titled Donald sheet west of Fifth Meridian, and Sicamous sheet west of Sixth Meridian. The maps contain the same information as the two-sheet general map. The first editions, with corrections to November 1st 1907, were followed by subsequent editions in 1911 and 1913. The Department of the Interior had to survey the British Columbia Railway Belt, for which is was responsible, and by making the maps cadastral in nature, they were useful in

promoting the Department's interest in land settlement and colonization.

The provincial government had been concerned mainly with regional and land status maps, begun about 1893, but not many were published. The Surveyor General, Tom Kains, says in the Crown Lands Surveys report for 1895

> A large and useful map of the southern portion of the East Kootenay District has recently been compiled for office reference, comprising the country lying between the International Boundary and the southern limit of the Canadian Pacific land grant belt. It is drawn upon a scale of one-half a mile to an inch, and besides giving an outline of the physical features of the country it shows all the lands taken up by pre-emption or purchase, as well as the blocks of land granted as a subsidy to the Columbia & Kootenay Railway Company. This plan is, of course, too large to published, but as it shows all surveys in their approximate relative positions it is a capital index map of that region, and doubtless will form the basis of a general map of the East Kootenay District, to be published when deemed expedient.[34]

By 1911 some sixty reference maps covered most areas of the province on the scale of one inch to a mile or one inch to two miles. These reference maps were intended for office use and as base maps, and were continually being up-dated, but blueprints were produced for public use on demand. In 1912 work was begun on the degree sheet series on the scale of one inch to two miles. This was the main provincial government land series of maps covering the Kootenay District.

The first two decades of the Twentieth Century saw two major boundary surveys begin involving the Kootenay District. The lack of published information and the failure to mark the entire line on the original North American Boundary Survey resulted in a number of problems. An International Joint Commission was set up and the re-survey was made from 1901 to 1908 under the surveyors J.J. McArthur and W.F. O'Hara, with R.A. Daly, geologist and J.M. Macoun, naturalist. The final report was not published until 1937, but R.A. Daly did a detailed geological report which appeared as an appendix to the Boundary Survey report, and as a Geological Survey Memoir (no. 38) in 1912.

The colony, and later the province of British Columbia, was bounded on the east by the Rocky Mountains, but the boundary line was not defined until the British Columbia - Alberta Boundary Survey began in 1913. The Interprovincial Boundary Commission included Arthur O. Wheeler for British Columbia, with J.N. Wallace for Canada up to September 1915, continued by R.W. Cautley, the commissioner for Alberta. The report of the Commission was divided into four parts. The first part, from Kicking Horse Pass south to the International Boundary, was surveyed from 1913 to 1916, and was published in 1917. Wheeler and Cautley continued the survey during the seasons of 1917 to 1921 from Kicking Horse Pass to Yellowhead Pass (published 1924), and in 1918 to 1924 from Yellowhead Pass to the 120th Meridian (published 1925). The surveys began in Kicking Horse Pass in 1913, and moved south with the detailed photo-topographic survey of the passes being made by Wheeler. The final part of the survey, the 120th Meridian, was not made until the 1950s.

The atlas for the first part of the report covers most of the Kootenay boundary. It contains an index sheet on the scale of 1:792,000, sixteen sheets of the

boundary line at 1:62,500, and ten detail sheets of the passes at 1:25,000 (except for sheets 4A and 11A, which were at 1:35,000). The sheets have contour intervals of 100 feet, and show triangulation and camera stations. The smaller scale sheets show the boundary along the natural line of watershed, and the boundary marked by the Commission, as well as the usual topographical details of roads, railroads, trails, townsites, cabins, tunnels, coal mines, glaciers, and morainal detritus and rockfalls. The detail sheets show the same information, plus additional monuments and cairns, and tables of "Bearings and distances between monuments". Sheet 13A marks "Book Rest Copper Claim W. Peyto" near Simpson Pass, on the Alberta side of the border. "Sheets 14 and 14A give the "Location of Banff Windermere Automobile Roads". Sheet 16, which covers the Kicking Horse Pass portion of the boundary, shows the tunnels and cabins, and states that it was surveyed in 1903 and 1906.

The work of the Commission illustrated the best survey techniques before air survey, and approaches the standard style and scales adopted for national surveys.

By the end of World War I, geographical knowledge of the Kootenay District was virtually complete, with some areas being known, literally, in considerable depth. A few inaccessible areas may have had to wait for the air survey to be accurately mapped, but otherwise, the map of the Kootenays was complete.

Surveys since 1871 had been carried out by professionals. The geologists with the Geological Survey of Canada were university graduates, with a Ph.D. requirement after 1907. The field crews were usually university students. The Dominion Land Surveyors, by the 1872 Dominion Lands Act, had an apprenticeship programme followed by stiff examinations before receiving their commission. An additional voluntary series of examinations was added in 1876, giving the title of Dominion Topographical Surveyor. In British Columbia, land surveyors were authorized by the Surveyor General and the Chief Commissioner of Lands and Works until the Act of 1891, which brought in regulations similar to the Dominion Lands Act.

Surveying was becoming more technical as new equipment and methods were developed. The survey camera and photo-topography were introduced in 1886, and used intensively in 1896. Triangulation was begun between 1891 and 1898 by Tom Kains in the southern Kootenays, and was started in the Railway Belt in 1901 by A.O. Wheeler.

Maps were no longer the work of one man, although some still carried the name of the man in direct charge of the survey, and perhaps the name of the surveyor general, deputy minister or minister under whose authority the map was produced. Field parties could consist of a topographer and/or a geologist, chainmen, levellers, photographers, triangulation assistants, and astronomers. Office work was done by draughtsmen and engravers or lithographers. The compiler could draw on previous surveys from a variety of sources. The Geological Surveys used surveys carried out by the Dominion Lands Branch, provincial governments, and the Canadian Pacific Railway.

In the 118 years from 1800 to 1918, exploration and surveying had moved from the domain of the talented amateur and the individual with broad interests to teams of highly-trained specialists. As with the resource industries in the Province, once the areas easily accessible to the individual have been covered,

capital is needed for skilled manpower and expensive and delicate equipment, and only the governments were in a position to meet the requirements.

Footnotes

1 Victor G. Hopwood, David Thompson: travels in western North America, 1784-1812 (Toronto, Macmillan, 1971), p. 2.

2 Hopwood, p. 7.

3 "A map of America..." in Notice respecting the boundary between His Majesty's possessions in North America and the United States... (London, B. McMillan, 1817).

4 Meriken Shinzu / "New map of America" by Nakayama Shibi, Kaei 7 (1854).

5 David Thompson, David Thompson's narrative 1784-1812,... edited...by Richard Glover (Toronto, Champlain Society, 1962), p. 359.

6 Alexander Ross, [Map of the Columbia River Basin] drawn by Alex. Ross September 1821 [sgd] A. Ross, Red River Settlement, Aug. 1st 1849. B.L. Add. Ms. 31, 338B.

7 David L. Williams, "Pierre-Jean De Smet," Dictionary of Canadian Biography, v. 10: 1871-1880 (Toronto, University of Toronto Press, 1972), p. 226.

8 Pierre-Jean De Smet, [Map of Dakota Indian Territory] "Respectfully presented to Col. D.D. Mitchell by P.J. De Smet Soc. Ies. 1851" NARS RG 75 #251; LC.

9 Map showing the relative positions of the different tribes of Indians and missions in the Territory of the United States between the Cascade and Rocky Mountains, and also in the British Possessions between the 49th and 54th parallels of north L., prepared by Captain A. Pleasonton, 2nd. Dragoons, A.A.A.G., from the maps of the Reverend Father P.J. DeSmet, S. of J., drawn by Private R.S. Peterson, Compy. E, 4th Infy. Fort Vanoucver, W.T., August, 1859. Published version of map "Copied from a map by Rev. P.J. DeSmet, Missionary for 12 years among the Flat Head and other Indians, Cotton Wood Springs Route from Ft. Leavenworth to Salt Lake City, July 18, 1858. NARS RG 77b US #201-2 and #199-1.

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31 Thomson, v. 2, p. 127.

32 "Surveyor General's Report, Feb. 1, 1897," British Columbia Sessional Papers (Victoria, 1897), p. 802.

33 "Surveyor General's Report, Feb. 2, 1898," B.C.S.P. 1898, p. 726.

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Abbreviations used in Footnotes:

B.C.S.P. = British Columbia Sessional Papers
B.L. = British Library
NARS RG = U.S. National Archives and Records Service Record Group
PAC MG = Public Archives of Canada Manuscripts Group
P.R.O. = Public Records Office, United Kingdom

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(Editor's note: Frances Woodward is planning to publish her complete carto-bibliography covering the Kootenay District and the Bulletin will include a notice advising you of its availability.

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ACML Bulletin 38

A REPORT ON THE JUNIOR ATLAS PROJECT AT HOSFORD PUBLISHING

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Paper presented at the 14th Annual Conference, Edmonton, 1980.

Recently two new junior atlases have been published and a third is almost completed. The Gage Junior Atlas of Canada is available; the Junior Atlas of Alberta is now in the schools; and the Saskatchewan Study Atlas* will shortly be released. The first of these, the Gage, is Canada wide in scope, employing primarily maps of symbols to show population and something of economics and lifestyle. It includes an interesting children's introduction to maps, many color photographs, and some text. Both the Alberta and Saskatchewan books have adopted a provincial style rather than a country-wide approach. This is a new style for junior atlases in Canada, although, of course, many adult regional atlases are available (usually university level). The provincial style has several points to recommend it for use in the junior grades. The Saskatchewan division II (grades 4, 5 and 6) curriculum identifies three areas of attention for social studies:

Year I	Saskatchewan - Our Province
Year II	Canada - Our Homeland
Year III	North America - Our Hemisphere

A provincial approach, if it includes some of the provinces, ties to the rest of the country, will be very useful in two, and possibly all three years. The content of the Saskatchewan Study Atlas can be broken down to Saskatchewan 53%, Canada 32%, with the remainder (15%) consisting of world examples and a continents reference section. The regional style also allows the inclusion of more socio-economic maps which serve two purposes. Under the guidance of a teacher, information relating to the human geography, economics, and history of the province is available in more detail than would be possible in an atlas dealing with all of Canada. From a cartographer's point of view, an equally important purpose is that students can be exposed to thematic maps at an early age. Familiarity with maps is not widespread in our society, and an early planned sequenced exposure to thematic maps should improve the usage of this valuable method of expression.

The area of children's use of maps has been a perennial area of study. Nevertheless, much remains to be done in a systematic way, especially in terms of delineating the best methods of map and data presentation. This problem led Hosford Publishing to involve educators in the design stages of the project. Gary de Leeuw, (University of Calgary), educational editor, Ronald Carswell, (University of Calgary), special research consultant, and Don Barnett, (University of Saskatchewan) are educators. The geographic expertise was provided by J. Howard Richards, University of Saskatchewan, one of the province's outstanding geographers. As well as causing some problems in reconciling differing

**Editor's note: Thinking about Ontario, a Hosford study atlas, will be the first released, an event that may occur later in 1981.*

points of view, the design team approach has resulted in the production of a book with some of the characteristics and abilities of children in mind.

Several of the format decisions may be of interest. The bleeding edges style was chosen in an effort to reinforce the concept of geographic continuity. Piagettian theory of child development implies that literal meanings may be picked up from abstract conceptual presentations. The intent of showing portions of Alberta and Manitoba, although with a grey overtone, was to discourage the formation of a concept of Saskatchewan as an isolated entity. This may, at first, seem overly wasteful of space, but allows the northern portion of Saskatchewan to be included. It also allows plenty of room for legend blocks. To avoid confusion, the number of displays per page was kept as low as possible, usually no more than four appear and most maps occupy a single page. Most pages on which more display occurs are combinations of specific photos and related maps. The photos were included to provide a relatively concrete reference for the more abstract cartographic representation. These matched pairs of photos and maps can be used in teaching about maps, symbolization, and generalization. The maps themselves were also kept as simple as possible consistent with presenting a useful amount of information. Two figure layers and a ground (base locational information) are the maximum used. This uses somewhat more pages but should improve the legibility. Proportional pie diagrams are the most complex symbology used, where possible these are avoided. Unfortunately the range of data values inherent in many subjects prevented the use of bar or line graph representation. No volumetric representation was used as the conservation of volume is not well developed in adults, let alone children.

A strong effort to provide map learning situations, using Saskatchewan material, was also made. The first nine maps were designed as a teaching sequence. Other sequences were also incorporated and, where possible, a microcosm to macrocosm approach was followed. This involves utilizing a large scale, relatively concrete example, often coupled with a photo and then moving up through levels of generalization and complexity to a socio-economic presentation of the phenomena on a Canada-wide scale. This concept is easily seen in the first section, "Learning about Maps". An oblique photo and an anaglyph stereo pair of the Cypress Hills Historic Site open the section. The objective is to assist in the shift of perspective from ground level to the vertical viewpoint of a map. The facing page contains an anaglyph stereo contour pair and a topographic style map, to illustrate the representation of the ground surface. The section continues with the legislative grounds area of Regina shown with a photo and map, then two pages of Regina at smaller scales. This is followed by generalized physical maps of Saskatchewan and Canada. Closing the section is the most generalized view of the earth most people will get, a N.A.S.A. orbital photo of the western hemisphere. The concepts of generalization and symbolic representation can be seen by comparing the map and photo combinations and the various pages.

To backtrack a moment, the anaglyph technique may be of interest. Early in the planning stages it was felt desirable to incorporate some stereo photo pairs, but this presented some difficulties. Few schools at these grade levels have pocket stereoscopes available, and a certain visual trick is required to fuse the images to create a stereo model. The anaglyphic presentation overcomes the cost problem by supplying plastic viewers with each atlas. It appears that very few children have difficulty in achieving stereo vision with anaglyphs

(de Leeuw and Carswell, 1979)*. As well the technique is novel and appears to motivate the students. From a cartographic point of view this may help to enlighten more people to uses of aerial photography, which can be a very useful tool in many everyday situations. The production is quite simple, the left photo of a pair is printed in blue and the right photo is red. The separation of the photos for vertical exaggeration can be calculated using methods derived from photogrametry, or since no vertical measurement is envisioned the separation can be judged by eye using two transparent color keys. This method was used for the Saskatchewan Study Atlas. This atlas which will soon be released is the first in a continuing publishing program which now includes work on a junior atlas of Ontario. Understandably, the Ontario book will differ from the Saskatchewan Atlas. Among other things we have increased the number of pages to accommodate the diversity of Ontario and our continuous research program has led us to revise some of our approaches to Atlas design. Extended teaching sections are envisioned both in map reading and in social studies areas. Although each book will differ from the previous, we remain committed to the concept of a regional atlas with strong input from educators as the best way to introduce maps and their use to children.

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*DeLeeuw, Gary J. and Carswell, Ronald J.B. "A Practical Way of Simulating the Third Dimension in the Earth Sciences; Report of a Study With Children," presented at the 1978 Science Council, ATA - National Science Teacher's Association Joint International Conference, Banff, Alberta, Canada, October 7, 1978.

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THE DATING OF AERONAUTICAL CHARTS AND MAPS OF THE NATIONAL TOPOGRAPHIC SYSTEM

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In cataloguing a map, one of the important facts to be set down is the date of the map. With sheets of topographic series, several different years might be applied to a given sheet. The most useful year would be the year of the information shown on the map. But if the map in question is one of the 1:250 000 series derived from sixteen different 1:50 000 maps, there might be sixteen different years on the source material. Even with a single 1:50 000 sheet, it is difficult to give a year that completely defines the year of the map information. The map may be compiled from air photography taken in, say, 1976, but the field check may have been made in 1980. During such a check, only major features are brought up-to-date. Which year should be used? Military map cataloguers tend to stay with the year of the aerial photography.

For practical reasons, a single date must be assigned to each sheet. Most map librarians use the Anglo American Cataloguing Rules (AACR) in one form or another in the cataloguing of their maps. The single date recorded in the "Publication, distribution, etc., area" (formerly called the "imprint") in the catalogue entry for the map is, according to those rules, the date of

publication. Furthermore, the rules instruct to record the date(s) of information applying to the contents of the map in a note if this date (or these dates) differ from the date of publication and are considered important. Consequently, map cataloguers have had to make a clear distinction between these two kinds of dates.

One of the basic precepts of AACR is that the information recorded in the catalogue entry has to come from certain prescribed sources. For the date of publication, the prescribed sources are the "cartographic item itself and any accompanying printed material". "Accompanying printed material" is generally understood to be material permanently associated with the map and published by the publishers of the map at the same time as the map, such as explanatory pamphlets, brochures, etc. If the date has been supplied by the cataloguer from any other sources than the prescribed ones, it has to be recorded in square brackets. If the date of publication is not clearly specified as such on the map, the cataloguer can substitute 1) the copyright date (to be recorded with a preceding lower case c, e.g., c1980) or 2) the date of manufacture (i.e. printing, etc.) specifying it as such, e.g. 1980 printing or 3) an unspecified date appearing on the map in association with the name of the publisher, e.g. Surveyed by the Crown Lands and Surveys Branch, Department of Natural Resources. 1943. (Note that if the date 1943 would have been preceded by a comma (,) that date would have been specified as the date of survey, which is the date of information, not necessarily that of publication.)

Rightly or wrongly, the year shown on the NTS index maps is the publication year, which is the year of the first printing of the current edition of the sheet. Subsequent reprintings of a particular edition do not change the publication year, but of course the publication of a new edition would. The question is, can an index sheet of a topographic or aeronautical series be considered as part of the map itself -- does the information which appears on an index sheet constitute prima facie evidence? The rules do not specifically address themselves to index sheets of series as sources of information for the cataloguing of series. However, it is clear that index sheets are legitimate "accompanying printed materials" when cataloguing the series as a whole. When a bibliographic entry is made for the whole series, the index sheets which accompany the series must be considered part of the "cartographic item itself". In other words, to record the opening and closing dates of a series, the dates as they appear on index sheets for the first and last sheets published in that series can be recorded without square brackets. When making bibliographic entries for individual sheets of a series, however, such index sheets are not part of the "cartographic item itself", because unlike the whole series, the item described is only one sheet of that series and an index sheet does not accompany the individual sheet. In that case, if no clear specified date of publication, copyright or printing is indicated, and the source of information for the date of publication is obtained from an index sheet, this date has to be recorded in square brackets.

As far as the date of information is concerned, it must be remembered that for maps of wilderness areas of Canada the air photography used in compilation may be as much as 15 years old yet no change in the topography has taken place. This latter fact can be ascertained with some degree of confidence by examining Landsat imagery and making enquiries from federal, provincial and territorial agencies that are familiar with the region. The date of publication and the date of information in this case are 15 years apart. The argument for using the

publication year or copyright year is: (a) that it is a new publication which needs to be distinguished from the previous one, and (b) that the Surveys and Mapping Branch does not knowingly publish a map that is out of date with respect to the major features on the map. In any case, the catalogue entry would carry the date of information in a note if it is readily obtainable.

Aeronautical charts present a different problem. To begin with, aeronautical charts normally have two significant years, one for the base map, the other for the air information. New editions of air charts are normally derived from larger scale topographic maps, so the date of information of the air base must be taken from the dates of information of the source material. In complicated cases, a small diagram in the margin may be used to illustrate the years applicable to the various parts of the chart. The date of the air information is printed on the map in the air overprint colour, and is the month and year that the air overprint plate was prepared. If the map is being catalogued as an air chart this is the date of publication of the chart as a whole.

Some confusing but interesting facts arise from the obviously correct policy in giving the airman the best possible information about the currency of his air chart. In 1958, it was decided to change the 8 mile to the inch air chart series to the slightly larger 1:500 000 scale. One sheet, 41 NE Sudbury, had been drawn at this new scale in 1957 as a prototype, but it was never published with an air overprint. Since this sheet and many hundreds of subsequent sheets of this 1:500 000 aeronuatical base became available without the aeronautical information overprint, map librarians and their users are now distinguishing this 1:500 000 base as a distinct and separate Canadian map series. In fact, the 1957 volume of the Bibliographie cartographique internationale (BCI) reported the series for the first time as "Canada. 1:500,000 - National Topographic Series" (entry 1389) and the 1959 volume of the BCI still refers to this series under the same title under entry 1379 with a see reference to the 1957 volume entry 1389. The entries for Canadian maps for these volumes of the BCI were prepared by the Department of Mines and Technical Surveys as the Department of Energy, Mines and Resources was then called. The 41 NE Sudbury sheet, therefore, must be considered the first sheet published in this series and therefore the opening date of publication for the series. In 1959, three sheets were published at the new scale, with the aeronautical overprint but as the base map was simply an enlargement of the former 8 mile sheet, the date of the base was not changed. The first three sheets at 1:500,000 published in 1959 with the aeronautical overprint were

Devon East	48 NW & NE
Pletipi	22 NW
and	
Chibougamu-Roberval	32 SE

These three sheets represent the first sheets of the 1:500 000 aeronautical edition and 1959 the opening date for this series.

Cataloguers must be prepared on occasion to find contradictory evidence in the margin of certain NTS maps concerning the date of the map and the opening of the series. Take, for example Sheet 54 NW, Churchill. The scale is 1:500 000. The imprint shows "Previous Editions 1944, 1947/ New Edition, 1950. /Overprinted with relief data 1955". There is no mention on the map that it was published at some date later than 1957 when the series opened, and today it

might be difficult to discover when this sheet was in fact published. Fortunately this situation cannot happen with NTS maps and aeronautical charts today because the publication and copyright date is always printed on the map.

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IN WHICH WE SERVE: MAP LIBRARIES AND OUR CLIENTELE
A REPORT ON ACTIVITIES AT THE UNIVERSITY MAP COLLECTION AT THE UNIVERSITY OF ALBERTA

Ronald Whistance-Smith
University Map Collection
University of Alberta
Edmonton, Alberta

The first thing to be borne in mind when addressing this topic is to remember that we operate with public funds, money supplied by the taxpayer. It may be directly derived from resource royalties, tariffs, or taxes and in a few instances from endowments, but no matter what the direct source, the root source is the taxpayer. The author's first premise is therefore that we, the map librarians and map curators owe something to the general public and that something is service.

The aim of this paper is to find out who we are serving and to what extent we are serving. This article uses the University of Alberta Map Collection as a pilot study only and it is the author's hope that others will take time to write similar studies of their collections in order to produce a more comprehensive answer to that question.

Let us begin by reviewing what was said in the Symons' Report, To Know Ourselves: The Report of the Commission on Canadian Studies published in 1975 by the Association of Universities and Colleges of Canada. On page 58, in the section on Geography curriculum the report has this to say about maps and map libraries:

> The importance of cartography is receiving increasing recognition, and this is an area of geographical studies in which substantially more teaching and research could be done by Canadian universities. Maps generally contain much more information than most people realize. The locational accuracy of many older maps, for instance, is low, but they often contain a wealth of information on other topics. For many parts of the country, the only literary source of historical information is maps. One Canadian geographer with whom the Commission corresponded illustrated what old maps can reveal about Canada:
>
> "Early maps of Canada reflect the explorer's limited knowledge and unique perception of the land. Information written on such maps describes both the land and events and features observed. When Southern Canada became more populated in the nineteenth century, maps made at the time contained place-names and other features that reflect the cultural variety of the settlers and the close community life that once existed and has largely disappeared now."
>
> Because of the special role of maps and map-making in the historical development

and present management of Canada, the Commission believes strongly that the arts and sciences of map-making and map utilization should be fostered, and that existing map resources should be more carefully conserved and more fully utilized than they have been in the past. Research and publication must be supported to meet the need for current cartographic information. The demand for new maps extends from studies of densely populated urban centres to the rapidly developing frontier regions of the Canadian North. Teaching and research in the fields of aerial photography and air photo interpretation, as well as in connection with other remote sensing programmes, should be sustained and expanded to maintain the important contribution Canada has already made to the development of this type of mapping. More work is also needed in the areas of Canadian historical geography and toponymy. The loss to foreign collectors of Canadian maps of historical significance should be checked, and steps should be taken to acquire copies and, where possible, the originals of maps held outside Canada that relate to the history of this country.

A greater number of good, comprehensive map collections should be established at universities and colleges and existing collections should be strengthened. There should be several major depositories for current maps and one for historical maps at universities in each of the regions of Canada. Such collections should develop regional and thematic specialties, appropriate to the location and academic strengths of the universities in which they are located. Universities can provide a valuable service to their respective communities, which is entirely in keeping with their academic role, by serving as centres for cartographic information about their own particular regions, as well as building up other special map collections. A real effort should be made to develop the arctic sections in major map collections across the country. The Commission was surprised to note that only two universities in Canada claimed to specialize in Arctic map holdings in response to a recent survey.

Information about their map collections and about the potential usefulness of these collections should be made more widely known by universities to their students and teaching staff, and to other educational institutions in the community. The scope of maps as resource materials for Canadian studies at all levels of education and in a wide variety of disciplines should be emphasized. Instruction in the use of maps should be included in teacher training programmes and systematic collections of maps should be developed in every high school as a normal element of the school library.

Good map collections are, if anything, more difficult to develop and maintain than good collections of books. Map collections should, therefore, be made the responsibility of trained personnel who are familiar both with library practice and with the academic disciplines served by such collections. To this end the place of map librarianship should be further recognized by schools of library science, and the pioneering work of the University of Toronto in training map librarians should be taken as an example for the development of similar courses elsewhere. Universities could also help to stimulate student interest in the professions of cartography and map librarianship through courses in geography and in many other disciplines, including history, economics, politics, sociology, anthropology and environmental studies, in which the usefulness of maps and other cartographic documents is demonstrated.

The present curator of the University of Alberta Map Collection originally identified as a basic weakness in this collection, the area of older maps of

Canada and particularly of Western Canada. Much time and effort and considerable money has been spent on building up the historical portion of the collection. We soon found that there was a rapidly increasing number of people interested in researching their family histories and that this often led them to early maps of Eastern Canada and Europe. Our acquisition policy thus expanded to include old maps of Europe. Fortunately, concurrent with the increased public demand, there has been an increase in the publication of facsimile editions of early maps and atlases which has kept the cost of acquisition within reasonable bounds.

With regard to making our collection more widely known to students and teaching staff and to other educational institutions in the community, we have done this on a selective basis. Our limited ability to respond to increasing demands has caused us to entertain tours only by those groups which approach us. The curator has presented talks to the Amisk-Waskahegan Chapter of the Historical Society of Alberta and to the Edmonton Branch of the Alberta Genealogical Society. By personal contact, the existence of the collection has been advertised through Government circles. The curator also gives an average of five or six lectures a year to students in the Faculty of Library Science concerning the history of map-making, the place of maps in the Social Sciences, maps as Government documents, and unique cataloguing and handling problems associated with maps.

Lectures are also given to students in introductory cartography on the history of topographic mapping in Canada. Orientation tours of the Map Collection are given to this class, and to others, such as, the undergraduate and graduate level air photo interpretation classes and the undergraduate soil science class. As these students graduate, they take the knowledge of the contents and services available in the collection with them and spread the word among fellow workers. What we observe then is a growing demand from off-campus users which we are happy to meet and to which we will refer later.

In keeping with the suggestions of the Symons' Report we have set our acquisition priorities as:

1. Alberta
2. Prairies
3. Western Canada
4. Canada and Eastern Canada
5. Western United States
6. Europe
7. Other, but primarily Latin America

Our subject priorities are:

1. Topography
2. Geology
3. Road maps
4. Town plans
5. Population maps
6. Other thematic maps

The increasing interaction of Alberta with States of the Western U.S. and the countries of Latin America has given us reason to place increasing importance on maps of these areas.

Service to the Community

This is the only facility of its type in Central and Northern Alberta and one of the largest in Canada. It serves University Faculty and students for research and general interests. It serves the general public directly and through the Public Library system via telephone reference, referral and inter-library loan, and through the University Extension Library. It serves industry: real estate; oil and gas; mineral exploration here and in other parts of Canada, North America and abroad; consulting firms, engineering and environmental for work in Alberta and beyond. It serves Government departments and agencies including the Premier's Office, the Legislature Library, Research Council of Alberta, Department of Environment, Energy and Natural Resources, and Transportation. We have also provided services to the Federal Departments of Environment, Transportation, and Agriculture.

We have contributed to local industry by acting as a major research resource for the production of the Saskatchewan Study Atlas, the Junior Atlas of Ontario, and for Federal Government map sheets produced under contract. We have also assisted potential developers in the choice of materials for the study of landscape and in the interpretation of those materials for siting of ski resorts, wilderness lodges, and other recreation facilities.

We have contributed to the creation of and preservation of Alberta's cultural heritage by actively collecting early maps showing the development of Western Canada and Alberta (as opposed to the passive collecting by other local archives), by providing research materials for the Atlas of Alberta and the Junior Atlas of Alberta; by providing assistance to groups searching for remnants of our past, i.e. emergency airstrips of the North West Staging Route, fur trade posts, trails and cabins, land ownership, and by providing assistance to persons conducting research for local and family histories.

The Map Collection contributes to the acquisition of scientific knowledge by assisting biologists, botanists, archaeologists, entomologists and zoologists and others who collect and catalogue specimens within and beyond Alberta. We have provided assistance to the Provincial Museum and Archives in identifying locations throughout the world where specimens in their collection were acquired and have provided material for the preparation of displays and for collecting expeditions. We have also assisted Alberta Transportation when, on occasion, they have required geological maps which are no longer available. The provision of out-of-print material to various government departments and agencies is of valuable assistance to them. In addition, when the Alberta Department of Transportation was contracted under CIDA to prepare a Resource Atlas of Indonesia, the Map Collection provided materials for preparation of base maps and other materials allowing initial resource inventory.

Annual circulation has risen from about 5,300 items in 1969 to about 13,000 items in 1980 with a peak in 1979 of over 18,000 items. This number is subject to enormous fluctuations since it depends on projects requiring air photographs. A single project in 1979 utilized over 4,000 air photos. A more gradual increase can be seen in the number of maps loaned. This has increased from 2,000 in 1970 to 5,500 in 1980. The number of borrowers also shows a steady rise from about 730 in 1970 to 1,400 in 1980. We have divided our user statistics into a number of categories in order to determine something about our user population. For the calendar year 1980 we find that 37.5% of our borrowers were students,

faculty or employees of the Department of Geography, 8.0% were in the Department of Geology, 12.2% were in other Departments of the Faculty of Science bringing the total of Science users to 57.6% of the total number of people who borrowed maps. The Faculty of Education accounted for 2.9% of our borrowers, Library Science for 2.4%, Arts 10.8%, Engineering 4.5%, Physical Education 3.9%, Agriculture-Forestry 4.2% and other Faculties or segments of the University, 5.4%. The Research Council of Alberta and various Government Departments accounted for 2.5% and other off-campus borrowers constituted 5.4% of the total number of persons to whom we loaned items from our collection.

If we look at the number of items loaned to each of these groups we find that most groups have a lower percentage of items borrowed than of borrowers. Only three groups borrow larger percentages of items than their share of the borrower population might suggest. These are, as might be expected, those associated with the Earth Sciences. Geography accounted for 44.4% (37.5% of borrowers), Geology 8.7% (8.0% of borrowers) and the Research Council and various Government Departments, a substantial 15.5% (2.5% of borrowers). This is mostly accounted for by air photos borrowed by the Research Council which would otherwise have had to be purchased.

We are one of relatively few University map libraries which actively loans material off campus, including, where necessary, to the general public. Lack of adequate copy facilities (neither large platten nor colour copiers are available), is one reason for this, but our main reason is that we feel very strongly committed to providing all the service we possibly can since we are financed by public funds.

Though we have already noted that over 1,400 people borrowed items from us in 1980, this is not an accurate indication of the number of people who actually use the Map Collection. There are, at the very least, 2.5 to 3 in-library map users for every map borrower. Since they also use items from the collection, the only task we do not perform for them is the creation of a lending record. All items must still be selected and refiled.

Through the years we have received gifts consisting of the map collections of two deceased and one retired professor. Each has contained a number of unique items not previously held by the Map Collection. During the past year we were put in touch with the widow of a deceased English architect and, for the cost of shipping, were presented with a sizeable number of maps of high utility, material dating from very recent back to the 1920s.

Institutional gifts and exchanges have formed a major part of our acquisitions over the past four years. We have received, mostly from Western U.S. libraries, more than 4,000 maps not previously held here, including a number of out-of-print Canadian maps. We have reciprocated by sending duplicate material to some of these universities trying to build collections of particular items, agriculture, genealogy, and Canadian Studies.

We are presently situated in a basement area with no windows. We have a strong concrete floor with only a narrow service tunnel beneath us. There are no weight restrictions on this floor. However, we are beneath a tiled plaza which has had a history of leaking in spring melt time and in heavy rains. This problem seemed to develop only after we moved to this location and though much time and money has been spent trying to seal these leaks, all efforts have been unsuccessful. Leakage

has caused the wall on the South side to begin crumbling in at least one place and the wall covering has been taped in place to keep the crumbling concrete from cascading inwards to the floor. This leakage has also caused damage to maps in our collection valued at nearly one thousand dollars. In addition, during the past fourteen months, we have suffered four floods, due to frozen pipes in an above ground stairwell. The most recent, just prior to Christmas was by far the most serious and costly to the University. Only a few books were damaged directly but the carpet, a sisal fibre, has had the smell of corn sillage to some persons. The air became so moist that we have had to keep a watch for mold in the lower drawers.

At least two of the ventilation outlets disgorge relatively large quantities of clay and sand size particles which adhere to maps left on top of cabinets. Some of this dirt is transferred into the cabinets when filing and its abrasive action can damage the affected maps.

When the collection moved into those quarters the question was asked about how long they would be adequate in terms of space. The response was that it would be adequate for about five years. Now, after six years, we are rapidly nearing the end of our capability to house the collection. Map cabinets have been stacked higher than we ever intended, new shelving has been found to more efficiently house our atlases, and space has run out to house additions to our still growing collection of air photos.

Temperature fluctuations from 65°F to 76°F occur within 24 hours at least twice each week make it less than pleasant working conditions. This is also damaging to the paper. Humidity control, also important in a collection of this nature, is not possible in these quarters.

Future needs of this map collection fall into immediate and short term needs, which must somehow be met within the next five years.

Money must be found for two additional full time positions, one whose chief responsibility would be the air photo collection, and the other would be a full time cataloguer. We have a very large quantity of photography awaiting processing, an activity not able to be covered by current staff. Our collection of maps is presently uncatalogued according to standard AACR format, and the cataloguer would be immediately faced with a tremendous backlog.

In 1966, the year the Map Collection was officially established, the collection was already too large and the staff too small to begin producing a card catalogue for all the thematic maps and map series. In 1971 a loose leaf catalogue was begun as much for inventory purposes and for search. This has been continued. The major drawbacks with this are the lack of an adequate variety of access points, lack of adequate cross-referencing, slowness of producing bibliographies, and the inability to draw on shared cataloguing services. On-line computer facilities for cataloguing, storage and retrieval of map records will be required within the next five years. The author visualizes an on-line terminal with access to UTLAS, OCLC, and RLIN networks. A printer should be attached to the unit to acquire information not required immediately and to produce subject specific bibliographies.

Another immediate need is to extend the hours of operation from 8 am - 4 pm, Mon. - Fri., to 8 am - 9 pm, Mon. - Thurs., 8 am - 5 pm, Fri. and 12 noon -

5 pm on Saturday to accommodate students taking evening and Saturday classes and to better accommodate the general public. Some libraries use student assistants to do this, but it has been my experience that this is a waste of time and money because: (a) they will never develop the familiarity with the collection to properly assist patrons and (b) it would be a waste of time and money to train them to perform cataloguing or indexing functions since they do not stay with the job long enough. Refiling of maps and atlases is the most frequent job left to them, and again, the accuracy of refiling of maps by student assistants in my experience leaves much to be desired. In essence they become highly paid 'map sitters' who use most of their time for studying. A special library of this nature requires personnel capable of providing consultation services tailored to the specific needs of our patrons.

In the longer term, two additional staff will be required, preferably with undergraduate degrees in geology and either soil science or forestry and with minor specialization in geography.

A larger facility is required to house the collection and to provide for future expansion. It should include space for high density storage of infrequently used items and more public work space. The collection presently occupies 5500 sq ft and this should be doubled. The facility should incorporate special environmental controls required in a collection of this type. It should also include proper security measures to prevent loss of materials both during and after opening hours.

A large platen colour copier is required in the map collection or nearby on campus. The latter solution, inclusion of such a machine in a University copy centre is a better one since it removes the item from the map collection budget and releases us from the onus of providing staff and servicing to that area.

The author has tried to show the major ways in which the University Map Collection of the University of Alberta presently serve a very wide cross-section of the academic community and the community at large. He has further sought to show how these services might be improved. It is hoped that this study may be of use to others who also seek to serve. "In which we serve" is a meaningful phrase, which typefies many of our activities and which was chosen with apologies to Noel Coward.

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EUROPEAN MAP LIBRARIES CO-OPERATE: THE ESTABLISHMENT OF THE GROUP OF MAP LIBRARIANS WITHIN LIBER - GROUPE DES CARTOTHÈCAIRES DE LIBER

Barbara Farrell
Map Library
Carleton University

Map librarians in Canada are fortunate in having a flourishing and independent professional association like ACML. Even so we find ourselves quite frequently frustrated by problems of communication arising from the distances across which we must exchange ideas and the language barriers we must try to break down. Consider then the communication problems facing curators of the many fine national and academic map collections distributed throughout Europe - from Iceland to the south of Spain and from Ireland to the Iron Curtain. They are the keepers of a large proportion of the world's most valuable historical map resources. They face similar problems of distance, compounded by international frontiers and varying national standards of economic well being. Their language problems are extremely complex. Yet until very recently there has been no unifying professional body to provide an official forum for discussing mutual problems on a European-wide basis. In the spring of 1980 a group of map librarians, who had been meeting informally at the gatherings of the Ligue des Bibliothèques Européenes de Recherche (LIBER), proposed to constitute their group as a formal subgroup of LIBER. As a result, from October 20-22, 1980, almost forty map curators from all parts of Europe met in Paris, at the invitation of Monique Pelletier of the Bibliothèque Nationale and under the provincial chairmanship of I. R. Kejlbo of Copenhagen. Their objectives were to establish officially the Group of Map Librarians within LIBER, to explore informally mutual problems in order to identify a future programme of action, and, in effect, to hold their first conference by the presentation of a variety of papers on topics of interest.

Rationale for the Formation of the Group

In her background paper Monique Pelletier provided the rationale for setting up a supra-national group. She explored the characteristics and value of two types of organization to which European map librarians could at present relate. On the one hand, many countries had their own map library groups which were able to meet local and national needs, for example, the group of map librarians within the Comité française de cartographe in France, and that within the British Cartographic Society in the United Kingdom. On the other hand, at the broadest level, there existed international organizations concerned both with the management of map libraries and the history of cartography. The International Federation of Library Associations (IFLA), Imagio Mundi, and the International Cartographic Association (ICA), had already many solid achievements - among others ISBD (CM), Unimarc,the Multilingual Dictionary of Technical Terms in Cartography, and conferences on the history of cartography were specifically mentioned. These organizations provided map librarians with mutually beneficial links with the broader worlds of libraries, cartographers and map producers. The further development of such links was vitally important. However existing international groups by their very nature could not provide Europeans with a forum directed specifically towards map libraries in which colleagues from collections both large and small could meet to discuss

practical matters and develop mutual assistance and co-operation.

Establishment of the Group and Policies

The formation of the group was unanimously ratified by those present who were eligible to vote. A chairman, Donald Moore, National Library of Wales, and Secretary, Monique Pelletier, Bibliothèque Nationale, Paris, were elected to serve for the next two years. As a matter of policy it was agreed that meetings would be held every second year; that meetings would be open to all European map libraries - not necessarily only those belonging to LIBER and that the group would co-operate closely with the Geography and Map Division of IFLA. The main objectives would be to increase communication between map libraries of all kinds, particularly archives and universities, and to make map collections more widely known among general libraries and archives.

Formulation of a Programme

In order to provide a basis for the formulation of a programme a general discussion was held to explore the conditions under which map libraries in Europe operate at present. Although some collections, for example in France, the Netherlands and Denmark, were more fortunate than others, there followed a frequently repeated tale of

a) shortages of money, staff (many quite large collections operated with only one, part-time map curator) and space.

b) poor physical facilities and lack of proper conditions for housing and conserving maps.

c) problems with cataloguing and automation.

The list is familiar enough to Canadian ears even though most of us in Canada would be considered well-off in terms of our physical and financial resources. It was agreed that all were topics which would benefit from the consultation and collaboration of a joint organization. The group was off to a good start and the programme of the next two days lived up admirably to the potential for interesting and beneficial topics.

Map Acquisition

L. Legarde, in 'Working Tools for the Acquisition of Cartographic Materials' painted a discouraging picture of the difficulty of planning a rational programme of map acquisition! A difficulty compounded by expanding map publication, increasing costs, inadquate staffing, economic and political problems. Her report, summarizing the results of a questionnaire distributed to European map collections by the Bibliothèque Nationale concentrated on the major practical problem: the lack of accessible information about newly published maps, in the hope that airing the problems would encourage map librarians to work together to alleviate the inadequacies recognised. She reviewed the values and limitations of the major acquisition tools for maps: Catalogues of official map publishers; World Cartography; Catalogues of Commercial map publishers; Geographic and Cartographic

periodicals; current national cartographic bibliographies; retrospective cartographic bibliographies (including BCI); published catalogues of map libraries; catalogues of specialist map stores; current catalogues of map libraries, and other miscellaneous sources of information. As the inadequacies of each were outlined reasons for the complexity of the map acquisition task became very clear.

Also in relation to the topic of map acquisition A. M. Briend commented on recent developments relating to Bibliographie Cartographique Internationale (B.C.I.). In summary, twenty-eight volumes have appeared between 1949 and 1979 covering map production for the period 1946-1975. Each volume includes maps of the entire world including base maps, topographic maps, national and regional thematic maps and atlases. In 1972 responsibility for the publication was transferred from the Union Géographique Internationale (U.G.I.) to the Service de Documentation et de Cartographie Géographique du Centre National de la Recherche Scientifique (C.N.R.S.) but without any financial assistance or personnel. A major effort was made, but in 1978 it became necessary to discontinue the bibliography. In anticipation of a global solution to the problem several temporary measures have been adopted and the following partial bibliographies have appeared or will appear:

In Intergéo Bulletin: No. 52, 1978. Atlases: 1976-1978.

No. 53, 1979. French and Swiss thematic maps, 1976-1978.

No. 59, 1980. Map received at Intergéo, 1976-1978.

In Bibliographie Géographique Internationale: Since 1979 a new heading "Maps and Atlases" has been created. Entries are for thematic maps and atlases and are nearly all accompanied by commentaries and indexes. An issue listing entries for 1979-80 is expected in November 1980. In the discussion which followed this talk it was stressed that an international bibliography was impossible without the production of good national bibliographies. For this, co-operation between map producers and the national library in each country was essential.

Reprographics

The sessions on the second day, hosted by the I.G.N., dealt with practical aspects of the reproduction of cartographic materials as experienced by the British Library, the Bibliothèque Nationale in Paris and several other map collections in France. In a series of papers, the policies, practices and problems of map reproduction for users were outlined. What emerged was a picture of the wide range of reprographic services, both photographic and, to a lesser extent electrostatic, available to the users of those collections despite the valid concern of the curators for the protection and preservation of valuable materials. In fact micrographics particularly have clearly become a well established part of the plans of the major libraries for the

conservation of archival materials. Microfilm hardware was also discussed including one simple modification to a relatively inexpensive, standard (in the U.K.) microfilm reader which enables microfilmed maps to be read on an horizontal surface (manufactured by M.E.C. Microfilm Ltd., screen size 510 x 760 mm). The British Library Map Room and the National Library of Scotland each possess one of these readers. The current limitations of microfilming maps in colour were presented in another paper. The session will certainly have given participants a greater awareness of the reproduction facilities offered by their national libraries and of the wide range of products available.

I must conclude on a personal note of thanks to the U.K. colleagues and Mlle. Pelletier who arranged my participation in a very worthwhile and stimulating experience. I have not described here but nevertheless will retain many pleasant memories of the less formal aspects of the meeting: the friendship of hitherto unknown colleagues; the 'vin d'honneur'; the lively lunch in Paris café; the hesitant conversations in French with a Spanish delegate; the delegate from Iceland who speaks five languages fluently and yet had to struggle too often with English; the tour of the vast I.G.N. map library and last but not least the outstanding cartography exhibit "Cartes et Figures de la Terre" at the Centre Georges Pompidou.

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ASSOCIATION OF CANADIAN MAP LIBRARIES

COMMITTEE REPORTS AND OTHER REPORTS

ACML Committee Reports and Chairmen 1980/81

Other Reports

Membership Status Report (Grace Welch)	52
IFLA Report (Hugo Stibbe)	no report
IFLA Liaison Committee Montreal 1986 Conference (I. Dubrovic)	no report

Offprint copies of these reports will be made available to CTL members attending the Annual Business Meeting in Halifax.

Some of the committees are presently inactive and therefore have not reported; for other committees a report is not mandatory at this time (i.e. the Handbook Committee).

ASSOCIATION OF CANADIAN MAP LIBRARIES

COMMITTEE REPORTS

ATLAS COMMITTEE FOR ATLANTIC CANADA

The committee met only once during the year.
The meeting was held in Fredericton on February 20, 1981 at the Provincial Archives of New Brunswick with three of the original committee members in attendance. Kirk MacDonald, Dalhousie University, changed employment and employer during the year and resigned from the committee. Elizabeth Hamilton, University of New Brunswick, was added to the committee, a welcome addition indeed.

The results of the surveys undertaken by three of the four provincial representatives were completed before the beginning of the year being reported. The survey results of the fourth province have now been submitted to the Committee Chairman.

At a meeting held on February 20, 1981 at Fredericton, N.B. the following was accomplished

- all survey results and draft lists collected to date were reviewed.
- it was agreed that Elizabeth Hamilton, UNB and Peggy Campbell, MRMS would initiate final compilation.
- it was agreed that an attempt would be made to have the first draft of the List completed by May 1981 before the ACML annual conference.
- it was agreed that discussions on publisher, costs of publication, etc. be discussed with ACML at the appropriate time.

The present status of Committee Membership is as follows:

New Brunswick:	Ms. Elizabeth Hamilton
	Mr. William R. MacKinnon
Newfoundland:	Ms. Margaret Chang
Nova Scotia:	Mr. Gary Shutlak
Prince Edward Island:	no representation
Chairman:	Mr. Brad Fay

C. Bradley Fay

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CONFERENCE COMMITTEE 1982 OTTAWA

The 1982 conference of the Association of Canadian Map Libraries is being hosted by the National Map Collection, Public Archives of Canada, which is celebrating its 75th anniversary as an administrative unit.

The conference will be held the week of August 16, 1982, immediately prior to the meetings in Montreal of the International Federation of Library Associations and Institutions (IFLA). Members of the ACML may wish to

consider attending the sessions of the Geography and Map Libraries Section of IFLA, following the ACML Conference.

Accommodation will be available at the University of Ottawa residences, or at downtown hotels.

The conference committee is being established in April 1981, and will have the first circular for distribution at the 1981 Halifax Conference.

Betty Kidd

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CONSERVATION COMMITTEE 1980-81

During the past year, the bilingual report entitled Map Collections in Canada and Conservation/Les collections de cartes et conservation au Canada, based on the questionnaire circulated in 1976, was distributed to all those who responded to the questionnaire.

Eighteen institutions participated in the 1980 joint order of non-acidic map folders. Although the institutions received the folders in a reasonable time period, the rolls of non-acidic tissue were never received by the eight institutions who ordered. The Conservation Committee has written both to the supplier and to the institutions. This program has proven to be successful, and it is recommended that it continue every second or third year.

The chairman of this committee recently published in Special Libraries, volume 71, number 12, December 1980, an article entitled "Preventative conservation for map collections".

Betty Kidd

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HISTORICAL MAPS COMMITTEE 1980 - 1981

"...to preserve and popularize the Canadian cartographic heritage..."

Summary

This has been yet another very productive year for the Historical Maps Committee. Progress has been made in all directions - in terms of production, in terms of sales and new distribution outlets, and in terms of publicity for cartographic Canadiana and the Association of Canadian Map Libraries. The very substantial income generated by the Historical Maps Committee enables the Association to look at other interesting and deserving projects, without dependancy on generally very scarce outside financing.

Production

The Committee can report production of 16 new maps, which bring the total published thus far to 70. At least six more maps will be printed before the

1981 ACML Conference. Eleven of these new maps were sponsored by various institutions and individuals. Seven of these institutions and private firms have collaborated with ACML for the first time and have thus helped to enhance the "outreach" of the Association.

Production of the folio, which is in effect an atlas of facsimile maps, has been a major undertaking. A hard cover had to be designed and a mock-up approved by the ACML Executive, selecting the most suitable from several samples prepared by binding firms. A title page and three sheets of lists and indexes were also produced, making the total folio an attractive and self-contained publication.

Additional copies of the cover and of the introductory pages were also printed, giving an opportunity to those who were purchasing ACML maps separately, as they appeared, to acquire this additional material and in this way to create their own folio sets.

Following statistical tables show the full story about the geographical areas covered by ACML maps, the period when these maps were originally produced, the sponsoring institutions, according to their professional status, and the location of sponsors. The latter two columns indicate the number and distribution of business contacts established by ACML across the country through the Historical Maps Committee.

Statistical summaries for the 70 maps produced by the ACML Historical Maps Committee (1979/80 figures are shown in brackets)

Predominant geographical area	No. of maps
World	(2) 2
W. Hemisphere and North America	(5) 7
Canada	(2) 6
East Coast	(10)11
Quebec	(5) 7
Ontario	(14)14
Prairies	(6) 9
West Coast	(7)10
Yukon and NWT	(3) 4

Date of publication	
1500s	(4) 5
1600s	(10)13
1700s	(17)20
1800s	(19)28
1900s	(4) 4

Sponsoring institution	
ACML	(6)10
National Map Collection	(3) 4
Universities	(20)23
Other educational institutions	(2) 2

Provincial archives and libraries	(10)14
Museums	(4) 5
Private companies	(6) 8
Private individuals	(3) 4

Location of sponsors (other than ACML and NMC)

Newfoundland	(4) 5
New Brunswick	(2) 2
Nova Scotia	(2) 2
Prince Edward Island	(1) 1
Quebec	(2) 3
Ontario	(21)25
Manitoba	(1) 2
Saskatchewan	(1) 1
Alberta	(4) 5
British Columbia	(5) 7
Yukon	(1) 2

The distribution and sales

The sales for this year were close to 5000 maps (including copies sold as folio sets), almost 50 per cent higher than last year. The net income from sales of maps and folio sets amounted to almost $10,000, making it the highest revenue item in the history of the Association.

The number of distribution outlets is on the increase. As sales through some firms and institutions level-off, other representatives show greater enthusiasm and manage to achieve very good results.

In view of the rising costs of production (negatives, paper, printing, mailing, invoicing), the ACML Executive approved higher prices for facsimile maps ($3 from previous price of $2, and $15 for hand-coloured maps). Sponsor's fee remains at $150. No adverse effect on sales has been noticed since new prices were introduced on January 1, 1981.

Plans for the future

The next printing of facsimile maps will take place prior to the 1981 ACML Conference. Plans are under way to have the following printing in August-September 1981.

Committee members were asked about plans to produce the second folio of ACML maps. Preliminary discussions among Committee members have taken place and it is hoped that once maps No. 51-100 are published (in other words, 30 maps down the road), the second folio will become a reality. Given our present production potential this could happen towards the end of 1982.

In closing, sincere appreciation is expressed to all associated with the

Historical Maps Project - to Committee members and consultants, the ACML Executive, and all ACML members who have solicited support from sponsors, helped in map sales, and provided encouragement and advice.

Serge A. Sauer

-oOo-

NATIONAL UNION CATALOGUE COMMITTEE

As chairman in limbo of the National Union Cataloguing Committee which has not met as a group for two years, I would appreciate your consideration of my recommendations concerning the future of this committee of the Association.

Over the years the National Union Cataloguing Committee has made a great deal of progress culminating in the production of a Manual for the Cataloguing of Maps under AARC 2. From the beginning it was obvious that no Union Catalogue of Maps could be attempted until such time as uniform rules had been developed.

However the committee was not formed originally to develop these rules but to produce a catalogue of the map holdings of Canada. In the early years of the Association it was recognized that the wealth of the National Collection lay not only in the National and Provincial Archives of Canada but also in the nation's libraries in universities and other institutions where extensive and specialized collections had been assembled.

The committee up to now has however produced only the tool which makes the purpose of the Association possible. In no way would I have it thought that this has been anything but an invaluable contribution by a number of talented and devoted members.

Now however it is,I believe,important that the Association return to the original purpose and concentrate on a program aimed at the actual production of a National Union Catalogue. In this Association there are members whose particular talents should be tapped to this end.

I recommend that those who have worked untold hours on the rules and have much still to do, be allowed to at least dream of an end to their toil - hopefully they will remain our learned advisers. I recommend that new committee members be appointed to the NUC committee and that they should concentrate on fulfilment of the original mandate of this Association.

Kate Donkin

-oOo-

NOMINATIONS AND ELECTIONS COMMITTEE

The Nomination Committee for the election of officers for the year 1981 was set up according to the ACML by-laws. The members are Kate Donkin, Chairman, Olga Slachta, and Mary Armstrong. The call for nominations was sent out and the committee was pleased that nominations were received for all positions. At this time ballots have been sent to all voting members and the results will be announced at the annual meeting.

Kate Donkin

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ASSOCIATION OF CANADIAN MAP LIBRARIES

OTHER REPORTS

NATIONAL COMMISSION ON CARTOGRAPHY

Since the last Council meeting, the National Commission on Cartography has been awaiting the Ruggles' Report with a great deal of expectation. Due to many circumstances the report has been delayed a number of times and, as a result, the activities of the National Commission on Cartography have been limited to the day to day affairs of the Commission. When the report is ready it will be distributed to all the member associations. The National Commission on Cartography will meet later in the summer to debate the recommendations of the report with a view to mapping out its future.

L. Dubreuil

-oOo-

PUBLICATIONS REPORT 1980

Balance as of January 1, 1980			$ 933.80
Credits: Sale of publications (Includes $2.00 Debit Memo)		$13,199.78	
Interest from account		144.70	
Foreign Exchange		99.17	13,443.65
			14,377.45
Disbursements: Transfer to Treasurer		$ 9,276.00	9,276.00
			$ 5,101.45

Outstanding Accounts - 1980: 1 - $12.00

1980 Sales of Publications, Facsimiles

Facsimiles

Ottawa Office	$ 2,758.90
London Office	9,885.28
	$12,644.18

Directory '80	24 copies
Folio of Plans No. 1	5 copies
Folio of Plans No. 2	19 copies
Proceedings	17 copies
Bulletins	19 copies

Bruce Weedmark

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TREASURER'S REPORT

Balance as of December 31, 1979 (excluding ACML/NMC contract funds)			$ 8,751.18
Receipts			
Memberships	1979	20.00	
	1980	4,134.72	
	1981	235.80	4,390.52
Sale of publications			13,443.65
Interest			1,262.04
Foreign exchange			174.20
Conference 1979			539.95
			19,810.36
			28,561.54
Disbursements			
Conference 1980			250.00
Historical maps committee			3,210.71
Directory of map collections			2,327.55
Handbook			935.00
Bulletin No. 33			
Typing & editing		460.00	
Printing		695.00	
IBM Rental		42.89	1,197.89
Bulletin No. 34			
Typing & editing		559.53	
Printing		1,250.00	
Newsletter ins.		125.00	
Photography		21.40	1,955.93
Bulletin No. 35			
Typing & editing		411.00	
Printing		1,109.00	
Mailing		22.00	1,542.00
Bulletin No. 36			
Typing & editing		383.50	
Printing		1,128.80	1,512.30
Editor's telephone calls			216.40
Index to Bulletin			546.00
Filing cabinet for archives			200.00
Reorganization of archives			350.00
Travel			1,369.00
IFLA membership			325.00
Annual incorporation fee			30.00
Invoices, leaflets, membership lists			460.23
Publications officer			375.00
Auditor's report			395.00
Telephone calls (executive)			119.59
Nominations committee			17.20

(continued)

Stamps & supplies	66.67	
Bank services charges	25.12	
Reception of cartographic archivists	10.00	
Return of overpayment on maps	112.00	17,548.59
Balance as of December 31, 1980 (excluding ACML/NMC contract funds)		11,012.95

Appendix A to Treasurer's Report for 1980

Balance as of December 31,1980 (excluding ACML/NMC contract funds)	$11,012.95
1979 ACML/NMC contract funds in 1980 budget	3,687.65
New contract funds for 1980	15,000.00
	29,700.60
ACML/NMC contract employee wages	16,945.74
Balance as of December 31, 1980 (including ACML/NMC contract funds)	$12,754.86

Appendix B to Treasurer's Report for 1980

Disposition of Funds

Savings account	6,229.46
Chequing account	1,423.95
Publications account	5,101.45
TOTAL	$12,754.86

Grace Welch

MEMBERSHIP STATUS DECEMBER 31, 1980

Full	83
Association	39
Institutional (Canadian)	79
Institutional (other)	43
Honourary	1
Exchange	12
TOTAL	257

Grace Welch

REVIEWS

Atlas of Saskatchewan Agriculture / Kai-iu Fung and Stuart H. Gage, Saskatoon: University of Saskatchewan, 1978. 143 p. Paper, spiral bound. $10.00.

A review of this atlas has proved to be a sad and disappointing task. I have difficulty in understanding why and how it was published; the limited and arbitrary scope of its contents would prevent any effective use for research, reference or educational purposes.

The atlas is comprised of computer produced maps. There are 122 maps and 9 block diagrams arranged in 17 sections and covering aspects of Climate, Land Use, Farm Types, Crop and Livestock Characteristics, Population and Economic Characteristics and Grasshopper Infestations. There are 1 1/4 pages of text and a one page base map on clear acetate is loosely inserted.

A primary concern is that this is not a work complete of itself. There is essentially no text to provide information on selection of map topics, to discuss the distributions presented or to justify the years for which data are mapped. Add to this the failure to include definitions of terms used and the absence of units of measurement on the maps themselves and this reviewer is greatly concerned, already.

There is no map of Saskatchewan in the atlas! Rather the area mapped is the southern portion of the province, with some kind of arbitrary northern boundary. The area mapped does not correspond to that used for agricultural maps in the Atlas of Saskatchewan*! Questions inevitably arise when relatively high values occur at the northern boundary, e.g. page 61.

There is no set of introductory maps in the atlas. Questions relating to location, soils, land use and general climatic parameters must therefore be referred to the Atlas of Saskatchewan which is referenced. If such is available, however, there seems to be little justification for the present atlas of agriculture.

The cartographic qualities of the maps, choropleth and isopleth can easily be visualized by any one familiar with SYMAP's line-printer out-put, complete with legend; only the title has been typeset. The modest photographic reduction is insufficient to offset the coarse patterns, which were perhaps the best available in the early 1960s but are hard to justify given more recent, and widely available, advances in computer mapping. My own judgement is that maps of this quality never were suitable for publication and that they should be viewed as compilation drawings ready for conventional drafting.

An overlay base map, printed on clear acetate is to provide a locational key. Unfortunately it does not fit and the lack of registration marks prevents any accurate placement. Why authors persist in using overlays I don't know: registration problems following printing are well known. Further, as a locational base, the overlay is scarcely helpful since none of the unit areas are named or

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* *Richards, J. Howard and I.I. Fung (eds.) Atlas of Saskatchewan, Saskatoon: University of Saskatchewan (1969).*

numbered. A tabulation of enumeration areas used is therefore not very useful.

As a design characteristic, no boundaries are drawn on the maps themselves. This creates a most curious lake or "archipelago" effect (e.g. page 67) wherever no pattern occurs--these effects occur widely. Unfortunately no mention is made of this unavailability of data on the maps themselves.

The failure to specify or overprint boundaries has created an unparalleled design for the province's boundaries. Both latitude 49°N and 110°W longitude are stepped. Even the border with Manitoba, controlled by the Correction Lines of the Dominion Land Survey System, has been transformed. These are in fact all machine-specific problems of the line-printer. They can be solved either by changing map projection, or consciously plotting beyond the borders and then editing out overlapping portions.

Climatic data and information on levels of grasshopper infestations are portrayed through isopleths. It is unfortunate that the locations at which data values were recorded are not given. Neither do we know whether records from stations beyond the province's boundaries were incorporated in plotting. This would greatly affect the isopleth pattern.

A persistent problem is comparability between maps. This is strongly suggested by the repetition of patterns but is made false by the selection of class intervals using an equal steps approach. Nowhere is this more frustrating than in the maps of precipitation. Pattern 1 covers 127.25 - 191.65 mm on page 1 (1954), 56.25 - 85.00 mm on page 7 (1961) and 143.75 - 171.40 mm on page 13 (1974).

The block diagrams are "pretty" and repeat information mapped elsewhere - from which they are isolated. I am fascinated by what the Saskatchewan farmer will make of "Before foreshortening EF = AGOB."

In summary this review has been a depressing task. The problems mentioned persist throughout; others of detail have been omitted. A thoughtfully and carefully produced atlas can be a treasure store for student and planner. Without much attention however a collection of maps can produce a strange and misleading graphic image. I must place the Atlas of Saskatchewan Agriculture in the latter category, not recommended.

Michael R.C. Coulson
Department of Geography
The University of Calgary
Calgary, Alberta

(Editor's note: A copy of this review was sent to Dr. Kai-iu Fung to allow him to respond to the points raised in the review. This atlas was produced as an interim updating of the agricultural section of the Atlas of Saskatchewan and only 500 copies were printed. Both this and the Atlas of Saskatchewan are out of print, and a new revised edition of the Atlas of Saskatchewan is now in the planning stages with a positive outlook.)

-oOo-

The Map Librarian in the Modern World; Essays in Honour of Walter W. Ristow / edited by Helen Wallis and Lothar Zögner. Presented by the IFLA Section of Geography and Map Libraries. München, New York, London, Paris: K.G. Saur, 1979. 295 p. illus. ISBN 3-598-10063-9. $26.00 (paper).

This collection or Festschrift of papers was compiled by Ristow's colleagues in the IFLA Section of Geography and Map Libraries to acknowledge his contributions to the founding and activities of the Section on the occasion of his 70th birthday and retirement after 40 years in map librarianship. Daniel J. Boorstin, The Librarian of Congress, has contributed the preface in which he comments that Dr. Ristow's "writings in the history of cartography, in map and atlas bibliography and his pioneering efforts in the new world of automation have earned him a place in the history both of American cartographic scholarship and of map librarianship". The editors have provided a brief foreword indicating the purpose of the volume as covering "the many aspects of his professional activities" as well as paying "tribute to the close friendship and community of interest which [the authors of the papers] have been privileged to share with Walter and Helen Ristow over these years".

Nearly 40% of the volume is devoted to Ristow and the Geography and Map Division of the Library of Congress. Appropriately for such a volume, there is a biographical essay outlining Ristow's education and career. This is followed by a list of his publications for the period from 1933 through 1977 which totals 227 items. In the nearly four years that have passed since this compilation, the list has continued to grow as retirement has not appeared to diminish his scholarly contributions. Four long-time colleagues and fellow staff members of the Geography and Map Division, John Wolter, the current Chief, Andrew M. Modelski, Richard W. Stephenson, and David K. Carrington, have contributed a brief history of the Division where Dr. Ristow spent the majority of his working years. An especially useful aspect of this paper is the "list of officially published works of the Geography and Map Division" from 1896 through 1977.

Four of the essays that follow also describe the history and/or activities of particular map collections. Roman Drazniowsky discusses the collection of the American Geographical Society prior to the move to Milwaukee. David Woodward reviews the development of the Hermon Dunlap Smith Center for the History of Cartography at the Newberry Library. Edmond Pognon writes in French about the collections of the Département des Cartes et Plans of the Bibliothèque Nationale. Anna Kozlowa describes cartographic materials in the Lenin State Library of the USSR.

Three of the papers are concerned with the status of map librarianship and/or map collections. Helen Wallis has provided a general report covering worldwide aspects of the field and pointing out notable changes and occurrences, in many of which Ristow figured. I.R. Kejlbo presents a history of geography and map libraries in Denmark, describing major collections briefly. Of special interest and importance to Canadian map librarians (show it to your administrators!) is Joan Winearls' informative and well-written review of map collections and map librarianship in Canada.

Two of the essays in the volume discuss the activities and acquisitions of individual map collectors. Ann-Mari Mickwitz describes some of the acquisitions of Adolf Erik Nordenskiöld whose collection is in the library of the University of Helsinki. Antoine De Smet writes in French about the activities of Viglius

ab Aytta from Zwichem.

The three remaining papers cover a variety of topics. Lothar Zögner discusses training for map librarianship, particularly in connection with the Working Group in the IFLA Section of Geography and Map Libraries and highlighting Dr. Ristow's contributions. E. Hans Van De Waal reviews the Dutch Union Map Catalogue including Dr. Ristow's facilitation of its activities. Emil Meynen contributes a discussion of "Die Thematische Karte: ihre Katalogisierung und Dokumentation."

While a goodly portion of the volume deals with the types of topics that have been of interest to Dr. Ristow over the years, only a few of the essays actually deal directly with his activities, except in passing, other than in the biographical sketch and the history of the Geography and Map Division. The papers are somewhat uneven in terms of style. One sentence paragraphs abound in one essay, and a couple of those papers which are written in English by non-native writers of English have instances of awkward grammar. A number of typographical errors were encountered; three on page 149 being the most glaring occurrence. The binding of the volume, as is the case of many paperbacks, is not particularly sturdy, and on the review copy it is already beginning to break down.

Despite the uneven style, the fact that it is a paperback, and the cost ($26.00 U.S.), it is still a useful volume for a Canadian map library or map librarian to have. It provides an informative survey of activities in major collections and countries, including Canada as mentioned previously, in addition to detailing the career, through 1977, of a distinguished American map librarian who has contributed significantly to the development of map librarianship on the international scene as well as in the United States.

Alberta Auringer Wood
University Library
Memorial University of Newfoundland
St. John's, Newfoundland

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Place Names of Peel: past & present / by Pauline J. Roulston. Cheltenham, Ont. : Boston Mills Press, c1978. 79 p. (The Place name series: no. 1) $6.95. ISBN 0-919822-18-5.

Gazetteers have always affected me in the same way as illustrated dictionaries - one never escapes reading just one definition. When faced with Pauline Roulston's Peel, the impulse to read on was inescapable from title page to the last map in one glorious burst. I admit to a certain prejudice in having spent much time in Peel County long before it became Mississauga, and having relatives by the score around Streetsville. However this bias could well be suppressed if the text were boring. I do enjoy Ms. Roulston's style of writing which is simple and clear, and I also enjoyed the fact that the author has not suppressed her desire to include the legend with the fact and the sublime with the ridiculous. The number of Orangemen and drunken Irish must have been legion in Peel and one group was not exclusive of the other. At times you decide that the Post Office had more to do with running the county than the municipal governments. Undoubtedly Ms. Roulston enjoys her work and it comes over loud and clear.

Herein lies the particular virtue of this work over and above its purpose as a gazetteer of a very limited area. The format is attractive but more than that, the generous use of space and distinctive type scripts makes it very simple to look up any place in Peel County by present or past name and even those places long since disappeared if not forgotten. The map references are simple and therefore useful to a broad audience. I would personally prefer maps which were visible while reading the text when unfolded. More importantly, I was particularly alarmed when the last two maps fell out of the binding after first reading. This is a great drawback because without the maps it would be virtually impossible to locate extinct settlements and we all know how maps have a terrible tendency to disappear from books if not properly bound in. This binding problem should not be regarded as a minor deficiency but as a major one which calls for repair before the book is placed in circulation.

If Pauline Roulston should gather the strength to write another gazetteer, I hope she chooses Wentworth - but anywhere will do as long as she continues similar research.

Kate Donkin
Map Library
McMaster University
Hamilton, Ontario

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Kitimat-Stikine Regional District: Regional Resource Inventory / Canadian Cartographics.- 1:500,000.- Terrace, B.C.: Planning Department, Kitimat-Stikine Regional District, 1978.- Col. map 2 sheets, each 70x98 cm. $10.

Northwestern British Columbia, travel and recreation guide / Canadian Cartographics.- 1:1,000,000.- Terrace, B.C.: Northwest Travel and Recreation Committee, 1980. Col. map brochure. 93x66 cm.

Terrace Community Plan / L. Skoda, Canadian Cartographics.- Scale varies.- Terrace, B.C.: Planning Department, 1980.- Col. map. 40x63 cm. on sheet 63x93 cm.

The first impression one gets on viewing Kitimat-Stikine: Regional Resource Inventory is of a cluttered topographic map, but it becomes obvious very quickly that what appeared at first to be clutter is the information intended by the title. Conveyed by colour are Municipalities, Indian Reserves, Provincial Parks, Recreation Reserves, Ecological Reserves, developed areas and land in the Agricultural Land Reserve. Symbols show location of mines: producing, formerly producing and prospective. Other symbols show various categories of aircraft landing areas and a variety of facilities associated with motoring tourists and boaters. Tree farm licences are outlined and a text gives the licence holder, expiry date, total area, total non-forest land in the licence, data on area of mature forest and immature forest, mature volume and net annual allowable cut. Other textual sections give notes on faunal resources of the region.

Insets on the North sheet are "The setting" 1:8,000,000 with inset text; "Development potential" 1:4,000,000 which displays a compendium of development proposals for the twenty years prior to 1978; "Climate: Mean annual precipitation

1:4,000,000 and six climographs for Dease Lake, Stewart, Prince Rupert, New Hazelton, Terrace and Kitimat townsites; Stewart 1:35,000 with inset data; Hazelton 1:110,000 with inset data.

Insets on the South sheet are: "Kitimat-Terrace corridor" 1:110,000 with inset data and text; "Population 1976" 1:2,000,000 showing Electoral Areas and Census Subdivisions; a block containing divided population pyramid showing age composition from the 1971 Census, a pie chart showing ethnic groups by national origin, a pie chart showing labour force by industry, a bar graph showing population growth 1961-1976, and a bar graph showing the average family income (1971) by towns and rural subdivisions.

The map is aesthetically pleasing, using as it does, muted colours, skillful placement of the insets, and clean, open type faces. The border is a solid black line 2 mm in width. The same weight of line is used to divide the insets from the main map and from each other. The map provides base-line data for the Kitimat-Stikine Regional Planning District and is an excellent starting point for any study of the area. It's cost is $10.00 and this reviewer recommends it highly for all map collections. It is the type of map normally produced only as an internal working document.

The decision to print and publish this map must have been a difficult one since it appears to have been a very costly publication. Certainly by having followed this route the planners are able to distribute the results of their work more widely. The main market for the map seems to be among commercial enterprises considering locating in the region. Most of the information required to make a decision on location is contained on this map. The fact that some of the data (the sources are all given) are from two to seven years out of date at the time of publication is regrettable but understandable considering the lag time between census gathering and dissemination of data.

The map certainly fulfills its intention of providing a regional resource inventory in a form more easily assimilated than any other. The inclusion of the topographic base, often omitted in this type of map, is of great value in understanding the map because this is an area of high relief with many steep slopes providing limitations to development. This information also helps explain the remarkable differences in the climates shown for the various communities.

It would be interesting to know whether this map has in fact assisted the region in attracting new development. If so, this can be used as justification for other areas to use similar techniques to put across the advantages of their particular region, and would certainly justify the expenditure on such a production.

The Northwestern British Columbia, travel and recreation guide must be one of the handsomest tourist map brochures ever produced. It is not delicate in the way of the French, not flamboyant in the way of the Swiss and not oversimplified in the way of the English regional tourist maps. There is no imitation here. This is an original approach which has produced a very useful, very beautiful map. It is clearly derived from the Kitimat-Stikine Regional District: Regional Resource Inventory produced by the same firm in 1978.

On the verso are six insets of cities and towns in the region at the following

scales: Prince Rupert, 1:50,000; The Hazelton area, 1:250,000 with further insets of Hazelton, South Hazelton, New Hazelton, Hagwiliget and Two Mile at 1:110,000; Kitimat, 1:100,000; Masset 1:21,000; the Stewart area 1:250,000 with an inset of the town at 1:35,000 and Terrace at 1:100,000. Included are photos and oblique views of the areas, text and a reduced version of the birds-eye view produced for the Terrace Community Plan. The inset photos appear to reproduce faithfully the abundant greens and blues of the natural surroundings. Several of the photos are on the dark side, especially those showing the Nishga Tribal Council Building, the Meziadin Roadside Camp, the Bear Pass, and Brown Bear Lake, but all others are quite bright.

On the main map, symbols have been chosen to distinguish populated places as belonging to one of six categories, five based on size and one for abandoned settlements. Others distinguish almost anything that might interest the traveller: where to ski, where to swim and where to empty the trailer holding tank. Customs and Immigration posts, RCMP posts, post offices, museums, hospitals, libraries, anchorages, airfields and many other items of interest are clearly identified. The map is really a traveller's encyclopedia of the area; yet, it does not appear cluttered.

Type styles and sizes are well chosen for clarity and with a few exceptions are easily read. The exceptions include mainly water features identified in green against a green background where either the pattern used to show Provincial Parks or a number of closely spaced contours interfere with easy identification.

The main map in the Terrace Community Plan is a "bird's eye view" set in the upper left portion of the sheet. In an inset is a contour map of Greater Terrace showing the extent of the community in 1911, 1927, and as of 1959. Other data included are a population pyramid showing age composition by sex as recorded in both the 1971 and 1976 censuses; a bar graph showing population from 1961 to 1996 with projections based on an assumed 3% growth rate; a pie chart to illustrate employment by sector in 1979, and the Official Community Plan described in point form.

The main map uses an artistic rendering of an oblique photo together with shading to present to the general public the surrounding environment and the setting of the community in a more understandable format than would a topographic plan. It impresses its point on the viewer's memory more readily than would a multi-page version of the plan, and it demonstrates the spatial relationships of the various elements of the plan. The lettering is clean and precise, well placed and used sparingly. The scale diagram gives horizontal scale in three selected directions. Vertical exaggeration is 3x. The colours used in the map are mostly representational, green for forest, green and yellow for fields, and the use of light and shadow conveys the impression of a colour photo. Departure from this is found only within the town where designated land uses and designated routes are shown, the former with transparent colours and the latter by symbol. Each building in the community is also shown, enhancing the photo-like quality of the map. The map was prepared for public information meetings to present the Community Plan in a form understandable by a majority of the community. It does this more effectively than any plan this reviewer has seen to date.

Canadian Cartographics has developed a wealth of expertise in the area of

presenting voluminous information in the form of a "one page atlas" as utilized by Environment Canada. The various maps of water and land use in the Georgia Strait and Puget Sound area are the most familiar to those of us in the West. The point is that these single sheets of paper represent what would have required upwards of fifty pages of text to interpret and they convey that information more precisely and more understandably in less time.

Ron Whistance-Smith
University Map Collection
University of Alberta
Edmonton, Alberta

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New Brunswick Index to Urban and Resource Mapping. January 1980, Edition 2. [s.l.] Land Registration and Information Service, Council of Maritime Premiers, 1980. 173 p. Black & white. 48 x 64 cm.

Prince Edward Island Index to Urban and Resource Mapping. January 1979. Edition 2. [s.l.] Land Registration and Information Service, Council of Maritime Premiers, 1979. 28 p. Black & white. 48 x 64 cm.

Ontario base maps scales 1:20,000, 1:10,000, 1:5,000 Index map[s]. 1:250,000 & 1:500,000. Toronto, Ontario Ministry of Natural Resources, 1979- 8 sheets to date. Col. 93 x 122 cm. or smaller.

As provincial governments get more and more involved in the production of very large scale topographic series at scales from 1:1,000 to 1:20,000, the indexes to these series begin to assume greater importance. First of all they are keys to substantially more maps than those in national topographic series. Secondly, few libraries or institutions will be able to buy or even store complete sets of paper sheets for their provinces and provincial agencies do not seem interested yet in providing the series in microform. Thus, it becomes essential to have as much information as possible about the series and particularly the indexes so that the user can be shown what is available and where to buy sheets.

Two such sets of indexes are those produced by the Council of Maritime Premiers Land Registration and Information Service for the Maritime Provinces' urban and resource mapping and that produced by the Ontario Ministry of Natural Resources for the Ontario base map series.

The Maritime set is in three paper-bound and stapled volumes one for each province of which two are reviewed here. The scales of mapping vary between provinces but the indexes are set up in the same way. Each index begins with an introductory page which describes the map products and defines terminology relating to the series, displays sample sheets from the series, information on where to buy them and instructions on the use of the index. The mapping scales are at 1:5,000 for P.E.I. and 1:10,000 and 1:20,000 for New Brunswick and Nova Scotia resource mapping (ie. mainly for rural coverage) and from 1:1,000 to 1:4,800 for urban maps. The actual index sheets are reductions of 1:50,000 sheets or 1:250,000 sheets and are arranged in 2 sections one for urban and one for resource mapping. Each section has its own key index by NTS

number. Oddly enough the actual index sheets are not arranged in the volume numerically and for the urban mapping the user has to consult an index to communities to locate the page on which that index sheet will be found or spend a lot of time trying to locate it. The New Brunswick volume also indicates a separate section on sheets converted to metric editions and in these cases some of the scales have changed (1:1200 to 1:1000 and 1:2400 to 1:2000).

The Ontario index set is a series of sheets at 1:250,000 for southern Ontario and 1:500,000 for northern Ontario to show coverage for the two basic scales of mapping 1:10,000 and 1:20,000 and derived mapping at 1:5,000 and 1:10,000. Basically, the indexes are simpler because the two scales do not overlap as they do in the Maritime series. The coverage of the two basic mapping scales are shown by blue and red tones on a brown base. The base maps are enlarged from the various reference maps at approximately 1:600,000 issued by the Ministry which allows for considerable base detail at a very readable size. These sheets are more readable than the Maritime set which are about 1/3 reductions of national topograph maps and are somewhat difficult to read.

The sheet line of the Ontario series is based on the UTM grid and the grid lines are drawn in. Instructions are given on how to form the sheet number and where to order the maps. A key index to the index sheets is also shown. The Ontario set would benefit from the addition of samples of the map products although as the indexes are presently set up there would probably not be space to show all scales.

One of the main drawbacks to these large scale series is the length of sheet number and the Ontario set is certainly the worst example. The number is 13 digits long being made up of the scale (minus 3 zeros) the grid zone, the easting in 4 digits and the northing in 5 digits, (eg. 10 17 6350 48450). The Maritime agency started out with an alpha-numeric system based on the NTS sheet number but in their metric series have converted to the coordinate numbering system also. However, since the scale of the indexes is generally larger than the Ontario set the number can be written in the square. With the Ontario set users have to be very careful that they construct the correct number or they may inadvertently have ordered the wrong map.

The main drawback to both series is the problem of keeping them up to date particularly when both formats are expensive to produce and new sheets are being rapidly issued. The New Brunswick index does indicate sheets planned in future but the Ontario set does not show this. The New Brunswick index indicates that an updating service via a monthly notice is being planned which would allow users to draw on the sheet lines themselves. This is reasonably sensible with a book form index although they are also producing revised editions of the volumes every 1 or 2 years. The Ontario Ministry of Natural Resources was obviously caught out on their revision programme and this reviewer's library received hand-coloured up-dated sheets with extensive new coverage shown, about 8 months after the original set was published. If the indexes had been issued as white prints, revisions could have been prepared cheaply and quickly every few months.

On the whole, however, these indexes are well-produced and valuable reference tools and should be in all map libraries. Map librarians can only hope that

the governments will be more generous in depositing at least local sheets in map libraries or making the whole set available in microform.

Joan Winearls
Map Library
University of Toronto Library
Toronto, Ontario

-oOo-

RECENT ACQUISITIONS

compiled from contributions by
Tara Naryansingh
Map Section
Geological Survey of Canada Library
Ottawa K1A 0E8

Contributors: GSC - Geological Survey of Canada Map Library
McU - McGill University Map and Air Photo Library
UL - Université Laval. Cartothèque
UT - University of Toronto Map Library
Other contributions are welcomed by the compiler.

MAPS / WORLD

Miller Freeman Publications, Inc.
World coal resources and major trade routes. -- 2nd ed. rev. -- Scale ca. 1:34 000 000 (E 65°--E 80° / N 80°--S 55°). -- San Francisco : Miller Freeman Pubs., c1979.
McU 1 map : col.; 71 x 100 cm.
Includes tables and graphs on coal trade, exports and imports, resources and production.
Compiled with the assistance of the Paul Weir Co. and the U.S. Dept. of the Interior.
Inset: [Europe], scale not given, 21 x 24 cm.

AFRICA

NAMIBIA/SOUTH WEST AFRICA

Geological Survey of South Africa and South-West Africa.
South-West Africa/Namibia: geological map: gravity, edition
GSC Suidwes-Afrika/Namibië: geologiese kaart: gravitasie-uitgawe. -- Scale 1:1 000 000. -- Pretoria, 1980.
[4 sheets]

ANTARCTICA

Antarctica / produced by Division of National Mapping, Dept. of National Development in association with Antarctic Division, Dept. of Science and the Environment. -- 6th ed. -- Scale 1:10 000 000 at

lat. 71°; polar sterographic proj. (W180 - E180° / S50 - S90°).
UT -- Canberra: NATMAP, 1979.
1 map : col.; 77 x 69 cm.
Insets: McDonald Islands. Scale 1:125 000. - Heard Island.
Scale 1:250 000 - Macquarie Island. Scale 1:250 000.

ASIA

CHINA

The Peoples of China / by the Cartographic Divison, National Geographic Society, 1980. -- Echelle 1:7 150 000. -- Washington: National
UL Geographic Society, 1980.
1 carte : coul.; 75 x 93 cm; verso: The People's Republic of China, 1:6 000 000 73 x 92 cm.

JAPAN

Sumi, Kiyoshi
Distribution map of known geothermal fields in Japan / compiled by
GSC Kiyoshi, Sumi and Iasc Takashima. -- Scale 1:2 000 000. -- Kawasaki, Geological Survey of Japan, 1980.
1 map : col. (1:2 000 000 map series, no. 20)

EUROPE

FINLAND

Korhoner, J
Suomen aeromagneettinen kartta : totaali intensiteeten jaannosanomalia kansainvalisen geomagneettisen referenssikentan (IGRF - 65) suhteen
GSC 1 km maan pinnasta ylöspain / J. Korhoner. -- Scale 1:2 000 000.
-- Helsinki: Geolloginen Tutkimuslaitos, 1980.

[The aeromagnetic map of Finland: residual anomaly map of total intensity according to IGRF - 65, 1 km above ground.]

FRANCE

France, richesses artistiques = France, artistic treasures. -- Ed. 3.
UL -- Echelle 1:1 000 000. -- Paris: Institut géographique national, 1978.
1 carte : coul.; 97 x 115 cm

GT. BRITAIN

Monastic Britain / compiled by Neville Haddock and Ian B. Cowan.
-- [3rd ed.]. -- Scale 1:625 000; Transverse Mercator proj.
(W 7° - E 2°/ N58°30' - N 50°). -- Southampton: Director General of the Ordinance Survey, 1976.
2 maps : col.; ea. 81 x 103 cm. & text.
UT Parts: North sheet - South sheet
Inset: Religious houses in London. Scale ca. 1:22 800.
Accompanied by: Monastic Britain. -- 35 p.

Legend to types of religious establishments & time of existence, boundaries of dioceses, deaneries & peculiar jurisdictions; base map shows place names, roads, hypsometric tints, national grid, etc.

POLAND

Mapa glebowo-rolnicza Polski = Soil-agricultural map of Poland. -- Echelle 1:1 000 000. -- Varszawa: Instytut Uprawy Nawozenia I
UL Gleboznawstwa W Pulawach, 1975.
3 cartes : coul.; 69 x 75 cm

NORTH AMERICA

Map of Canada and part of the United States. -- Echelle 1:12 500 000,
UL -- Montréal: The Burland Lithographic, 1880.
1 carte : coul.; 18.7 x 43.6 cm

Miller Freeman Publications, Inc.
Forest industries mill map / [published by] Miller Freeman Publications, Inc. -- 3rd 3d. -- Scale ca. 1:6 336 000 (W 125° - W 66° / N 50° - N 25°). -- San Francisco, 1979.
McU 1 map : col.; 61 x 94 cm, on sheet 94 x 127 cm
Includes "Alphabetical list of mills (by state and city)".
Insets: "Alaska", "Hawaii", different scales, different sizes; "Insets A-M", depicting regions in the northeast with numerous mills, different scales, different sizes.
Map no. 20580B.

CANADA

Aerial survey data base: current and planned coverage = Banque de points de canevas photogrammetriques: conveture actuelle et prévue. -- Scale 1:6 336 000 (E168° - 0° / N 84° - N 36°). -- [Ottawa] :
UT Dept. of Energy, Mines and Resources, Surveys and Mapping Branch, 1980.
1 map : col.; 85 x 97 cm. -- (MCR 106)
2 classes of available adjustments; projected coverage available by 1985.

MANITOBA

Manitoba. Mineral Resources Division.
GSC Mineral map of Manitoba. -- Scale 1:1 000 000. -- Winnipeg, 1980.
1 map : col. (Map 80-1) Price 3.00

NOVA SCOTIA

Halifax / produced and published by Maritime Resource Management Service. -- Scale ca. 1:23 000. -- Amherst, N.S. : M.R.M.S.; presented by
UT City of Halifax Visitors and Convention Bureau, 1979.
1 map : col.; 23 x 52 cm.
On verso: Halifax Harbour - [location map].
Historic sites; parks; schools; hospitals; cultural features; advertisements.

ONTARIO

Niagara Escarpment Commission: proposed plan. -- Echelle 1:50 000. --
UL Ontario : Niagara Escarpment Commission, 1979.
9 cartes : coul.; 73 x 104 cm.

Forty mile and Oakville Creek study areas: (International field year for the Great Lakes) / cartography by C. Lochan and M. Lankin. -- Scale 1: 50 000; Transverse Mercator proj. (W79°50'- W79°30' / N43°34'-N43°10'). -- Toronto : Ont. Ministry of the Environment, 1979.
UT 5 maps : col.; 89 x 54 cm. & text (Ontario Ministry of the Environment. Water Resources Branch. Map, 4005-1 - 4005-5).
Accompanies: The hydrogeology of the IFYGL Forty Mile and Oakville Creek Study areas / by R.C. Ostry. -- Toronto, 1979. -- 44 p. (Water resources report, 5b).

QUEBEC

Carte géologique du Québec / par le Service de la Cartographie.
-- Edition provisoire. -- Echelle 1:1 500 000. -- Québec: Ministère
UL de l'Energie et des Ressources, Direction générale de la recherche géologique et minérale, 1980.
1 carte: ozalid; 142 x 116 cm. -- (DP-735).

Cartes des régions biogéographiques du Québec / Lauréan Tardif.
-- Echelle 1:4 000 000. -- Quebec: Ministère de l'Agriculture,
UL Direction générale de la recherche et de l'enseignement Service de la recherche en sols, 1977.
1 carte : coul., 55 x 45 cm.

Interprétation de données aéromagnetiques dans la partie Sud du Québec / par Hubert Claude et autres. -- Echelles diverses. -- Québec:
UL Les relevés géophysiques, 1979.
18 cartes: ozalid; 100 x 60 cm plus ou moins plus notice. -- (DP-709).

Penouille: géomorphologie / Levées de terrain et cartographie (conception et réalisation) Noël Gingras. -- Echelle 1:265. -- [Sainte Foy : Nöel Gingras], 1978.
UL 1 carte: ozalid; 73 x 101 cm.
4 tableux de formes - résultante des dynamiques fluviale, éolienne, glaciale et marine.

Carte hydrogéologique des Iles de la Madeleine / par Marcel Sylvestre, 1979. -- Echelle 1:50 000. -- Quebec: Ministère des Richesses
UL Naturelles, Service des eaux souterraines, 1979.
1 carte : coul.; 99 x 98 cm.

Coeur du Quebec, Mauricie. -- Echelle 1:158 400. -- Shawinigan: Touris-Bec, 1980.
UL 1 carte : coul.; 99 x 69 cm
Au verso 5 cartons des principales villes de la Mauricie avec index des rues

UNITED STATES

National wild and scenic rivers system as authorized by P.L. 90-542 as amended: [United States]. -- Scale ca. 1:11 842 000. [Washington, D.C.] : Dept. of the Interior, Heritage Conservation and Recreation
UT Service, 1979.
1 map : col.; 35 x 47 cm
Existing components; studies completed and in progress; key to gov't level responsible for management.

IDAHO

Breckenridge, Roy M.
Energy resources of Idaho / by Roy M. Breckenridge, Earl H. Bennet and Jerry L. Harbour. -- Scale 1:1 000 000. -- Moscow, Idaho,
GSC Idaho Bureau of Mines and Geology, 1980.
1 map (Map 3)

ILLINOIS

Bier, James A.
Landforms of Illinois / by James A. Bier. -- Scale 1:1 000 000. --
GSC Urbana, Illinois State Geological Survey, 1980.
1 map

Quaternary deposits of Illinois / compiled by Jerry A. Lineback. -- Echelle 1:500 000; proj. conique conforme de Lambert. -- Urbana :
UL Illinois State Geological Survey, 1979.
1 carte : coul.; 142 x 100 cm
4 cartons: generalized areal geology of the bedrock surface topography of the bedrock surface thickness of Pleistocene deposits.

UTAH

Utah Geological and Mineral Survey.
Geothermal resources of Utah / geothermal data compiled by the Utah Geological and Mineral Survey; map prepared by the National Geo-
GSC physical and Solar-Terrestrial Data Center, NOAA for the Division of Geothermal Energy, U.S. Dept. of Energy.-- Scale 1:500 000. -- Salt Lake City, 1980.
1 map : col.
Available free of charge from Utah Geological and Mineral Survey, 606 Black Hawk Way, Salt Lake City, Utah 84108.

WYOMING

Wyoming mines and minerals / compiled by W. Dan Hausel ... [et al.].
GSC -- Scale 1:500 000. -- Laramie, Wyo., 1979.
1 map : col.

ATLASES / WORLD

Duchaufour, Philippe, 1912-
Atlas écologique des sols du monde / par Philippe Duchaufour; avec la collaboration de Pierre Faivre, Michel Gury. -- Paris :
UT Masson, 1976.
x, 178 p., 20 f. de planches : ill.; 25 cm.
Publié avec le concours du Centre national de la recherche scientifique.

[Mirovoj vodnyj balans i vodnye reursy Zemli]. World water balance and water resources of the earth / [edited by V.I. Korzun et al.].
UL -- [Paris] : Unesco, c1978.
663 p. [3] f. de planches pliées : ill., cartes. -- (Studies and reports in hydrology; 25)

AFRICA

Atlas de la République Unie du Cameroun / sous la direction de Georges
UL Laclavère; introduction de Jean-Félix Loung. -- Paris : Editions J.A., 1979.
72 p. : cartes en coul. -- (Les Atlas Jeune Afrique)

ASIA

CHINA

China. -- [Pinyin ed.]. -- Scale 1:5 000 000; Lambert conformal proj. (E67° - E138°/ N56°- N15°). -- [Washington, D.C.] : Central Intelligence Agency, 1979.
UT 1 map : col.; 87 x 102 cm.
On verso: gazetteer with Wade-Giles transliteration.
In Pinyin and English.
4 classes of boundaries; roads, railroads; 5 classes of administrative centres; pop. key; relief by shading; spot elev. & depths in metres.

U.S.S.R.

Pochvenno-klimaticheskii atlas Novosibirskoi oblasti = [Soil-climate atlas of the Novosibirsk region] / otv. redaktor A.P. Sliadnev.
UT -- Novosibirsk : Naula, Sibirskoe otd-nie, 1978.
121 p., maps (part col.)
At head of title: Akademiia nauk SSSR. Sibirskoe otdelenie. Institut pochovoedniia i agrokhimii.

FRANCE

Index atlas de France: liste des localités, nomenclature des communes,
UT cartes départmentales et plans de villes. -- [Rennes] : Oberthur, 1978.
976 p. : col maps

POLAND

Warsaw. Instytut Geologiczny. Wydawnictwa Geologiczne.
Atlas geologiczno-strukturalny polludniowej czes'ci morza Baltyckiego. -- Scale 1:750 000. -- Warsaw, The Institute, 1979.
GSC 1 atlas : text (39 p.); 21 maps in folio.
Plotted from collection of photographs under the direction of Andrzeja Witkowskiego.

NORTH AMERICA

UNITED STATES

Halvorsom, Peter L.
Atlas of religious change in America, 1952-1971 / Peter L. Halvorsom,
UL William M. Newman; cartography by Mark C. Nielsen. -- Washington : Glenmary Research Center, 1978.
v, 95 p. : cartes.

Media Marketing Services
United States data book: census tract maps with zip code color overlays: direct marketing atlas. -- Lincoln, Neb. : Media Marketing Services, [1978]
UT 348 p. : chiefly maps (some col.); 31 cm.
Listed as a product of Data Publications, South Hackensack, N.J. in its United States zip code marketing business map atlas, v. 1, 1978-79, p. [17].

National Planning Association. Center for Economic Projections.
Basic maps of the U.S. economy, 1967-1990: population, employment,
UT income. -- Washington, D.C. : Center for Economic Projections, National Planning Association, c1979.
x, 292 p. : maps; 22 x 30 cm. & 2 transparencies (col.; 18 x 25 cm.) in pocket.

U.S. War Dept.
The official military atlas of the Civil War / by George B. Davis, Leslie J. Perry, Joseph W. Kirkley; compiled by Calvin D. Cowles;
UL introd by Richard J. Sommers. -- New York : Arno Press, c1978.
[41] p., [175] f. de planches : ill. (certaines en coul.), cartes en coul.

CALIFORNIA

Atlas of California / Michael W. Donley ... [et al.]. -- Culver City, Calif. : Pacific Book Center, 1979.
UT v, 191 p. : col. ill., col. maps; 38 cm.
Includes gazetteer and index.
CONTENTS: The human imprint. -- Economic patterns. -- The physical environment. -- Reference.

PENNSYLVANIA

Wherry, Edgar Theodore, 1885-
Atlas of the flora of Pennsylvania / Edgar T. Wherry, John M.
UL Fogg, Jr., Herbert A. Wahl. -- Philadelphia, Pa. : Morris Aboretum
of the University of Pennsylvania, 1979.
xxx, 390 p. : chiefly maps.
Includes index.

CANADA

Kerr, Donals Gordon Grady, 1913-
Atlas historique du Canada / D.G.G. Kerr; [cartographie, C.C.J. Bond;
UL ill., Ellsworth Walsh et al.]. -- Ed. métrique. -- Don Mills,
Ont. : Nelson, c1979.
iii, 100 p. : ill. (certaines en coul.), cartes en coul.; 31 cm.

NEW BRUNSWICK

Bérubé, Adrien
Atlas prospectif de l'Acadie / Adrien Bérubé. -- Edmunston, N.-B.
UL : Société du Madawaska, 1979.
56 p. : cartes

HAITI

Organisation des états américains. Bureau de développement régional
Haiti: mission d'assistance technique intégrée / étude réalisée
par le Bureau de développement régional avec la collaboration
du Conseil national de développement et de planification (CONADEP)
UL du gouvernement de la République d'Haiti. -- Washington : Secrétariat
général, Organisation des états américains, 1972.
3 t. en 1 v., xxxix, 646 p : ill; 28 cm. & atlas (7 cartes en coul.)

OCEANS

PACIFIC OCEAN

Ministerstvo Geologii SSSR. Vsesoiuznyi nauchno-issledovatel'skii
geologicheskii insitut (VSEGEI).
Paleobiograficheskii atlas Tikhookheanskogo poduizhnogo poiasa i
GSC Tikhogo Okeano. -- Scale 1:60 000 000. -- Moscow, 1979.
[Paleobiogeographical atlas of the Pacific mobile belt and Pacific
Ocean].

INDEXES AND GAZETTEERS

The International geographic encylcopedia and atlas /[by the editorial
staff of Houghton Mifflin Company]. -- Boston : Houghton Mifflin,
UL c1979.
xvi, 889, [115] p. : cartes.

Schubert, J.S.
Computer processing of LANDSAT data for Canada Land Inventory land use mapping / by J.S. Schubert. -- [Ottawa] : Canada Land Inventory, 1978.
UT
ix, 72 p. : ill (some col.), maps; 28 cm. -- (Report - the Canada Land Inventory; no. 13)
Includes summary in French.
Bibliography: p. 71-72.

United States Geological Survey. Geographic Names Team.
Geographic names: alphabetical finding list /[prepared from a computer file by Branch of Geographic Names]. -- Reston, Va. : USGS Topographic Division, Office of Research & Technical Standards, National Center, 1979-
UT

NEW PUBLICATIONS

Crude oil pipeline map of the United States and Canada / Oil and Gas Journal.
1 map : col.; 40" x 57"

Scheduled for publication March 1981. "Map will include pipeline routes with operator and pipe diameter in inches ... pump stations, terminals and refineries with owner and barrels per day."
Available from: Pennwell Books, Map Division, P.O. Box 1260, Tulsa, OK 74101. Price US 30.00.

Crude oil pipeline atlas / Oil & Gas Journal
1 atlas (40 p.); 8 1/2" x 11"

Scheduled for publication May 1981. Will contain some information as map as well as statistical surveys from Oil and Gas Journal.
Available from: Pennwell Books, Map Division, P.O. Box 1260, Tulsa, OK 74101. Price US 50.00.

Nicholson, N.L.
Maps of Canada: a guide to official Canadian maps, charts, atlases, and gazetteers / N.L. Nicholson and L.M. Sebert. Hamden, Conn. : Archon Books, 1981.
200 p., ill, maps, tables.
ISBN 0-208-01782-8
Available from Archon Books, P.O. Box 4327, 995 Sherman Ave., Hamden, Connecticut 06514. Price US 32.50.

Geological Survey of Canada.
National Geochemical Reconnaissance 1:2 000 000 coloured compilation map series. GSC Open Files 730 - 749 released Feb. 1981.

Series of 20 open files containing xerox coloured maps prepared from digital data and plotted utilizing an Applicon colour plotter. Maps cover areas in Ontario, British Columbia, Saskatchewan, Labrador, Yukon and Northwest Territories.
Copies available from: Campbell Reproductions, 880 Wellington St., Ottawa, Ont. K1R 6K7. Price 21.00 each.

REPORT FROM ACML CONSERVATION COMMITTEE AVAILABLE.
As noted in the December 1980 Bulletin, the report entitled Map collections in Canada and conservation = Les collections de cartes et conservation au Canada is now available. Copies have been circulated, gratis, to all collections which completed the 1976 questionnaire. However, there will be a $5.00 charge for all other copies, to help defray copying charges.

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MAPS OF INDIAN RESERVES AND SETTLEMENTS IN THE NATIONAL MAP COLLECTION. Volume 1: British Columbia. This publication is available free of charge from: Information Service, Public Archives of Canada, 395 Wellington Street, Ottawa, K1A 0S9.

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BOARD OF DIRECTORS MEETING

SUMMARY OF THE MINUTES

The meeting was held at Burnside Hall, McGill University on October 24, 1980 and was attended by all six directors.

For the benefit of new members L. Dubreuil reviewed some of the more important ACML activities during the past year including, in particular, the brief which was sent by the Association to Honourable Francis Fox in response to the recommendations relating to the National Map Collection in G. Sylvestre's report The Future of the National Library of Canada.

B. MacKinnon reported that amongst the provincial archivists in Canada there is considerable interest in, and support for, the report commissioned by ACML to survey cartographic collections held by provincial archives in Canada.

G. Welch submitted the Treasurer's report for the period June 16 - September 30, 1980 and a budget forecast for October 1980 - June 1981. The Board recommended raising membership fees to $18.00 (full and associate memberships) and $30.00 (institutional memberships) to cover the increased costs of the Bulletin.

L. Dubreuil suggested that the Bulletin should include a regular column listing recently catalogued maps. B. Batchelder suggested that some of the unsolicited papers directed to him for publication in the Bulletin should be refereed by other individuals in order to upgrade them and/or to increase their informational quality. B. Batchelder stated that ACML conference organizers should be given goals by the ACML Executive. He recommended a conference committee organization which could provide guidance on the quality of conference papers.

L. Dubreuil reported that the ACML Directory (4th edition) would be available in late October 1980; she also stated that the ACML Handbook was in final draft form. It was reported that ACML had published 62 historical maps as of October 1980.

During B. Batchelder's voluntary absence from the room, committee members agreed that it was and remains the policy of ACML to actively discourage ACML members from seeking remuneration for ACML activities. Therefore, since B. Batchelder had requested remuneration for work connected with the Bulletin it was decided that he should resign his position as 2nd Vice President. Upon receipt of B. Batchelder's resignation the Board agreed to begin paying him for proof reading services connected with the Bulletin at the rate of $2.50 per page, to a maximum of 100 pages, for the period ending December 1981. At this point B. Batchelder returned to the meeting. He agreed to these terms and verbally resigned as 2nd Vice President.

L. Dubreuil suggested that the responsibility for maintaining ACML membership lists should rest with the Secretary. R. Pinnell agreed to investigate the possibility of establishing a computerized membership list using University of Waterloo computing faculities.

Richard Pinnell
Secretary, ACML

(Full minutes are available from the Secretary upon request)

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FIFTEENTH ANNUAL CONFERENCE / QUINZIEME CONGRES ANNUEL

Public Archives of Nova Scotia
6016 University Avenue
Halifax, Nova Scotia

June / juin 7-11, 1981

CONFERENCE PROGRAM

Sunday, June 7

2:00 - 5:00 Executive Meeting. Aitken's Room, Public Archives

7:30 pm Registration, Reception

Monday, June 8

8:00 - 12:00 Registration

9:00 - 9:15 Official Welcome: Hugh Taylor, Provincial Archivist, Nova Scotia

9:15 - 10:30 Map Producers of the Atlantic Provinces: Part I
Chairman: Lorraine Dubreuil, Map & Air Photo Library, McGill University
Panelists: Earl R. Robinson, Lands Division, Department of Natural Resources, New Brunswick
Charles Pennel, Librarian, Memorial University
H.B. Robertson, Senior Director, Lands Branch, Department of Lands and Forests, Nova Scotia

10:30 - 10:45 COFFEE

10:45 - 12:15 Panel Discussion: orientation of users to the map collection
Co-ordinator: Joan Winearls, Map Library, University of Toronto Library
Panelists: Kate Donkin, Map Library, McMaster University
Bob Batchelder, Map & Airphoto Division, University of Calgary Library
Frances Woodward, Cartographic Archives & Historical Map Collection, University of British Columbia Library

12:15 - 2:00 LUNCH

2:00 - 3:15 Map Producers in the Atlantic Provinces: Part II
Chairman: Lorraine Dubreuil, Map & Air Photo Library, McGill University
Panelists: Robin McMulgan, Regional Manager, Charlottetown Registry Office, P.E.I.
Brad Fay, Manager, Information Division, Maritime Resource Management Service
Jim Chisholm, Director, Surveys and Mapping Division, Land Registration & Information Services

3:15 - 3:30 COFFEE

3:30 - 4:30 Reports Session Chairman: Heather Stevens, National Map Collection
Reports: EMR - Richard Groot
Environment Canada - Wendy Simpson-Lewis
NMC - Betty Kidd

Tuesday, June 9

9:00 - 10:15 Round Table: Bibliographic Computer Systems for Maps
Chairman: Hugh Stibbe, National Map Collection
Panelists: Joan Winearls, Map Library, University of Toronto
Pierre Lepine, Bibliothèque Nationale du Québec

10:15 - 10:30 COFFEE

10:30 - 12:00 Saskatchewan by the Sea: The Topographic Work of Alexander Murray
Speaker: Dr. Mike Staveley, Chairman, Department of Geography, Memorial University

12:00 - 2:00 LUNCH

2:00 - 3:30 Annual Business Meeting:
President: Lorraine Dubreuil, Map & Air Photo Library, McGill University
1st Vice President: Bill MacKinnon, Map Section, Provincial Archives of New Brunswick
2nd Vice President: Vacant
Past President: Tom Nagy, National Map Collection
Secretary: Elizabeth Hamilton, University of New Brunswick
Treasurer: Grace Welch, National Library of Canada

3:30 - 3:45 COFFEE

3:45 - 5:00 Current Map Library News
Session Chairman: Serge Sauer, Map Library, University of Western Ontario

7:00 Annual Banquet - St. George's Church Parish Hall

Wednesday, June 10

9:00 - 10:30 Atlas Project: Atlas of Gulf of Maine
Hal Mills, Dalhousie Ocean Studies

10:30 - 10:45 COFFEE

10:45 - 12:00 Air Photos: Their storage and organization
Chairman:
Panelists: Aileen Desbarats, Map Library, University of Ottawa
Neale Lefler, Production Manager, Maritime Resource Management Service

12:00 - 2:00 LUNCH

2:00 - 3:30 Cartographic Archives: Architectural Records
Chairman: Elizabeth Blight, Provincial Archives of Manitoba
Panelists: Annalise Walker, Curator, Canadian Architectural Archives, Library, University of Calgary
Garry Shutlak, Provincial Archives of Nova Scotia

3:30 - 3:45 COFFEE

3:45 - 4:30 Cartographic Archives Survey Report
Chairman: Margaret Chang, Newfoundland Archives
Panelists: Bill MacKinnon, Map Section, Provincial Archives of British Columbia
Frances Woodward, Historical Map Collection, University of British Columbia

Thursday, June 11

9:00 - 11:00 Bedford Institute

2:00 - 3:00 Harbour Tour

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BULLETIN!

In a letter to the University Map Library, University of Waterloo, dated 12 May 1981, JRO Kartografische of Munich, West Germany writes:

> Up to now the Aktuelle JRO Landkarte was only available in German, French and Dutch. However, we intend to publish it also in English at the end of this year. The English edition will be named Topical JRO Map - TJM.

The address of this cartographic firm is:

JRO Kartografische Verlagsgesellschaft mbH
Postfach 40 09 40
Leopoldstr. 175
8000 München 40
West Germany

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DIRECTORY OF -
REPERTOIRES DES -

CANADIAN MAP COLLECTIONS
COLLECTIONS DES CARTES CANADIENNES

CANADIAN MAP COLLECTIONS * COLLECTIONS DES CARTES CANADIENNES

1980

Price $12.00

It is available from:
Publications Committee, ACML
% National Map Collection
Public Archives of Canada
395 Wellington Street
Ottawa, Ontario K1A 0N3

CARTES HISTORIQUES

TWELFTH PRINTING:

#63 Railway & Guide map of Manitoba (1887).
#64 Partie Occidentale de la Nouvelle France ou Canada (1755).
#65 Plan of the City of Winnipeg (1874).
#66 Map of Vancouver Island (1849).
#67 Map showing... Gold Region on Fraser River (1858).
#68 Grand Trunk Railway System and its connections to Klondike Gold Fields (1898).
#69 Quebec, Ville de l'Amerique Septentrionale dans la Nouvelle France (1694).
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