Canadian Canal Society
Société des Canaux du Canada

CANALS CANADA/CANAUX DU CANADA

Newsletter of the Canadian Canal Society
Société des Canaux du Canada

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President's Message

Transportation has always been of critical importance to Canada as a large sparsely populated country. From today's perspective, the role of canals in Canada's history and development has been overshadowed by that of railways, especially the story of the building of the Canadian Pacific Railway and the "last spike." However, before railways, waterways and canals formed the basis of long distance transportation. After Confederation, the Federal Government recognized that canals were just as important as railways by creating the Department of Railways and Canals. This Department was not transformed into the Department of Transport until 1936.

With increasing fuel costs and greater highway congestion, canals and waterways should assume a greater role in commercial shipping. In this context, the Great Lakes St. Lawrence Seaway System, which provides a gateway into the heartland of eastern North America, should become a more important transportation facility. The St. Lawrence Seaway Management Corporation will be celebrating the 50th anniversary of the opening of the Seaway next year. The celebrations will be an opportunity to highlight the design and building of the Seaway and its past operations and to showcase the potential of waterborne shipping. The Canadian Canal Society expects to be involved in the celebration events.

Canada is fortunate to have several operating heritage canals. These canals have become important recreational and tourist corridors and have enhanced the economies and built character of the affected communities. The jewel of these heritage canals is the Rideau Canal, which was designated a World Heritage Site by UNESCO last year for its outstanding engineering and heritage features. This September, the World Canals Conference will be held in Kingston, Ontario and will showcase the Rideau Canal. Conference participants will be able to experience the features of the Rideau that

impressed UNESCO. I have registered for the Conference and I encourage other members to do so.

Old abandoned canals can still have significant heritage value. Two notable examples are the first three historic Welland Canals in southern Ontario and the Shubenacadie Canal in Nova Scotia. Both areas face challenges in preserving and rehabilitating remnant canal structures and in receiving appropriate recognition from senior levels of government. However, there is encouraging evidence of increased community interest in heritage in general and in canal heritage in particular. The pedestrian-bicycle trails and recreational facilities that have been established along the Welland Canals and the Shubenacadie Canal corridors are popular with the public. Celebrations have been organized in many communities to commemorate historic canal events, such as the 175th anniversary of the Rideau Canal and the 75th anniversary of the Fourth Welland Canal last year. Local groups have requested the Federal Government to designate the Welland Canals corridor and Shubenacadie Canal features as National Historic Sites. In Niagara, enthusiasts have established their own websites on the historic Welland Canals and one individual organizes hikes for the public every second Sunday to explore remnants of the old Welland Canals. The resulting increased public awareness of canals hopefully will generate greater support for heritage canal preservation and formal government recognition.

Canada has a great tradition of canals and inland waterways. However, the commercial and heritage value of canals cannot be taken for granted. Commercial corporations (shipping companies and the Seaway Corporation), non-profit organizations such as the Canadian Canal Society, communities and individuals must continue to support efforts to maintain and enhance all aspects of canals if this tradition is to be protected for the long term.

Tom Whitelaw

Membership - Welcome to New Members

William Guy & family, Stuart, FL, USA
David L Smith, Grand Rapids, MI, USA

We are particularly grateful to the following that have paid for Institutional Membership. The extra contribution by them assists us in carrying out our mandate of promoting Canadian canals.

Marine Museum of the Great Lakes, Kingston, ON
Port Colborne Historical & Marine Museum, Port Colborne, ON
St Catharines Public Library, St Catharines, ON
Welland Public Library, Welland, ON

A special thanks also to the five members who made a contribution beyond the basic membership level.

Secretary's Report

The Annual General Meeting of the Society was held in the Burgoyne Room of the St Catharines Museum on Sunday, 13 April 2008.

President Tom Whitelaw spoke on a number of topics, he mentioned the early opening of the Welland Canal and that next year would mark the 50th Anniversary of the St Lawrence Seaway. At the 25th Anniversary Dinner the speaker made a presentation on a trial vacuum mooring system at lock 8, this system is now being tested at lock 7. Hydro plants are being installed at locks 1, 2, and 3 of the Welland Canal. Port Weller Dry Docks, which had declared bankruptcy protection, has been bought. The Society has submitted an application for a Trillium Grant. The monies will be used to fund signage along the Welland Canals Trail.

The Treasurer reported that the bank balance was healthy in spite of a slight decline in membership. Thanks are due to **Carol Gaspari** for auditing the books.

The proposed constitutional amendments were not dealt with as a quorum was not present.

As the business of the Society must continue an election of officers was held. The following are the Executive for 2008/2009:

President	Tom Whitelaw
Vice President	Bruce Timms
Secretary	George Hume
Treasurer	Steve Hinchliffe
Past President	Roberta (Bobbie) Styran

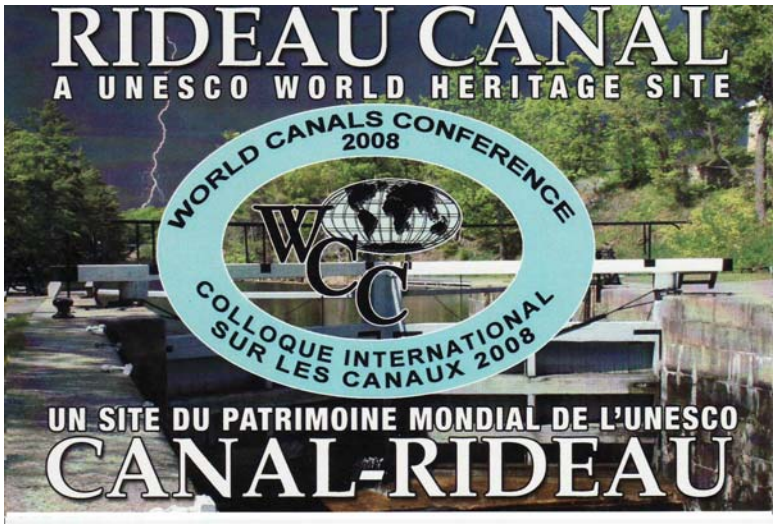
The following are the Directors of the Society:

Carol Gaspari	Bob Sears	Marg Voaden

Thanks were extended to Ken Mckenzie who did not stand for re-election.

When the meeting adjourned **Ken Mckenzie** introduced the speaker, Brian Leyden, who has authored a book entitled, *Building A Village Church, St. John's - Port Dalhousie 1868*. The church reflects the people of the congregation and how the community was influenced by the two Welland Canals that had been built. If you would like a copy please call Brian Leyden at 905-934-4241.

World Canals Conference 2008
Kingston, Ontario – 15 – 17 September



The theme of the conference is "Managing Canal Corridors in the 21st Century". Besides the plenary sessions the delegates will explore the length of the canal from Ottawa to Kingston. One of the dinners will be held a Fort Henry, which is also included in the UNESCO World Heritage Site designation.

Registration information may be obtained at www.canals2008.com or by calling toll free 877-336-7047.

World Canals Conference 2009
Serbia – 21 – 23 September

The conference dates are now a month later than previously announced. Details of the conference will be announced in Kingston at WCC 2008. We will report more fully in the fall edition of Canals Canada.

World Canals Conference 2010
Rochester – 19 – 22 September

Ten years after first holding a World Canals Conference Rochester will once again host the world. The conference will look at the progress that has been made during the ten year period, and, the challenges that still lie ahead.

The theme of the conference is: "Canals in the Urban Setting, New York State, and Worldwide: Challenges and Opportunities".

2007 Fall Field Trip – Sharon Temple and Newmarket Canal

Saturday the 8th September saw 20 intrepid adventurers rendezvous at the Sharon Temple, near Newmarket, Ontario, for our Fall Field Trip. Because numbers could not justify hiring a bus a decision was made to carpool instead. **Colin Duquemin** tells me that this had not been done since the Society's second field trip, which was to Fenelon Falls in 1983. After that trip they vowed to never again carpool. Low numbers have led to the cancellation of some recently planned trips, rather than have another cancellation it was decided that carpooling deserved another chance. Careful route reconnaissance, maps, and a briefing from stop to stop meant that everyone made it from point to point in a timely and safe manner.

The Sharon Temple is a National Historic Site, and, like the Rideau Canal, another National Historic Site, it was celebrating its 175th Anniversary.

Sharon Temple Complex

The Sharon Temple complex is comprised of several buildings. At the front of the Temple complex is David Willson's Study, built in 1825 by devoted followers of the Children of Peace. This architectural gem is similar in style to the Meeting House which once stood farther south on Leslie Street.

There is a wealth of history, architecture, faith and the musical achievements of David Willson and The Children of Peace.

The Sharon Temple was built according to the imaginative plan of David Willson to demonstrate through it's symbolic beauty the religious beliefs of the Children of Peace, the sect which he founded.

Construction began in 1825 with Ebenezer Doan as the master builder, and the whole congregation contributing their skills. The 3-storey white frame building represents the Trinity. Its square base expresses their determination "to deal with everyone on the square". The four exterior doors denote ecumenicalism, welcoming everyone on an equal footing. The windows allow the light to shine equally on everyone. Inside, twelve columns symbolize the twelve apostles. The four inner pillars represent the virtues of faith, hope, charity and love, symbolizing the foundation and support of their beliefs as supports the building itself.

Do visit the Sharon Temple complex for a guided tour! Pickup the walking tour of the Village of Sharon and explore the rest of the community.

Newmarket Canal

The railways! When it comes to talking about canals and railways they are the oil and water of transportation. But the Newmarket Canal was built because of the railway. In 1904 the Grand Trunk Railway increased their freight rates by 33% to 50%, it was too much to bear and an alternative was demanded. That alternative was the Newmarket Canal. Officially it was called "The Holland River Division of the Trent Canal System", but, the wide support of the business community and political officials resulted in it being referred to as the "Newmarket Canal". This was also in spite of the fact that it was not to be the terminus, as plans were developed to reach Aurora.

There had been earlier proposals to connect Lake Ontario with Lake Simcoe. A plan by the Surveyor-General of Upper Canada, drawn in 1800, shows a canal connecting the Rouge River to the East Holland River. The *1880 Atlas of the County of York* showed the proposed route of the Toronto and Georgian Bay Ship Canal, linking the East Humber River with the West Holland River.

Closer to home work was under way on the hydraulic lift locks at Peterborough and Kirkfield. Soon the Trent Canal System would join Lake Simcoe to Lake Ontario. Merchants in Newmarket, such as the Davis Leather Company, Wm Cane & Sons Woodware Co and Office Specialty Mfg Co would be able to bring in needed raw material cheaply. Farmers would have access to the American Cereal Co (later Quaker Oats) in Peterborough which consumed 20,000 bushels of oats a day.

The mills along the East Holland River had often complained about the lack of water. What would this mean to the demands of a canal? Trust was put in the ability of modern technology to overcome this problem.

A public meeting was held on 30 September 1904 and one of the main speakers was William Mulock, the Liberal member of York North. In February 1905 Newmarket Council met to put together a proposal. On the 21st of the month a delegation, Liberals and Conservatives, traveled to Ottawa to present their case. Prime Minister Laurier listened and promised that a survey would be made.

Sir William Mulock could not have had a better ally than the engineer EJ Walsh. As author James Angus describes him "Walsh seems to have been one of those government engineers who believed that if a proposal was politically desirable, it had to be technically possible."

By June of 1905 the engineering report was submitted to Ottawa and in July the House of Commons voted $100,000 to commence work on the canal. The following year dredging commenced. In 1907 and 1908 work was carried out on the turning basin and the locks. Excavation of Lock 3 was completed in 1908.

In 1909 the canal is turning political, that is the expenditure, feasibility and justification are being questioned. The Honourable Allen Aylesworth, who has replaced Mulock defends the need for the canal. By the end of the construction season almost all the work on the turning basin, Lock 3 and the connecting canal is completed.

The end of 1910 saw the near completion of Lock 2 and work had commenced on Lock 1 at Holland Landing. The Conservatives continued to discredit the Liberals over the Newmarket Canal boondoggle.

On 21 September 1911 the Conservative government of Sir Robert Borden defeats the Laurier Liberals. An election that was fought on Reciprocity also had as the subtext, the Liberal government record of scandal and corruption. A prime example of this "waste" of government money was the expenditure on the Newmarket Canal.

In January 1912 Canada's New Conservative government confirmed its intention to abandon work on the canal. The Newmarket Board of Trade met at the end of the month and sent a petition off to Ottawa protesting the cancellation. On 14 February the resolution was read in parliament, but the government held firm on its plan to cancel the canal project. On 7 August 1912 all work was officially stopped. It was estimated that 83% of the work on the structures had been completed. Including the dredging contracts over $900,000 had been spent and it was estimated that $400,000 more would be needed to complete it.

In a twist of irony the railroad that had led to the construction of the canal as an alternative transportation mode prospered. It made its money by bringing in the construction material for its rival.

General Statistics

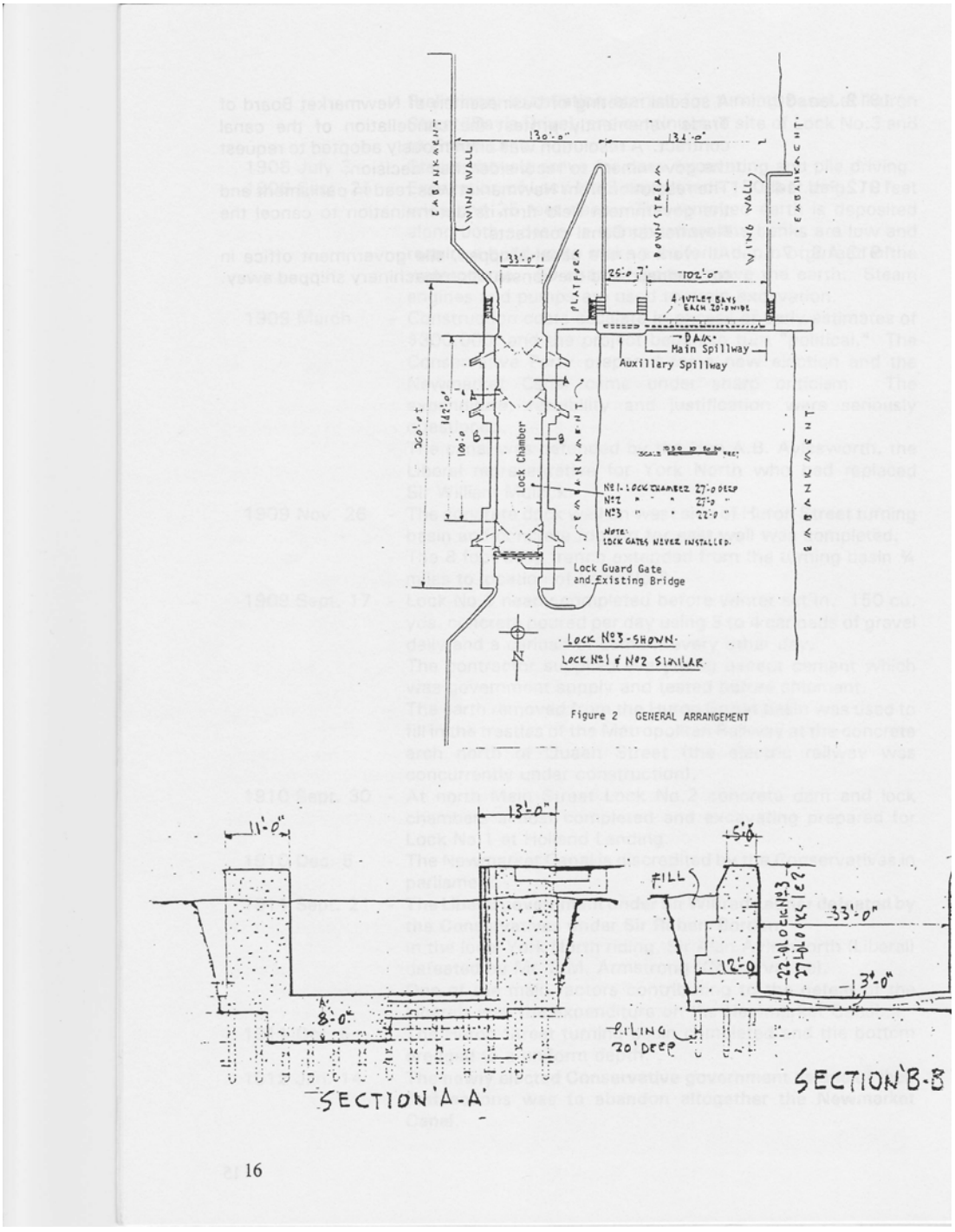
The total length of the canal was to be 13 miles of which 8-1/2 miles was straightening and dredging the Holland River.

The elevation of Lake Simcoe is 718 feet above sea level and Newmarket is 761 feet. The difference was to be overcome with: Lock 1 at Holland Landing, 16 feet; Lock 2 at North Main Street, 16 feet; and, Lock 3 at Newmarket, 11 feet.

Swing bridges were to be built at Locks 1 & 2 and at Green Lane.

RB Rogers was the engineer responsible for the construction of the Hydraulic Lift Lock at Peterborough. He used un-reinforced concrete in its construction and the same technique was used on the Newmarket Canal.

Alex Grant, who was one of the engineers for the Welland Ship Canal was the supervising engineer.

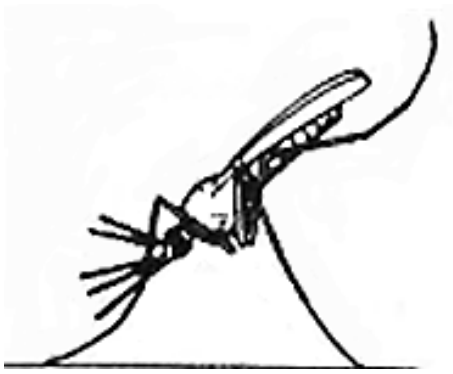


(Guides from the field trip may be obtained by contacting Bob Sears; the cost is $15.00, including postage.)

Malaria on the Rideau Canal

As we sit here, pining for summer, thinking fondly of those dog days of August, it's worth remembering that during construction of the Rideau Canal, August was known as the "sickly season." The sickness was malaria, a disease not understood during canal construction, and its history in North America not remembered today.

To understand how malaria affected those building the canal, one must first understand what malaria actually is. Malaria is caused by parasites of the genus *Plasmodium*, of which there are four different species. They all work the same way; the parasite needs both humans and a particular type of mosquito to complete its life cycle. In Ontario, a species of the female anopheles mosquito (still present) was the carrier. The anopheles mosquito is a dusk to dawn biting mosquito that will bite a human more than once, the latter feature being critical for the spread of malaria.



The Lock Construction Camp at Jones Falls

Located at the spot now occupied by the Blacksmith's shop at Jones Falls, these buildings didn't prevent malaria carrying mosquitoes from entering at night. "Basin and upper lock at Jones' Falls, from the East Upper end of 3rd lock, works nearly completed".
by Thomas Burrowes, October 1831, Archives of Ontario, C 1-0-0-0-55.

The basic life cycle of the malaria parasite starts when a malaria-carrying mosquito bites a human. The parasites (as sporozoites) head to the liver and proceed to incubate. The sporozoites multiply and, when sufficient numbers are reached, head out to invade red blood cells and produce merozoites. These merozoites multiply and eventually burst the red blood cells, producing the classic chills and fever symptoms in the victim. It is at this stage that anopheles mosquitoes can pick up the parasites when taking blood from a human with the disease. Once back in the mosquito, the merozoites develop into male and female gametocytes. These gametocytes fuse in the mosquito's gut (stomach) and produce sporozoites, which head into the mosquito's salivary

glands, ready to be injected into the next human victim, and the cycle starts all over again.

In Ontario, winter would normally break this cycle. But one variety of malaria, a temperate form known as *P. vivax,* has the ability to hibernate in the liver. Some of the *P.vivax* sporozoites do the normal malaria cycle (infecting their hosts that year), others "over-winter" in the liver, coming out the next summer when the mosquitoes have returned, to start the cycle again.

Malaria was not unique to the Rideau – it was present in Ontario as early as the 1700s. For example, in 1793, Mrs. Simcoe, wife of the Lieutenant Governor of Upper Canada, was absent from a gala ball – she was sick with malaria. There is some speculation that the great influx of Loyalists from the U.S. in the late 1700s, many of whom would have been carrying malaria, expanded the range of the disease in Ontario. At that time it was called by many names, "fever, ague, lake fever, swamp fever, intermittent fever, and fever of the country." The most common terms were "ague" or "fever & ague." Anyone reading period literature will see these terms commonly mentioned.

By the time the Rideau Canal construction started in 1826-27, malaria was well established throughout much of the range of the anopheles mosquito in Ontario. However, the building of construction camps, putting dozens to hundreds of people in close proximity, in areas populated by the anopheles mosquito (whose highest numbers were in the southern part of the Rideau), meant an explosion of the disease. The summer of 1828 saw the first great outbreak of malaria in the southern construction camps. The period from August 1 to September 15 of each year became known as the "sickly season." About 60% of the men would annually get sick with malaria. It eventually led to many men abandoning the work sites during that period of the year.

Rideau Canal contractor John Redpath, in a letter written from Jones Falls on December 3, 1831, referenced malaria, stating: "*the exceeding unhealthiness of the place from which cause all engaged in it suffered much from lake fever and fever & ague, and it has also retarded the work for about three months each year. I caught the disease both the first* [1828] *and second year missed the third but this year had a severe attack of Lake Fever – which kept me to bed for two months and nearly two months more before I was fit for active service as nothing can compensate for the worse of health so no inducement whatever would stimulate one to a similar undertaking."* Redpath was noting that his workforce, primarily Scots and French Canadians, were all laid low by malaria. Ironically, in 1834, Redpath brought his family to his sister's house at Jones Falls, in order to escape the deadly cholera epidemic (which killed his wife), that was raging at that time in Montreal.

In 1829, John MacTaggart, in referencing the first major malaria outbreak in the summer of 1828, wrote that *"at the Rideau Canal few could work with fever and ague; at Jones Falls and Kingston Mills, no one was able to carry a draught of water to a friend; doctors and all were laid down together."*

Malaria was not understood at the time, it was believed to be caused by bad air (hence "mal"-"aria" – literally "bad"-"air"). Colonel By had large sections of forest at the construction areas cleared to promote breezes in order to blow away this "bad air."

The mystery of malaria during construction of the Rideau isn't that it existed (it was present in Ontario long before the building of the Rideau Canal), but that so many died from it. Today, *P. vivax* has essentially a 0% mortality rate since *P.vivax* infects far fewer blood cells than other forms of malaria. People get sick from *P.vivax*, but they don't die. However the number of deaths reported from the canal construction period shows a direct death rate of about 1.5% at the lockstations, which might be extrapolated up to 3% to account for deaths off-site. We don't have exact (or even good rough) numbers for how many people worked on the canal – but an educated guess, using the higher 3% figure, is that 375 to 600 workers may have died from malaria. This doesn't include women and children who died from malaria in apparently similar numbers. For instance, in 1830, in the area from Newboro to Kingston Mills, out of a total of 1,316 men, 787 got sick and 27 died. At the same time, 13 women and 15 children were also recorded as having died.

To account for the death rate, the most likely explanation is that other diseases and heath issues of the day, such as dysentery, played a role. It may have been that *P vivax* was fatal to someone already suffering from another disease or health problem. A less likely explanation is that the more virulent tropical malaria, *P. falciparum,* was also present. Introduced into the U.S. with the African slave trade, it doesn't have the ability to over-winter in Canada, so, if it was present, it must have been re-introduced each year. John Redpath makes a distinction between "lake fever" and "fever & ague" so perhaps he was referencing different forms of malaria, or perhaps malaria complicated by another disease or health issue.

Although cinchona bark (containing quinine) had been in use for years as a treatment for malaria, it was the invention of quinoline alkaloid (named 'Quinine'), in 1820, that provided the first highly potent anti-malarial drug. But at the time of the building of the Rideau Canal it was very difficult to obtain and its use was therefore limited.

Malaria was eradicated from Ontario by the end of the 1800s. This was done by reducing the numbers of malaria parasites to a point low enough to break the cycle (the classic case example of how this can be done was the U.S.

construction of the Panama Canal). Extensive use of Quinine by the mid-1800s acted as a prophylactic for the disease (there are stories from that period of children going to school, "buzzed" on their morning dose of Quinine). The addition of glass, and eventually screens, on doors and windows, to prevent the entry of mosquitoes at night, reduced the rate of infection. Swamps were drained, reducing mosquito breeding habitat in areas of human habitation. This all took place, essentially eradicating malaria in Ontario, before it was scientifically recognized, in the late 1800s, that mosquitoes were the carrier of the disease.

A number of myths and misconceptions have grown up around malaria on the Rideau, I'll try to dispel some of these:

Mythconception #1 – malaria was unique to the construction of the Rideau Canal. No, it was present in Ontario before and after the building of the Rideau and present at similar large construction projects of the period (i.e. the building of the Erie Canal). The Rideau was not unique.

Mythconception #2 – Colonel By stopped recording the number of deaths. No, records were kept for the entire construction period once malaria was recognized as a problem (1828-1831).

Mythconception #3 – malaria affected Irish labourers more than other workers. No, malaria was indiscriminate, it affected everyone. One of the hardest hit places was Jones Falls, which didn't employ Irish labourers. Direct numbers from the records show that the Royal Sappers and Miners took the hardest hit percentage wise, but the records are fragmented so no conclusions can reliably be drawn.

Mythconception #4 – British soldiers who had served in tropical countries caused the malaria on the Rideau. No, we've already seen that malaria was present in the area long before the construction of the canal. The soldiers who worked on the Rideau Canal were Companies raised in Britain (where the temperate form of malaria existed in marshland regions). Yes, a few could have been infected with tropical malaria from previous postings – but their low numbers would not have been sufficient to start up a malaria cycle.

The bottom line is that malaria was the single largest cause of death during the construction of the canal. The Rideau Canal, similar to other "megaprojects" of the period, is a monument to human sweat, toil, death and perseverance. It's well worth celebrating since civilizations were built on such projects and the building of the Rideau Canal helped Canada advance into nationhood.

Note: While malaria isn't a problem in Canada today, it kills over 1 million people worldwide every year, mostly in developing nations. Most of the deaths are caused by the species P. falciparum.

This is an updated version of an article that originally appeared in Rideau Reflections, the newsletter of the Friends of the Rideau, **Ken Watson**, Editor)

Ken Watson (Ken is the author of several books on the Rideau Canal available through our website. Ken is also our webmaster. Editor)

Second Welland Canal Restoration

(A letter to the editor)

In the Fall 2007 issue of *Canals Canada*, there was mention of two items, among others, relative to the Second Welland Canal that I wish to take note of. One was that Lock 3, which had remained intact for decades, had been mostly filled in by a nearby highway project. The second was that on the American Canal Society web site, I list the Second Welland Canal as potentially restorable.

Looking at a map shows Lake Ontario, the Trent Severn Waterway, the Rideau Canal, and the Ottawa River all interconnected and very popular destinations for cruising boats. To the south is Lake Erie connecting to the rest of the Great Lakes and on to the central river system of America. Connecting these are the Fourth Welland Canal and the New York State waterways. While the New York State waterways are very boater friendly and becoming more so, the Fourth Welland Canal is intended and operated for large commercial ships. The Fourth Welland Canal has very high tolls for small pleasure craft and gives them low priority. A transit of the canal must be done in one day as there are no intermediate marinas. This intentionally discourages pleasure craft use of the route.

A similar situation exists on the remainder of the Seaway, also discouraging through traffic. But, a few years ago, the Lachine Canal in Montreal was restored to navigation, bypassing the first two Seaway locks. Transits in the first year exceeded expectations and have reportedly continued to increase in the years since. Restoration of the Soulanges Canal has been proposed, which would bypass the third and fourth Seaway locks. There is also discussion of restoration of the Cornwall Canal, to bypass the fifth and sixth Seaway locks.

In the Niagara region, I believe that a better opportunity exists for the Second Welland Canal. The route of the second canal begins at Port Dalhousie, where there are extensive marina facilities. It then extends through St. Catharines and up the escarpment to Thorold where it joins the current waterway. Most of the locks on the route remain although some have been filled in or otherwise abused. The route passes close to downtown St. Catharines which could use an economic boost. In downtown Thorold, is a large filled in basin, on which only a firehouse has been built. A basin there could contain a marina, helping that town's economy. While re-excavation of this basin apparently has some

environmental issues, there is known technology to deal with it. Along the route, the many paper mills that used to exist have been largely removed.

After Thorold, the Fourth Canal would have to be followed, but conflicts with ship traffic might be handled by scheduling and convoys. At Port Robinson, a buried lock exists that could be used to reconnect to the Welland River and on to the upper Niagara River and the Erie Canal. Further south, the old route through Welland could possibly be used with construction of an aqueduct over the sunken railway and highway route. At Port Colborne, a lock and draw bridge could be introduced in the older channel, now used as a spillway, to bypass Lock 8. On the route, a decision would have to be made about bridge clearances, but studies for the Lachine Canal restoration showed that an eight foot clearance was adequate for 90% of the craft in the area. Higher clearances would better compete with the New York canals. But even in New York, sailboats have to unstep their masts.

Restorations aren't cheap. But, reuse of the second canal could serve as a unique economic stimulus for tourism in the area and stop the continuing destruction of the remains. The best way to preserve historic structures is to find modern uses for them and tourism is a big business. While watching a ship transit the fourth canal's Lock 3 is certainly an attraction, boating through, walking beside, and gongoozling at a restored Second Welland Canal would be a much greater draw.

Dave Barber (besides being a CCS member Dave is also the President of the American Canal Society, Editor)

(See also the Fall 2007 edition of Canals Canada for the editors suggestions for the lock at Port Robinson and the route through Welland)

Fourth Welland Canal- A Through Route Alternative

In the last edition of Canals Canada I suggested two alternatives to create a through route of the abandoned section of the Fourth Welland Canal through Welland. Those suggestions were an aqueduct and a marine railway.

But there is another option that is already being used on the Ottawa Waterway. The Waterway uses hydraulic trailers to move boats around the various dams on the Upper Ottawa River. Vessels are restricted to 30 feet in length and 12,000 pounds. The boats that are able to fit within the restrictions are able to enjoy over 300 miles of the river from above Ottawa to New Liskeard.

Development in Port

The Ontario Municipal Board Hearing that is looking at development in Port Dalhousie, which includes a 17 storey condominium, is at the halfway point. Scheduling conflicts and a protracted hearing have resulted in a recess until the fall. A Board decision will likely not happen until early in the new year.

This article is not about Port Dalhousie but rather about Port Weller. In the recently published book *"John Laing Weller – The Man Who Does Things"* there is an interesting illustration on page 63. The illustration, circa 1927, is of a Port Weller than might have been.

(Illustration courtesy of the St Catharines Museum – Russell Plumley Collection, 1971.90.14)

The new canal was seen as bringing prosperity to the area of the entrance to the canal. Industry would boom along it's banks and this in turn would require housing for the workers. Housing for those workers included four to five story apartments along main thoroughfares (no condos in those days). Cross streets would provide lots for single-family dwellings. The workers were to have access to parks and recreation facilities and both the beaches on the east and west side were to be provided with piers.

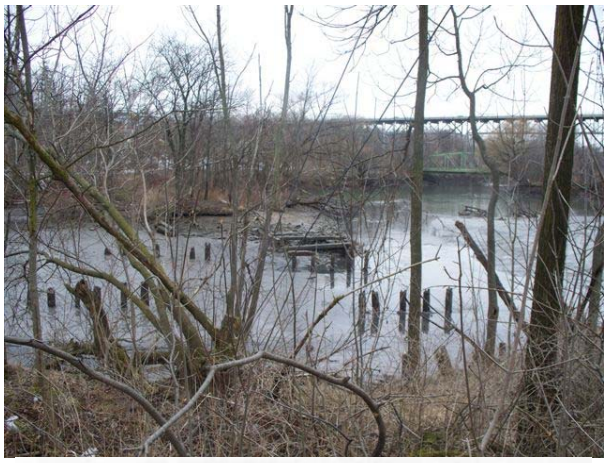
The main rail yard is on the west bank and there was also to be limited rail service on the east side. Road traffic along Lakeshore Road was not to be held up by train or ship as a high level bridge was to be provided to pass over both.

The illustration of the lock is of interest as it shows the single leaf lock gate that had been proposed for use on the canal. The decision to use mitre gates instead of the single leaf was made in 1920 so it is interesting that this illustration from 1927 would still use the single leaf design.

John Laing Weller CE MEIC "The Man Who Does Things" is available at the St Catharines Museum.

Historic Bridge Structures at Lock 3

Maintenance at the DeCew Falls Generating Station resulted in a large drop in the water level of Twelve Mile Creek. CCS Vice President **Bruce Timms** was able to record the remains of the towpath bridge and the road bridge from the Merrittville Highway that became exposed. Contrast today with the two historical illustrations in the centre.



Buried Treasure Lock 3 1845*

by Bruce Timms

Well maybe! The stones of Lock 3, laid in place in 1843 or 1844 by Scots Masons, may be considered buried treasure to some, and they are looking for more. The edge of the downstream end of Lock 3 of the 2nd Welland Canal is barely visible along the Merritt Trail on the south side of Highway 406.

Above: The 2nd Welland Canal in downtown St Catharines as drawn in 1875
Below: photo of Hutchison's Mill and Lock 3 with train trestle in the background

This lock was built as part of the reconstruction of the wooden lock of the 1st Welland Canal which opened in 1829. The 2nd Welland Canal was built with 27 stone locks to replace the 40 wooden locks. The new locks were 26 feet wide and 150 feet long between the gates. Compare that with today's canal locks at 80 feet wide and 859 feet between the gates

The good news from a treasure hunter's point of view is that this lock was only built to have 9 feet of water over the sill and just a 9' 6" lift. The treasure is not too deep and the site is not too wide. Careful excavation, like an archaeologist dusting off dinosaur bones, may uncover an abundance of canal treasures here.

The popular drawing of St Catharines, 1875, reprinted by the St Catharines Historical Museum in 1981, shows the lock at the base of the hill behind the on a straight line projection of Ontario Street. The very west end of the south wall of the approach wall is visible today. Like many 2nd Canal relics it is overgrown with weeds, trees and bushes, but it is visible and can be made more so with some effort from historic treasure hunters. Clues to the line of the

lock are taken from that birds eye view map drawn by H Brosius and produced by the Chicago Lith Co in the late 1800s. It identifies Hutchison's Mill just a short distance upstream from Lock 3. A photo shows that building and a steamer tied up in front of the lock with a bell stack steam train running over the rail trestle in the background.

Some energetic souls are working with the City to arrange an uncovering of at least the top of the south wall to see what can be explored here. The 406 highway through the valley buried most of the lock. A report from 1977 indicates that the lock was largely intact with water but without gates. The report states "*In downtown St Catharines, only one lock of the original two is left above ground. It is found just west of the Glenridge fill bridge and is completely intact except for the gates.*" It may still be completely intact, except that it is now partly buried by Highway 406. Partly, but not all, and just how much is recoverable is the question the new group of treasure hunters are seeking to answer.

It is hoped that some of this lock can be uncovered in time to take photos to Ottawa in late August to strengthen our case for designation of this lock and the entire Historic Canals Corridor as a National Historic Site.

A report from 1977 was prepared for the Historic Planning and Research Branch, Heritage Conservation Division, Ministry of Culture and Recreation, Province of Ontario, Honourable Robert Welch, Minister. It stated the problem that still remains today:

The Problem *Of the four Welland Canals constructed between 1824 and 1932, only isolated segments have survived. While progress and development have been responsible for the disappearance of countless parts of those canals, neglect, vandalism and a lack of knowledge of their significance have also been contributing factors. Those resources remaining are endangered until their significance is understood and sensitive planning decisions are made for them. Without historical resource planning now, there may eventually be no resources left to conserve for present and future generations.*

Well stated Mr Minister, one generation and several ministers later, the problem remains the same.

A few energetic souls, a little treasure hunting, and a serious bid for National Historic Site designation are a few good first steps to solving that problem.

If you would like to help go to www.thewellandcanalsadvocate.ca and register your interest, no tomb raiders please, this National Treasure has no gold, but great history of our City lies buried here!

This article was originally published in Dalhousie Peer #138, July 2008
* The Second Welland Canal officially opened on 21 May 1845

A Canal for Windsor, Ontario?

On 29 July 2008, Mayor Eddie Francis announced a development proposal for Windsor that included digging a new canal. The proposal would initially see the development of a marina, and then, in a later phase a canal would be built as the focus for an urban village.

The creation of a canal where none previously existed has already proven successful in San Antonio, Phoenix and Oklahoma City. A proposal is being studied to rewater the Old Erie Canal Aqueduct and Broad Street in Rochester, NY. There are also many European examples where formally derelict or under utilized canals are now vibrant centres of their communities.

The plan has been well received by the business community who are pledging $75,000 of private funding for the feasibility study. A preliminary estimate puts the project at $60 million.

Editor's Corner

I think that this is a first for me as editor, this edition, except for the World Canals Conference calendar items, is 100% Canadian content. I was able to achieve this thanks to contributions by **Ken Watson** and **Bruce Timms**. This is your newsletter, so if you have some knowledge to share with your fellow members please contribute.

I will add one more piece of foreign content since CCS has no planned field trips. The Canal Society of New York State will conduct their Fall Field Trip to the Seneca and Cayuga Canal. The trip will be based in Seneca Falls and having visited there last year I can attest to the fact that it is lovely place to visit. The trip is planned for 24 – 26 October, a wonderful time to extend your stay and explore the Finger Lakes and their many excellent wineries. Details will be posted at www.canalsnys.org or get in touch with me and I will pass along the information when it becomes available.

Bob Sears, Editor

Errata – Port Robinson

On page 16 my first sentence states lock, but in the second sentence I inadvertently used the plural. The second sentence should also have been the singular "lock". That said north of the exposed lock may be buried the remains of the locks (plural) from the First Welland Canal.

The Canadian Canal Society

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