

DISEASE DURING THE BUILDING OF THE RIDEAU CANAL

Today, 21st century medical science is struggling to fully understand a new virus, COVID-19. The general public is being educated about the value of proper hygiene and social distancing to prevent the spread of this infectious disease. But go back almost 200 years, to the time of the building of the Rideau Canal, a time when most diseases were a mystery and medical science was in its infancy. The vast majority of the deaths during the building of the Rideau Canal were due to disease. Medical care was rudimentary and in many cases you were better off not being treated by a “doctor” of that era given the types of treatment that you might receive.

The most well known and most misunderstood disease that affected the Rideau was malaria, which is caused by a parasite with cyclic life stages that requires two hosts, human and a particular type of mosquito. To put a well worn myth to bed, the type of malaria that affected workers on the Rideau was not unique to the Rideau and it was not brought here by British soldiers – it was already in Ontario and had been for at least 30 years prior to the building of the Rideau Canal.

But malaria was only one of several medical conditions that killed people. There was tuberculosis, known as “consumption” in that era, highly infectious and with a high death rate. There was “regular” influenza, the flu, that killed many. There was dysentery, spread by poor sanitation, which, while not generally fatal in itself, if added to the burden of something like influenza or malaria, could and did cause death. There was also gonorrhoea and syphilis and host of other ailments. The excess consumption of alcohol was responsible for several accidental deaths and some poisoning deaths. Most men were smokers and this may have contributed to various types of pulmonary issues, some resulting in death.

The records we have today from that era are fragmentary, only those bits that have survived the passage of time. But one interesting complete record that we have is that of medical care along the Rideau in 1827. These records were done by Dr. A.J. Christie who was hired by Colonel By in 1827 to provide medical care to the workers along the length of the Rideau. Christie listed the disease for each person he treated as well as the outcome (basically cured or died). He treated 1,278 men, plus an unknown number of women and children, for various ailments. Most common were digestive and bowel disorders, the preponderance of these affecting Irish immigrants. Christie attributed the reason to a change from a plant-based diet to a meat-based diet which caused digestive upset. Other diseases he noted included ophthalmia (eye infection) and phlegm (usually indicating an underlying medical condition).



Bloodletting

This 1860 photo shows a man being bled as a medical treatment. Photo: The Burns Archive (via Wikipedia)

On Christie’s list, it was influenza that was the main killer. Of the 12 men who Christie listed as dying in 1827, 10 died of “fever cont” or continuous fever which was regular influenza that still kills many people today. Of the other two, one died of Pleurites and one of Pathis Pulma – both of those appear to be lung/chest related. Malaria was also present in 1827. While most fevers on his lists show as continuous (influenza), Christie notes a few instances of “Fever Tertian” and “Fever Intermit” – both are known today as malaria (a fever that comes and goes in cycles). There were no deaths from malaria in 1827.

In 1828, conditions changed. It was an unseasonably warm year producing a bumper crop of mosquitoes, including the anopheles, the only mosquito in Ontario that can carry malaria. The type of malaria was a parasite known as plasmodium vivax, a temperate form of malaria, able to overwinter in a human liver (unlike

Friends of the Rideau is a volunteer, non-profit organization, working to enhance and conserve the heritage and charm of the Rideau Canal.

Friends of the Rideau, P.O. Box 1232, Stn Main, Smith Falls, Ontario K7A 5C7

Email: info@rideaufriends.com – Website: www.rideaufriends.com.

Comments about the newsletter can be directed to the editor, Ken Watson, c/o Friends of the Rideau or by email at: rideauken@gmail.com

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tropical malaria) and so able to survive in colder climates than tropical malaria which is a different type of malaria parasite. This temperate form of malaria was present in England and Europe at the time. It needs a certain population density of both humans and mosquitoes for the malarial cycle to sustain itself. It first appeared in urban areas, arriving in Canada towards the end of the 1700s, as our population increased. This particular type of malaria generally has a very low mortality rate – it was just one of many diseases people of the era had to contend with. An effective prophylactic for malaria, quinine, had only been synthesized in 1820 – at the time of the building of the canal it was still rare and expensive. Colonel By caught malaria at least twice and the medical treatment was to bleed him (ineffective and potentially harmful).

Another set of records that we have are those of the Sappers and Miners. Of the 22 that died, 7 had no cause listed, 5 died from black powder blasting accidents, 1 drowned, 6 were listed as dying of “fever,” 2 by consumption (tuberculosis) and 1 of a stroke. The fever deaths don’t distinguish between influenza and malaria, but based on the August to October dates of several deaths, some were likely malaria related.

There are no comprehensive records for 1828 to 1831 other than the Return of the Sick which listed deaths by malaria. But many of the medical issues that affected workers in 1827 would have continued. Influenza would have remained a problem. Problems with poor sanitation resulting in dysentery, bacterial infections and the like, would have been contributing factors in fever (influenza or malaria) deaths. And, to put another myth to bed, disease affected all equally, particularly malaria. Labourers, tradesmen, contractors and Sappers and Miners all died in about equal amounts – they were all living in the same conditions and so were affected the same way.

Cholera, one of the worst scourges of the era, didn’t arrive on the Rideau until 1832, after the canal had been completed. It hit most of the populated areas of Québec and Ontario and within the next couple of years killed far more people than died during the building of the Rideau Canal.

Today we understand many things that were not known in the 1820s and 30s. Malaria was believed to be

Names of Patients	Disease	Period of Confinement	Remarks
David Atkinson	Diarrhoea	Two days	Discharged cured
John Stephenson	gout	3 "	" "
John McGillivray	Diarrhoea	3 "	" "
John Adams	Dysentery	6 "	" "
Edw ^d Pealey	Ophthalmia	4 "	" "
Daniel Robinson	Veneral	9 "	" "
John Kee	Ophthalmia	4 "	" "
James Barry	Sore legs	16 "	" returned
John Gullen	Indigestion	3 "	" cured
Ira Shaw	Fever cont ^d	4 "	dead
John McCrae	Fever tertian	8 "	Disch ^d cured
John Ross	Indigestion	2 "	" "
Daniel McIntyre	Dysentery	5 "	" "

A portion of A.J. Christie’s listing

This is a portion of list created by A.J. Christie, documenting the men he treated in the Rideau construction camps in 1827. On this part of the list we can see that Ira Shaw died of “fever cont”, regular influenza. John McCrae had fever tertian, likely malaria, and he is listed as being discharged cured, as were the other men on this portion of the list. Christie Papers, Library and Archives Canada, MG24, Vol. 6, p.1987.

caused by bad air, they had no clue that mosquitoes were the culprit. Colonel By ordered the trees to be cleared at all the worksites to promote the flow of fresh air in an attempt to mitigate that disease. He even purchased extra land near some lockstations so that he could clear those areas of trees. But with the night-biting anopheles mosquito infecting people while they slept, it was an ineffective prevention method.

The centuries old concept of the four bodily humours: black bile, yellow bile, phlegm, and blood, although fading, was still in use. Part of that concept was that these had to be kept in balance, hence bleeding was one “cure” used to restore the balance of humours. Blistering was also used, the placement of hot plaster to raise blisters, which were then drained. Dr. Christie when he was hired in 1827, was instructed to use bleeding and blistering as treatments.

A doctor’s kit of the era would have contained all sorts of medicines, some helpful, some not (other than placebo effect) and some quite poisonous. Calomel (Mercury(I) Chloride), a poison, was used as a purgative and for curing diseases such as syphilis. Antimony was used for pneumonia and consumption. Castor oil, hemlock oil, and magnesia were for digestive issues, Epsom salts for purging, opodeldoc (a soap based plaster or liniment) for aching muscles, mustard plasters for congestion, opium or laudanum (a tincture of opium) for pain, and ipecac (powdered root of a Brazilian plant) to induce vomiting for purging.

Just as today, there was no lack of quack “cures” and people who believed in them. John MacTaggart, in his 1829 book “Three Years in Canada” stated:

“The country swarms with quacks, and a man of real surgical merit receives no encouragement; people are apt to prescribe for themselves when they take a turn of illness, and so are hurried out of the world sooner than most likely they otherwise would be.”

The bottom line is that in terms of medical care, they were doing their best with the information they had. Nobody wanted to see people die, but high mortality from disease or other medical problems was a fact of life back then. It was often worse for women and children. Complications from childbirth and infant mortality were the norm. Dr. Christie noted that 6 women and 38 children died in 1827, but on a more positive note, he also noted there were 54 births.

Today, as we take precautions not to catch a new virus, and have medical systems that are often effective in taking care of us, think about those men and women who had to deal with all sorts of unknown medical conditions. And who, if they got sick, were subject to all sorts of problematic “cures.” That was just a part of life in that time period.

- Ken W. Watson

Thanks to FoR director Sue Warren for providing information on what might be found in a doctor's bag in the 1820s.

2020 AGM

Our AGM has been delayed to the fall due to COVID-19. Hopefully we'll have some certainty about how to safely hold an AGM in the coming months.

The Depot

We do not know at this time whether we can open The Depot in Merrickville this summer. We normally operate it with volunteers and summer students, but it remains uncertain whether we will be able to do so this summer. We'll post any updates about The Depot on our website.

Membership

With the loss of revenue for our normal sales at summer events and at the Depot, it's more important than ever that you renew your membership. A form has been included if a renewal is needed—please renew now.

For anyone reading this newsletter who is not a member, please consider joining us. You'll find membership information on our website. Thank-you.

Message from the Chair

Dear Friends,

What a strange and challenging time this is. Normally (whatever that now means!!) I would be writing to you about summer plans, Friends of the Rideau's travelling road show with our booth set up at events along the Rideau Waterway over the next several months. Not this year. As I write this, it has just been announced that the Rideau Canal will partially open on June 1, except for Jones Falls and Kingston Mills where the infrastructure work has been delayed due to COVID-19. They are expected to open later in June. Some businesses and attractions, such as the Merrickville Blockhouse, will remain closed this year. Not a very auspicious start to the 189th season on the Rideau.

As you know, Parks Canada has undertaken renovations and repairs to The Depot, the heritage building in Blockhouse Park in Merrickville which serves as Friends' visitor centre during the summer months. With the onset of COVID-19 that work had to stop by provincial directive. As this message is written, discussions are underway about the completion of the project and Friends hopes that we will be able to open at the beginning of July, with appropriate protocols to protect visitors and staff. The renovations and repairs were extensive, necessitated by deterioration of the foundation and floor of the building, and the fact that the washrooms did not meet current standards for comfort and accessibility. Watch Friends' website for updates.

On behalf of Friends, Ken Watson and I met in late 2019 with David Britton, the recently-appointed Director of Ontario Waterways at Parks Canada and hence the person in charge of the Rideau Canal. We had a wide-ranging discussion on issues of interest and concern to Friends, among them the preparation of the long-overdue Rideau Canal management plan, the ongoing challenge of preserving commemorative integrity, and public engagement and communications. At the pre-pandemic meeting we were assured that the public consultations on the management plan would take place this summer, and that an Associate Director, resident in Smiths Falls, would be appointed mid-year. It's our assessment that neither of these will likely happen until 2021 at the earliest.

Finally, though we have had to postpone our Annual (Spring) Meeting, we are developing ideas for a meeting in the autumn, possibly together with an open house at The Depot. Stay tuned. Meanwhile, stay well and enjoy our beautiful Rideau Canal.

- Hunter McGill

Protection of the Rideau Canal World Heritage Site – The View from UNESCO



The Château Laurier Hotel

The top is an artist’s conception of the proposed “boxcar” addition. It’s a severe detraction to the visual character of the Ottawa locks and extremely heritage inappropriate to the Château Laurier in terms of design.

The lower photo, taken in 2004, shows the previous configuration, much lower in profile and conformable in view to the building as a whole.

Top: Larco Development (from City of Ottawa website).
Bottom: Ken W. Watson.

In November last year the Director of the World Heritage Centre at UNESCO, Dr. Mechtild Rössler, wrote to the Canadian government expressing concern about the “state of conservation” of the Rideau Canal in light of the proposed development projects for the Château Laurier in Ottawa (large modern addition) and the site of the former Rideau Marina in Kingston (proposed apartment complex). In short, based on a review done by ICOMOS (the International Council on Monuments and Sites), the technical advisory body to the World Heritage Centre, UNESCO’s view was that these projects could have “a significantly negative impact” on the outstanding values of the Rideau Canal and should be subject to a Heritage Impact Assessment and a Visual Impact Assessment.

From the Friends of the Rideau perspective, the most important comment in the UNESCO letter is that “the management system for the property does not currently provide adequate protection to the Outstanding Universal Values or the setting thereof.”

Translated, this means that the justification given by the Canadian government for designating the Rideau Canal as a World Heritage Site is not being protected, especially when it comes to developments proposed immediately adjacent to the Canal. UNESCO notes also that the last management plan for the Rideau Canal dates from 2005, an observation which Friends of the Rideau has been making for close to a decade.

The UNESCO letter and its technical annex from ICOMOS are written in formal language which is to be expected in the context of the World Heritage Convention, the inter-governmental framework which Canada has signed, pledging to protect cultural and natural sites it is responsible for. But the core message is that when it comes to the Rideau Canal, our government is not living up to its responsibilities. When the long-awaited management plan comes forward for public consultation and review, the comments made by UNESCO should be central to the discussion.

- Hunter McGill

2020 Hours of Operation

2020 Fees

Dates	Days	Hours
June 1*—June 21	Mon to Thurs	10 am to 4 pm
	Fri to Sun, holidays	9 am to 7 pm
June 22 – Sept. 7	Mon to Thurs	9 am to 6 pm
	Fri to Sun, holidays	9 am to 7 pm
Sept. 8— Oct. 12	Mon to Friday	10 am to 4 pm
	Sat to Sun, holidays	9 am to 5 pm

Single Lockage & Return	= \$ 0.92 per foot
One Day	= \$ 1.64/ft
Transit (one way)	= \$ 4.75/ft
Six Days (any six days)	= \$ 5.16/ft
Seasonal	= \$ 8.99/ft

* except for Kingston Mills and Jones Falls which are expected to open later in June.

RIDEAU CANAL MANAGEMENT PLAN

The very long overdue management plan for the Rideau Canal, which legally should have been updated several years ago, has been delayed, yet again, this time for a valid reason, COVID-19. The following is a statement from Parks Canada:

The health and safety of Canadians, visitors, and Parks Canada team members is of the utmost importance to the Agency. Parks Canada is following the advice of public health experts and implementing measures to support Canada's efforts to limit the spread of the novel coronavirus (COVID-19) and reduce risks to employees and visitors.

As a result, Parks Canada has also suspended all public consultations and formal engagement with stakeholders and Indigenous peoples on management plans until further notice.

Management plans are developed through consultation and input from various people and organizations, including Indigenous peoples, local and regional residents, visitors, and the public.

The Agency is currently focusing its efforts on critical operations. There is, therefore, limited capacity to undertake full and meaningful management planning consultations at this time. Parks Canada also recognizes that the focus of the Canadian public, Indigenous partners and our stakeholders is on public health and safety and the economy.

Parks Canada is committed to resuming all management planning activities, including public consultations and formal engagement with stakeholders and Indigenous peoples, once operations return to normal and capacity allows.

A major issue that has come up since they did the draft version (which we've yet to see), is the UNESCO concern about the state of conservation of the site (see the UNESCO article on page 4). They've noted that "the management system for the property does not currently provide adequate protection to the Outstanding Universal Values or the setting thereof." That will have to be directly addressed in the new management plan, including a new commitment to the Rideau Corridor Landscape Strategy which has so far failed in achieving its mandate, to implement legal protection of the visual values of the Rideau Canal. Parks Canada has cited jurisdictional issues in cases such as the proposed heritage inappropriate addition to Château Laurier, with the excuse that "it's not our jurisdiction." However, as UNESCO pointed out, protection of the values of the World Heritage Site is a federal responsibility – internal jurisdictional issues are not an excuse for inaction.

Quick Facts: The "current" management plan dates to 2005. It has effectively been obsolete since Parks Canada did a massive management re-organization in 2012. A new management plan should have been created at that time to reflect the large change in management and policy direction under the new Waterways unit. Heritage interpretation, public education and public engagement were abandoned in favour of revenue generation, which was made a priority over commemorative integrity, a situation that continues to this day on the Rideau Canal. Legally it was required to be updated in 2015 based on the legislated 10-year cycle (Parks Canada Agency Act). In addition, the "current" World Heritage Site management plan for the Rideau Canal, which also dates to 2005, is badly out of date. Much of what Parks Canada promised to UNESCO as part of the World Heritage Site nomination process is not being done on the Rideau Canal.

RIDEAU HERITAGE INFORMATION

In a previous newsletter we mentioned the website, parkscanadahistory.com, which contains digitized copies of various research reports relating to Parks Canada sites. Since then, we've contacted the operator of the site. It turns out that the site is run by an individual on a volunteer basis who purchases these reports on the used book market, digitizes them and then makes them freely available to the public as downloadable PDFs. It's a fantastic initiative, a wonderful public service, making this valuable information easily available to anyone, anywhere in the world.

Last December, the Board of the Directors of Friends of the Rideau unanimously agreed to donate the 12 manuscript reports that we've digitized to this site. In addition, Ken Watson donated a PDF copy of his book, *Engineered Landscapes* and paper copies of several Rideau manuscript reports that he had in his library.

The on-line availability of these documents is even more important now since Parks Canada removed most of its local libraries in 2012, including two on the Rideau Canal (Elgin and Smiths Falls), making it very difficult for local researchers, or those just interested in detailed history, to access that information. Parks Canada has no digitization project of its own.

On the parkscanadahistory.com website, go to the drop down menu at the bottom of page to select your favourite Parks Canada site and see what is currently available.

ENJOY THE RIDEAU CANAL and STAY SAFE IN 2020

Unless you have an underlying medical condition that puts you at risk, there is no reason not to get out on the water this year and explore the beautiful Rideau Canal, as long as you observe common sense safety in order not to transmit or catch COVID-19.

As of this writing (late May), Parks Canada has just released their general safety guidelines for the lockstations which include:

- Nautical distancing
- Wash your hands
- Touchless locking
- Follow direction from Lock Staff
- Stay on boat while locking
- Cashless payment preferred

We're going to be living with the risk of COVID-19 for at least this year, so it will not be business as usual. Social distancing, proper hygiene (lots of hand washing) and the use of a mask as appropriate will be the norm. Please keep the safety of the Parks Canada lock staff in mind when you pass through a lockstation. Try to be self-contained as much as possible which is pretty easy to do if you're boating.

New rules and protocols are still being developed by government – follow those directives as they are made public. Before you head out, check for the latest updates from the Rideau Canal Office of Parks Canada. We have a link to their COVID-19 page at the top of our website home page at www.rideaufriends.com

THE VIRTUAL RIDEAU

For those of you who can't get out or just want to enjoy a Rideau experience at home, the TVO "slow TV" show, **Tripping the Rideau**, a four-hour real time journey along the Rideau Canal from Manotick to Ottawa, which was first aired this spring, can now be viewed on-line by going to www.trippingtherideaucanal.ca

Also on that page are links to several 360 degree virtual reality videos. When watching these videos on your computer, you can see the 360 degree view by moving your mouse. If viewed on a smartphone, simply move your phone to see different views. And for those who happen to have a VR headset, you'll get the full immersive 360 degree experience.



The peaceful Rideau Canal

A photo taken by your newsletter editor several years ago, heading out in the early morning, is a view now seen almost every day so far this season, a lake on the Rideau Canal with no boats.

Local wildlife appears to be loving the lack of human annoyances, lots of waterbirds, turtles and the like doing their thing with nobody disturbing them.

Photo by Ken W. Watson, 2005