

2 ARTIST Rosemary Clarke Young

5 FURNISHINGS The Dawson Desk: Providing a 'Comfortable Repose' for Students Melanie Ballard

> 8 LECTURE Anita Jackson: Historic Gardens in Nova Scotia Suzanne Rent

10 LOYALIST HERITAGE **The Loyalist Heritage of Shelburne, Nova Scotia** Christopher A. Sharpe

14 LECTURE **The John Tremain House, 5500 Inglis Street, Halifax** Heather Watts

16 TECHNOLOGY **Ground Penetrating Radar in Nova Scotia Archaeology** Jonathan Fowler and Sara Beanlands

Volume 43 No. 3 ISSN 0384 7335

ARTIST

The Griffin

A quarterly newsletter published by Heritage Trust of Nova Scotia

Patron: His Honour The Honourable Arthur J. LeBlanc, ONS, QC, Lieutenant Governor of Nova Scotia

Editorial Committee Donald Forbes, Melanie Ballard, Dulcie Conrad, Michal Crowe, Peter Delefes, Donna McInnis, Nancy O'Brien, Tony Edwards Brian Kinsman (ex officio)

Contributors to this issue

Melanie Ballard, Sara Beanlands, Rosemary Clarke Young, Jonathan Fowler, Anita Jackson, Andrew Murphy, Suzanne Rent, Christopher Sharpe, Heather Watts Layout: Douglas Porter Printers: etc. Press Ltd

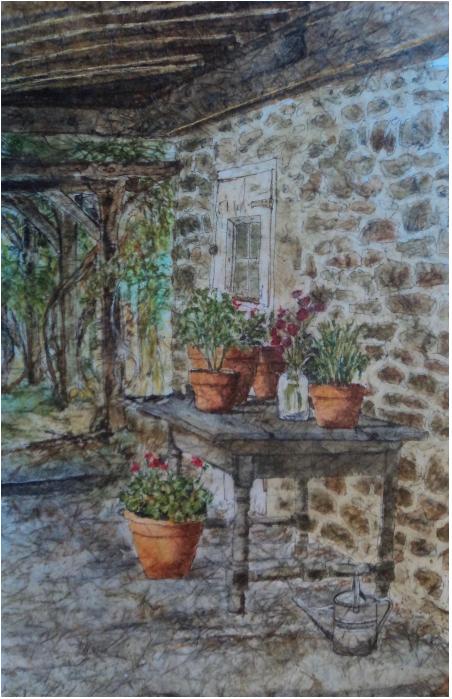
Unless otherwise indicated, the opinions expressed in these pages are those of the contributors and do not necessarily reflect the views of Heritage Trust of Nova Scotia. We welcome submissions but reserve the right to edit for publication. Contributions appear in both print and web editions. Deadline for the next issue: October 15, 2018

Please send submissions to Heritage Trust of Nova Scotia Box 36111 Spring Garden RPO Halifax NS B3J 3S9 griffin@htns.ca www.htns.ca Tel: 902 423-4807

Heritage Trust of Nova Scotia is a charitable organization. All donations are tax creditable.

Cover image: The Kitchen Corner (detail), by Rosemary Clarke Young, 2018, watercolour wax resist on rice paper, 10"x14", \$400 (courtesy of the artist and Teichert Gallery)

Rosemary Clarke Young



The Potting Table, by Rosemary Clarke Young, 2017, watercolour wax resist on rice paper, 11" x 17", \$400 (courtesy of the artist)

Bedford artist Rosemary Clarke Young

studied art in Montreal and later at Barat College (Illinois), the Art Institute of Chicago, and Arizona State University. For the past 17 years, she has exhibited regularly in galleries and shows, both locally and in New Brunswick, Montreal, Ottawa, and Denmark. Since 2008 she has taught children's art classes, both privately and in local schools.

While Rosemary works in oil, encaustic, and soft pastel, her principal medium is watercolour wax resist on rice paper. Her practice focuses mostly on interiors, inspired by simple views of everyday scenes, capturing light and shadows.

For information on any of her work, please contact her at larke@ ns.sympatico.ca

Rosemary Clarke Young's work is available through the Teichert Gallery in Halifax (teichertgallery.ca).

Heritage Trust of Nova Scotia

Illustrated Public Lecture

SEPTEMBER 20 Suzanne Rent Prince's Lodge Rotunda: Stories Behind a Halifax Landmark

OCTOBER 18 **Royce Walker** The Forts of McNabs Island

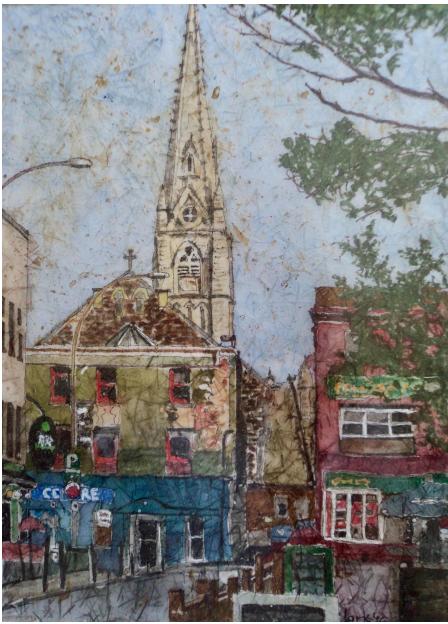
NOVEMBER 15

Fergie McKay The Pictou Bar Lighthouse Property

All talks take place at 7:30 pm on the 3rd Thursday of the month

Museum of Natural History Auditorium 1747 Summer Street, Halifax Access from visitor's parking lot

Information 423-4807



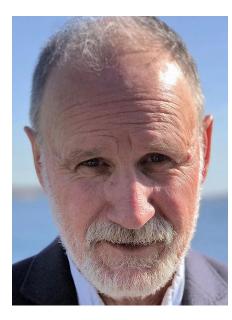
Argyle and Blowers, by Rosemary Clarke Young, 2017, watercolour wax resist on rice paper, 8" x 11" (courtesy of the artist)

SAVE THE DATE DOORS Open for Churches 2018

Kings County: Saturday-Sunday September 22–23, 10 am – 4 pm (Sat), 1 – 4 pm (Sun) Annapolis County: Friday-Saturday September 29–30, noon – 4 pm (Fri), 10 am – 4 pm (Sat) Richmond and Inverness Counties: Sunday-Monday, October 7–8, noon – 4 pm CBRM and Victoria County: Tuesday-Wednesday, October 9–10, noon – 4 pm

 \sim Some sites have restricted hours. Please check regional lists for details. \sim

REPORT President's Report



Andrew Murphy, the new President of the Heritage Trust of Nova Scotia, is a lifelong resident of Halifax, with deep roots in the city. Members of his family have run businesses in Halifax for seven generations; as he says, "we have been continuously self-employed here since 1815." The various businesses have moved around a lot in those years. His grandmother's family, the Cronans, owned much of the waterfront where Purdy's Wharf is now. Her husband, John Murphy, purchased Patrick Power's wholesale dry goods business in 1873, which was then located in the building where the Split Crow is today, on the historic Granville Mall. Eventually they had

a factory on the present site of the Metro Centre, downhill from the Citadel. His brother and sister, Philip and Annette, still run this business, J. & M. Murphy Limited. Andrew has been a practising chartered accountant for over 30 years. He has also done some development in Halifax, his latest project, on Gottingen Street, being the ongoing conversion of the old Glubes Furniture Store into 44 residential units. Over the years, Andrew has served on numerous boards and commissions, including a 15year period with Phoenix Youth Programs, serving as Treasurer. Prior to taking on his new role, he served as Vice President (Finance) with the Heritage Trust.

Andew Murphy

I am excited and honoured to take on the task of President of the Heritage Trust of Nova Scotia. There continues to be a great challenge in trying to save our built heritage in this province, a complex problem which ranges from development pressures in Halifax (causing demolitions) to trying to find viable uses for buildings outside the city (just to keep the heat on and the roof maintained).

During the past number of weeks, I have been investigating some of the vast amount of history and information that is stored at the Trust's offices in Dartmouth. In one of the many file folders there, I found a collection of newspaper articles and editorials concerning the proposed demolition of the buildings at Privateers Wharf and what is now known as Historic Properties. I thought that, with the debate still raging about spending \$65 million to revamp the Cogswell Interchange, I should take a look. What I read in those faded newspaper articles and editorials was fascinating.

On June 19, 1969, the exact date of my 10th birthday, the city councillors of

Halifax, in their wisdom, voted 5 to 2 to complete the demolition of the heritage buildings in what is now the Historic Properties waterfront area. There were a number of reasons why they chose to do this. Foremost was a general urge to be 'modern'. They wanted to complete the proposed 6-lane Harbour Drive road system, which was to run above the waterfront and connect with the alreadybuilt Cogswell Interchange.

The big problem they had identified was the Morse's Tea Building (now known to newcomers and tourists as the "Your Name Here" Building) and the Enos Collins Bank Building, just 28 feet away. These two buildings had been placed rather haphazardly over 200 years ago, with absolutely no regard for the road space requirement for 18-wheel trucks. Goodness – What were they thinking?

After the June 19 vote to demolish the historic waterfront properties, the debate continued to rage. There were many articles and editorials debating the issue. Heritage Trust and other advocates argued that the waterfront could be one of the most special places in Canada. Along with preserving the historic buildings, they advocated the building of the Maritime Museum of the Atlantic. L.B. Jenson [Commander 'Yogi' Jenson, RCN] suggested in a letter to the editor that "... if the waterfront restoration had been permitted, it was the intention of some of us to devote our efforts to obtaining and restoring by public fund across Canada a wartime RCN corvette [HMCS *Sackville*]."

Where would we be if those pesky Heritage Trust people had not ...blocked the ...expressway along the waterfront?

Perhaps the most interesting piece of debate published was by the Mayor of Halifax himself, who predicted in an open letter to Heritage Trust of Nova Scotia founding President, Victor de B. Oland, the then sitting President of the Canadian Tourist Association, that by 1974 the once-thriving Halifax would become a ghost town "... [if] we give the old buildings [some of which are historic] first priority ... if the city council, confused by a fast moving world, decided to opt for history and forget economics and the future." He predicted, amongst other dire consequences, that Scotia Square would never get built, that Mr Oland's brewery would be

FURNISHINGS

closed within three years, and that the Children's Hospital would lose the Killam gift and be out of funds, with the new hospital building only half up. All of this would be caused by a decision to keep the Privateers Wharf buildings.

Eventually, cooler heads prevailed. With some not-so-subtle nudging from the federal government in Ottawa, which threated to withhold key funding if the buildings were demolished, on Thursday, July 31, 1969, council voted to rescind the previous motion, thus saving the waterfront Historic Properties buildings, we hope forever.

Flash forward almost exactly 50 years, and the Halifax waterfront is now the most visited tourism site in Nova Scotia. Tourism in Nova Scotia is now a \$2.7 billion annual business, with \$1.5 billion of that business based in Halifax; it has grown to be more important than the port itself, said to provide \$750 million annually in economic benefits to the regional economy.

Where would we be if those pesky Heritage Trust people had not stood in the way of modernity and not blocked the 6-lane expressway along the waterfront? We would be down hundreds of millions in tourist revenue each and every year. I look forward to celebrating the 50th anniversary next year of the July 31 vote to keep Historic Properties. Perhaps we can get our city to erect a statue of Mr Louis W. Collins, an early Heritage Trust board member, first Chair of the Halifax Landmarks Commission, and Honorary Civic Historian, as a tribute to his dedication and tireless work on this issue as he led the opposition to the demolitions and prevented the tragedy that would have been the Harbour Drive. Perhaps we can convince them to place the statue in the middle of a sizable new park at the end of Granville Mall, and to rethink the planned redevelopment of the Cogswell Interchange lands, to stop sending cars and trucks to the still inconveniently-narrow streets of the historic district.

The Dawson Desk: Providing a 'Comfortable Repose' for Students



Painted Dawson Desk in collection of the Little White Schoolhouse, Truro (Griffin photo)

Melanie Ballard

Our cover image of an old-fashioned kitchen interior is an apt complement to the following article, which is also focused on interiors. It describes an iconic school seat design used for many years in oneroom schoolhouses around the province.

In the spring of 1850, John W. Dawson, Superintendent of Education for Nova Scotia, made a tour of schools in the eastern United States. He met with local school officials and toured several schools, observing the architecture and furnishings of the schoolhouses, as well as the methods of instruction and discipline.

On visiting a one-room school in Boston, Dawson observed a class of sixty young students, seated in rows, in a

room "sufficiently large to allow abundance of space for this arrangement." He offered a comparison of this school to those he had visited in Nova Scotia: "Each child occupied a comfortable little arm-chair of suitable height, with a rack attached to one arm for slate and books. It was quite pleasing to witness the air of comfortable repose with which these children sat in their snug little chairs. The contrast between them and the poor little people of the same age in our schools, perched in rows on tall, backless forms, was very striking; and gave a valuable lesson in the important department of school seating, so much neglected in this Province."

To assist Nova Scotia communities in building schools that would provide adequate space and comfort to allow students to learn properly, Dawson produced a pamphlet which set out plans for schoolhouses and furniture. He borrowed largely from an American book, *School Architecture*, by Henry Barnard (published 1850).

Some school districts could afford to purchase American model desks – the classic style we recognize with beautiful cast iron legs, wooden seats, and wooden desk tops, made for one or two students. But Dawson included in his plans a pattern for a desk made entirely of wood, which could fit two children. This 'Dawson Desk' could be made by local craftspeople, using wood of their choosing, thus allowing even poorer school districts to provide proper seating for students.

In spite of Dawson's suggestions, fifteen years later schools across the province were not uniform in appearance or standards. In 1866, the Inspector for Cumberland County complained about the poor furniture in that county's schools:

"With regard to the 'Furniture' in the old school-houses, it is in general quite in keeping with the houses themselves – of the most primitive description. A rough deal [softwood plank] with four pieces of wood driven into as many augur-holes, for legs, generally constituted the seats for children. Anything was considered good enough for a little child to sit upon in school six hours a day. The desks were also of the same rude pattern, ricketty and unsteady, and generally ranged round the four walls of the room. There was no convenience, and less comfort."

Many of the inspectors were concerned for the comfort of the students and their ability to concentrate on lessons when inadequate seats and desks might be causing physical discomfort. Mr J.B. Calkin, Inspector for Kings County (and future Principal of the Normal School in Truro), wrote,

"In many otherwise very respectable [school]houses, the furniture is barely tolerable. The writing tables frequently consist of boards inclined from the walls, and the seats are not provided with any supports for the backs of the children ... The fact seems scarcely to be appreciated that when the child is not comfortably seated,



Little White Schoolhouse (former Riverton District No. 9 School, Pictou Co.) on the NSCC campus in Truro (Griffin photo)

he is liable to suffer physical injury, and that certainly his discomfort will impede his progress in study."

In spite of these cases of schools lacking adequate desks, there are examples in the 1866 reports of counties with the improved seating promoted by Dawson. In Colchester County, it was noted that "many of the old houses have been re-furnished, several of the new are already provided with the Dawson desk; and I am quite confident that all will, in a short time, be as well provided as circumstances will permit." In some rural sections of Halifax County, it was claimed that all schoolhouses had the Dawson Desk, while other sections of the county lacked adequate desks because of the ignorance of builders. To overcome this ignorance, the inspector was authorized by the Board of Commissioners to provide each school section that was building new, or planning to refurbish old schools, with a model desk. In Hants and Shelburne counties, many schools at this time had Dawson Desks, although some of the districts were encouraging the purchase of the costlier American patent desk.

In Truro, the Little White Schoolhouse Museum, which preserves the history of public education and teacher training, has two Dawson Desks in its collection. Originating from different areas of the province, the desks differ in size and finish. One is painted and the other is varnished. When one thinks of school desks, it is likely one envisions the American model, with its attractive cast iron legs and polished wood seat and desk top. It is the cast iron model that tends to survive - perhaps its perception as the quintessential antique school desk affords it higher value in peoples' minds. In comparison, the wooden Dawson Desk may look somewhat 'homemade'. I wonder how many Dawson Desks remain in this province, and how many may have been tossed out as being of little value.

Melanie Ballard is President of the Little White Schoolhouse Museum. Located at 20 Arthur Street, Truro (on the NSCC Campus), the Schoolhouse is open June 1 to August 31, Tuesday to Saturday, 10 am-5 pm. www.littlewhiteschool.ca

A tribute to Hal Forbes (5 August 1955 - 24 August 2018)

Janet Morris

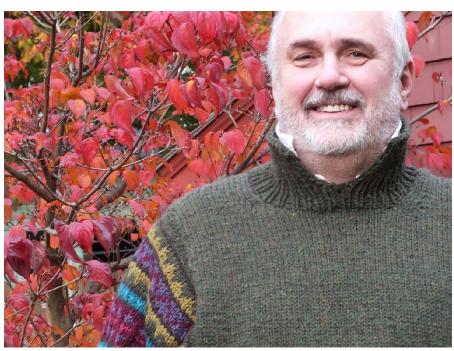
In the mid-1980s, there was a heritage house tour which included a lovely house on Creighton Street – out of the usual south-end neighbourhoods where other houses were featured. This was the last house I visited on the tour, and I recall the owner was fairly chatty. It was 40 minutes after the tour had ended before he was able to pry me out of that enchanting house.

In the intervening years, Hal became a trusted friend and mentor. Meanwhile, the area has become guite popular, largely due to Hal's colour palette and his incredible decorative eye. He called it "Hallywood". His woodworking shop on Gottingen Street became a go-to place for many tradespeople in the city looking for or needing something special. It was also a venue where many craftsmen learned their skills. Hal contributed greatly to the development and continuity of skilled wooden building craftsmanship, passing on his knowledge and experience to others, including students at Holland College in his native Prince Edward Island.

Hal could take the ordinary and make it extraordinary.

Several of the homes Hal rehabilitated he maintained as rental properties. Others he fixed up and sold. It happened that, oftentimes, a neighbouring house was re-done by Brian MacKay Lyons. The juxtaposition was stark, but both were expressions of how to keep these homes and the neighbourhood ticking.

Hal was an early contributor to Jane's Walks. He conducted wonderful tours and recounted eye-opening stories of the past of some of the buildings. Indeed, it was apparent that the neighbourhood had been a real community, with grocery stores on every second corner. Some of these have been regen-



Courtesy of David Archibald and Barbra Forbes

erated by Hal: in particular, Deedee's Ice Cream has become a focal point in the present-day community.

Hal's irrepressible energy saw developments in his own historic home - the backyard shed, the fencing, the outdoor entrance to his basement kitchen, the kitchen itself, bookshelves, bathrooms everything he could touch. His creative energy reached out to other buildings in the neighbourhood, and occasional projects dotting other parts of the city. Hal could take the ordinary and make it extraordinary. I have a garden shed in a hidden enclave that so perfectly incorporates features of the heritage home beside it that I've come to love my 'folly' even more than the house. Once when I ran into him on the street. Hal invited me into his office (his truck) to show me a drawing - it was his rather plain workshop dressed up with such incredible wood detailing that it was unrecognizable - but beautiful! Imagine seeing the world through those eyes!

But as was so lovingly expressed at

the service celebrating his life, Hal the person was even more amazing than his work. Everyone who knew him has fond recollections; the stories could fill volumes. He was that big.

Almost 20 years ago I did a project on the fringe of 'his' neighbourhood – it was larger and more complex than I had anticipated. My workmen had gone away, I had decisions to make, and I was truly falling apart. Then I encountered Hal on the street one day. He scraped me off the sidewalk, helped me make some decisions, and got the project moving forward again. And he really hardly knew me then. Hal was magnificent.

LECTURE Anita Jackson: Historic Gardens in Nova Scotia

Suzanne Rent

In May, landscape designer Anita Jackson, who has both interest and experience in heritage conservation, gave a talk on historic gardens in the Heritage Trust's monthly series of illustrated public lectures. When we think heritage, we don't often think of what was happening outside of our historic architecture. But the gardens surrounding heritage buildings and homes played a significant role in food production, social status, and the history of our natural environment.

"I'm always amazed at what people knew and how they utilized the resources they had," Jackson says. "I think people understood hard work and the continuity required and the patience to do what they did."

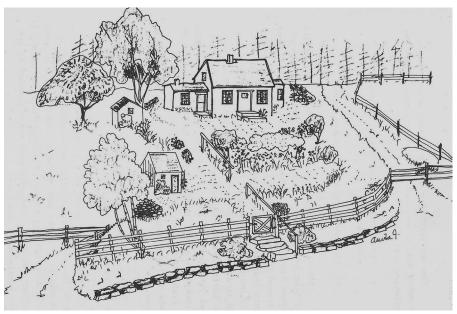
Jackson grew up in Halifax but spent her summers with her family at their farm in Lorneville, Cumberland County. She studied ornamental horticulture at the Nova Scotia Agricultural College, environmental planning at NSCAD, and holds a Master of Arts in landscape conservation from the University of York.

In her presentation, Jackson spoke about several historic gardens around Nova Scotia, from elaborate English pleasure gardens to subsistence gardens that fed families and communities.

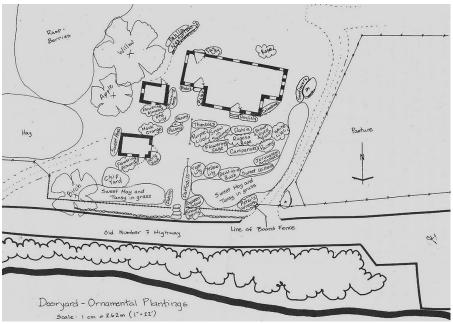
"What happens on the Eastern Shore of Nova Scotia is different from what happens in the Annapolis Valley," she says, adding that variation in soil, economics, and cultural backgrounds all influenced these gardens. "People always worked with what they had. The gardens themselves are so site-specific."

Fisherman's Life Museum:

Located in Head of Jeddore on the Eastern Shore, the gardens at this one-time small and modest home were among the first to inspire Jackson to learn more about historic gardens in Nova Scotia. The house was home to Ervine Myers, his wife, Ethelda, and their 13 daughters.



Dooryard plantings and fence, Fisherman's Life Museum, Head of Jeddore, sketch by Anita Jackson (courtesy Nova Scotia Museum, from Curatorial Report no. 47, 1983)



Ornamental plantings, Fisherman's Life Museum, Head of Jeddore, by Anita Jackson (courtesy Nova Scotia Museum, from Curatorial Report no. 47, 1983) (note scale refers to original publication scale and may not apply here; north to bottom)



Garden plants on outcrop, Fisherman's Life Museum, Head of Jeddore (courtesy of Anita Jackson)

It's a perfect representation of a traditional fishing family's home in rural Nova Scotia. Jackson did an internship with the Nova Scotia Museum early in her career. The museum had just acquired the house and restored it to become the Fisherman's Life Museum. Jackson worked on the restoration of the landscape. She says today you can find the vegetable garden, old apple trees, and some crops, such as squash and rhubarb, around rocks. This garden is the epitome of subsistence gardens from the turn of the 20th century. But Jackson says it was also very familiar to her. "It has that sense of coming home," Jackson says. "It actually felt a lot like walking around our old farm."

Cole Harbour Heritage Farm:

Located in a suburban neighbourhood off Cole Harbour Road, this site is a collection of buildings from former farms that were located throughout Forest Hills when it was undergoing development in the 1970s. The buildings were brought to the current site as a way to preserve Cole Harbour's agricultural past. There are animals, plants, the historic Giles house, another home converted to a tea room, blacksmith shop, and other artefacts that showcase the community's history. Like the Fisherman's Life Museum, this is a look at a traditional rural family farm. The plant cultivars here are not specifically historic, but represent plantings that would have been present around these buildings when they were homes. The plants include flowers and vegetables that are used in the traditional recipes made in the tea room.

"It's a neat little jewel," Jackson says. "To just drop in there and experience a bit of that tradition of market gardening that supported a lot of Dartmouth and Halifax in terms of food."

Prince's Lodge:

The former country estate of Sir John Wentworth and temporary home to Prince Edward, Duke of Kent, was the site of a lavish landscape park that the Duke had created when he lived there in the late 18th century. "I think it was a very authentic example of the English landscape style imported to Canada," Jackson says. "The Duke of Kent really enjoyed doing it. It was his great passion, so he brought a lot of enthusiasm to the project. And he had tremendous resources to do what he wanted." The Duke of Kent added ornamental architectural pieces to his gardens, including Chinese temples and the music rotunda, which is the only surviving building.

There were also grottos, a duck or swan house, cascades, and a fishing pavilion. After his return to England, the Duke of Kent had his gardener, Michael Dalton, sent to the property to maintain the greenhouse and gardens on the estate.

Jackson lived on the former estate for several years and says many of the trees and plants still grow in the area. Remnant garden plants included barberry, elderberry, hawthorn, and oak. She remembers an original Lombardy poplar from the Duke's planting falling onto her deck during a storm one year.

Camp Hill Cemetery:

Designed by a military engineer, this cemetery is the final resting place for famous Nova Scotians, including Joseph Howe, Viola Desmond, and Robert Stanfield. Jackson says the cemetery was part of a larger movement of rural cemeteries that included Mount Auburn Cemetery in Boston. The trees include horse chestnut, Scot's pine, elm, maple, yew, and locust. Structural features include the entrance gates and the wrought iron fence. One unique feature was the keeper's lodge, a miniature doll house, which was near the Summer Street entrance, both designed by Edward Elliot in 1880.

Government House:

Construction started on Government House in 1800 and the Wentworth family moved in to the house in 1805. Work on the gardens started in 1804. Construction of fences and the laying of flagstones started in 1806. Wentworth's successor, Sir George Prevost, had a root cellar built in the garden. Garden tea parties were common here and still are an annual tradition. The back garden on Hollis Street was the original entrance to the house.

Public Gardens:

The oldest Victorian garden in North America, the gardens got their start when Joseph Howe suggested the idea of a Horticultural Society in 1833. Three

continued on page 16

loyalist heritage The Loyalist Heritage of Shelburne, Nova Scotia

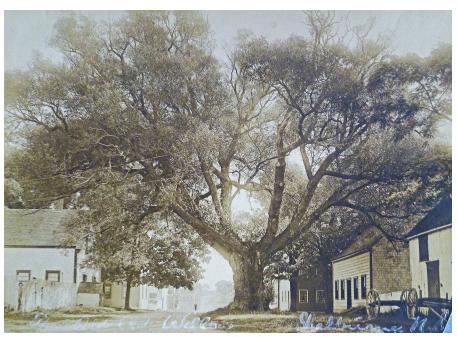
Christopher A. Sharpe

In 2018, the out-of-town Board meeting of the Heritage Trust was held in Shelburne, hosted by the Shelburne Historical Society. Many of the Board members stayed at the Cooper's Inn, dating from 1780 (see below). *The meeting provided an opportunity for* the Board to explore the outstanding built heritage of Shelburne and to learn of some of the challenges and successes of the Society, the community, and other local institutions in sustaining their remarkable heritage resources. The meeting also included the launch for the Trust's recent publication, Witnesses to a New Nation, introduced in the last issue of The Griffin. A fine photo of the Shelburne waterfront (courtesy of Chris Sharpe) graces the book's cover.

The first recorded reference to Shelburne is on the 1686 map *Terres de l'Acadie*, by the French Royal Hydrographer. It was then called Port Rasoir (or Razoir). By 1693 two French families were living at the top of the harbour, but it was primarily used as a base for a summer fishery. Whatever buildings were located here were ransacked and/ or burned by pirates and privateers in 1699, 1705 and 1708.

By 1756 the Acadians had been expelled from most of Nova Scotia and the harbour then became a summer fishing base for New England and English boats. In time the name was Anglicized to Port Rasway and, eventually, Port Roseway.

The English government was anxious to attract permanent settlement to the rural areas of Nova Scotia and offered large land grants to those who proposed colonization schemes. In the 1760s, Alexander McNutt offered to bring seven or eight thousand Irish settlers to Port Roseway. Alarmed at the prospect of such a drain on the Irish population, the Governor of Nova Scotia was ordered not to grant any lands to McNutt, but the latter's persistence led



The Old Willow Tree on George Street, looking east (date and photographer unknown), showing the Humphreys House and the Shakespear House to the right (south) of the tree (courtesy of Shelburne County Museum and Archives)

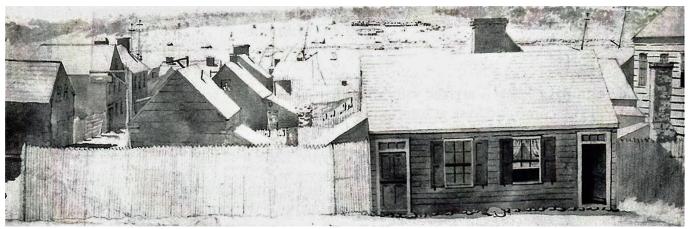
to his being granted 420,000 acres between Port Clyde and Liverpool in 1765. The Port Roseway area was surveyed for a settlement to be called Jerusalem. His grandiose scheme never materialized and by the end of the 1770s there were only 14 families, most of them McNutts, living on the eponymous island at the mouth of the harbour, and on its west side.

Preparations

Lord Cornwallis surrendered the British forces in North American on 19 October 1781 at Yorktown. Concerned about the fate of Loyalists, Sir Guy Carleton, Commander in Chief of His Majesty's Forces in America, encouraged them to settle in Nova Scotia. One of the groups that was established to take advantage of the promises of free land and six months of supplies (with the vague assurance that more might be forthcoming, if necessary) was the Port Roseway Associates, which met for the first time in a New York tavern on 16 November 1782¹.

The group corresponded with Alexander McNutt who gave glowing accounts of the quality of the land and timber in the area. Charles Morris, Surveyor-General of Nova Scotia, gave assurance that the place was the best situated in the colony for trade, fishing and farming. The site was also recommended by Gideon White, the greatgreat-grandson of a man born on the Mayflower in 1620. He was a fervent Loyalist who had been a successful ship owner and captain, carrying supplies from New England to Nova Scotia. He then had a brilliant career as an officer in the British Army during the recent war. He recommended Port Roseway because it was "a safe distance from the ocean, had a fine harbour, and potential for the fishing industry."

A grant of 400,000 acres, extending from the eastern border of Barrington to Port Mouton and along the rivers into the interior, was made to the Associates. Although no site survey had been per-



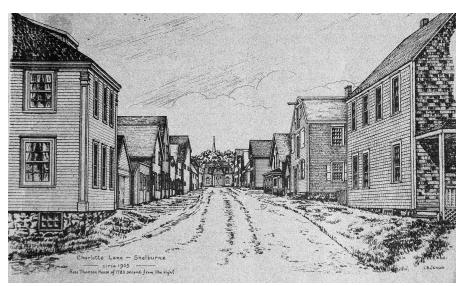
Part of the Town of Shelburne in Nova Scotia, with the Barracks opposite, in 1789, by Captain W. Booth, pencil on paper (courtesy of Library and Archives Canada, Acc. no. 1990-289-1, copyright expired)

formed, a town plan was drawn up in Halifax and approved by Governor John Parr. Not surprisingly, given the lack of local detail, it was a standard rectilinear grid of 49 blocks, each subdivided into 16 house lots, permitting a total of 784 houses. There was no allocation of space for wharves or waterside mercantile premises.

Loyalists Arrive

The Port Roseway Associates, some discharged members of former Provincial Regiments, and a group of Freed Blacks arrived in Port Roseway at 4 p.m. on Sunday, 4 May 1783 in a fleet of 13 square-rigged ships plus several sloops and schooners. This first group contained 3037 people: 577 men, 452 women, 657 children (354 of them under the age of 10), 415 servants and 936 freed slaves. One can only try to imagine their dismay when they set eyes on the 'dark rocks and dismal trees' that covered the proposed site of their new town at the northeast corner of the harbour.

Several days were spent looking for a better situation, but none was found, so the work of building a new town began on the original site. House lots were laid out on 16 May and the first lots drawn on 22 May. Between June and July another 1170 Loyalist refugees arrived, much to the displeasure of the Associates, who resented the presence of these latecomers. Uncorroborated sources suggest that Cornwallis sent another 5000 Loyalists to Shelburne in



Charlotte Lane looking east, c.1905, by L.B. Jenson, showing the Ross-Thompson House (1873, second on right) on the south side of the street, and the Peter Guyon House (1785, left) on the opposite corner lot (courtesy of Michael and Barbara Turney)

the 'bleak, cold fall' of 1783.

On 20 July, Governor Parr arrived at Port Roseway for a visit, and announced that henceforth the town would be called Shelburne, after William Petty-Fitzmaurice, 2nd Earl of Shelburne and, until very recently, the British Prime Minister (4 July 1782 – 2 April 1783). During Parr's five-day visit, three ships brought another 90 families to the town. His written description of the 10-weekold town beggars belief. To Carleton he wrote "From every appearance I have not a doubt but that it will in a short time become the most flourishing town for trade of any in this part of the world, and the country will ... for agriculture."

Contemporary accounts report that on the third day of his visit he dined with the leading Loyalists at the home of James Robertson, after which he attended a public supper and ball "conducted with the greatest Festivity and Decorum" and which did not break up until 5 am.

Rise and Decline of Shelburne

In December 1783, Parr reported that there were 12,000 people in Shelburne. In August 1784, Gideon White told a friend there were about 15,000 residents. Either estimate would make it the fourth largest town in North America, surpassed only by New York, Philadelphia, and Boston. Unfortunately, such exaggerated estimates of the population are still being repeated. It was, momentarily, a town of significant size. However, a 1784 survey by Col. Robert Morse, Chief of the Royal Engineers in North America, counted 7922 people in Shelburne. This included 4787 Loyalists, 1614 disbanded soldiers, and 1521 freed slaves living in Birchtown, located on an unnavigable arm of the harbour, six miles (10 km) west of Shelburne. The settlement was named in honour of General Samuel Birch, commandant of New York City, who had granted asylum to fleeing slaves.

Parr's report boasted that 800 houses were finished, 600 more were "in great forwardness" and that several hundred were "more lately begun." The Royal Engineers reported that between 23 May 1783 and 1 February 1784, 1127 buildings were constructed: 80 temporary winter structures, 231 framed houses, and the remainder log houses. Benjamin Marston, the deputy surveyor, reported that between February and September 1784 between 250 and 300 more houses and stores were built. Gideon White's letter of August 1784 reported that about 2000 of 2700 houses were framed.

The only contemporary sources we have of what Shelburne might have looked like are two pictures drawn by Captain William Booth, Royal Engineers, in 1789. One of them looks downslope toward the harbour, showing a dense cluster of houses and someone looking out an upstairs window. Another (not included here) shows the harbour looking roughly south, with the town on the left and one of the oldest surviving houses in Shelburne (now provincially registered as the Ryer-Davis House) just to the right of centre.

The decline of Shelburne was swift and brutal. The optimistic expectations of the Loyalists had been fostered in an urban environment far removed in every way from that which was encountered on arrival. Severe disappointment was

inevitable. The failure of the Associates to properly assess the area's potential to support a town, and to recognize their lack of appropriate skills and abilities, proved to be disastrous. The list of problems and grievances included long delays in making the grants for farm lots; arguments between the different groups among the Loyalists about who was eligible for land grants; the slow and painful development of trade and commerce; the fact that the soil was stony and peppered with boulders; the heavy ice which ground against and damaged the ships all winter; and the conflicts not only with earlier settlers but among the Loyalists themselves. The Port Roseway Associates had determined that town affairs must be settled at public meetings. Unanimity of purpose and strong leadership were vital, but neither existed. On 8 May 1783, only four days after the flotilla of Loyalists arrived at Port Roseway, Benjamin Marston, commenting in his diary about the idea that a public opinion poll should be held to determine the site of the settlement, wrote: "this cursed republican, townmeeting spirit has been the ruin of us already, and unless checked by some stricter form of government will oversee the prospects which now present itself of retrieving our affairs."

This is one of the most remarkable concentrations of late 18th century built heritage in Canada

Two hundred families left Shelburne in 1784, frustrated by the delay in receiving land grants. By 1789 about two-thirds of the town was uninhabited and there were more than 400 deserted houses. Then, in 1791, assisted by the British government, 544 of the Black inhabitants of Birchtown sailed to Freetown, Sierra Leone. The heyday of Loyalist Shelburne was over as quickly as it had begun, but enough relics of those frantic early days survive to give us a taste of the optimism with which the town was founded.

Walking Tour - a Rich Heritage

A tour during the HTNS Board Meeting in June explored the historic waterfront and adjacent blocks in the centre of Shelburne, including at least 21 buildings constructed in the Loyalist heyday of the town between 1780 and 1785. This is one of the most remarkable concentrations of late 18th century built heritage in Canada. Unfortunately there is very little formal protection to ensure the survival of these historic structures. More details on many of these buildings were provided in the handout that forms the basis for this article and was distributed to tour participants. Here we have space to include just a few examples.

17 George Street – Shakespear(e) House (1784)

Listed in the Canadian Register of Historic Properties

This house was built by Stephen Shakespear, a member of the Port Roseway Associates, who was typically given a one acre town lot and a 500 acre plot on the Roseway River. Like many of the original houses, this one was built of verticallyset logs framed together at the ends and covered with beaded ship-lap clapboard. It was originally a plain rectangle with a gabled roof and a symmetrical, five-bay front. It was set flush with the ground on a granite foundation. The roofline was later altered and a rear extension added, giving it a salt-box appearance. The original stone chimney remains.

112 Water – Humphreys House (1785)

This lot was originally granted to Charles Mason, one of the original surveyors employed to lay out the town. He lived on a farm in Birchtown, but sold that, and this property, in 1875. It was bought by James Humphreys, publisher of *The Nova Scotia Packet and General Advertiser*, one of the early town's three newspapers. He was also a vestryman of Christ Church (Anglican) and represented Shelburne in the Nova Scotia House of Assembly between 1785 and 1790. He returned to Philadelphia in 1797. The house was bought in a Sheriff's auction by Jacob van Buskirk in 1802. He was a



The Ross-Thompson House (1783), 9 Charlotte Lane, in 2017 (courtesy of the author)

merchant, justice of the peace, customs officer, Lieutenant-Colonel Commander of the 22nd (Shelburne) Battalion of Militia, and member of the House of Assembly from 1808 to 1818. This house has all the characteristics of a classic Georgian building: large stone chimneys, symmetrically-placed six-over-six windows, narrow cornerboards, no window trim and shallow eave overhang.

9 Charlotte Lane – Ross-Thompson House (1785)

Listed in the Canadian Register of Historic Properties

The only surviving 18th century store in Nova Scotia was built between 1785 and 1786 by brothers George and Robert Ross, EULs. They operated an international trading business from the house, ran a small store for local residents under the gambrel roof on the north end, and lived in the residential rear (south) section of the building, the part with the gable roof. In 1815 the store was sold to the brothers' former clerk Robert Thomson whose son Robert Ross Thomson operated the store and the post office there, until his death in 1880. He was Lieutenant-Colonel of the local militia in the late 1860s, during the Fenian raids, and the room above the store was used at that time as the militia room. In the

hope of preserving the property it was purchased in 1931 by a Professor K.G.T. Webster and turned over to the Province of Nova Scotia in 1957. It would seem likely that this is the Webster who was a Professor of English at Yale University, from which he received his PhD in 1902. The Shelburne Historical Society opened a museum in the building in 1978.

10 Charlotte Lane – Peter Guyon House (1785)

Listed in the Canadian Register of Historic Properties

The house was built circa 1785 by Peter Guyon, a Huguenot member of the Port Roseway Associates. Circa 1895, the house was bought by Arthur F. and Elmore Bower, who operated a grocery store on the north side, facing Dock Street. The house is a two-and-a-half storey Georgian style building with a hipped gable roof with central chimney on the south exposure and a gable roof on the north. There is very little overhang, but there are cornerboards with moulding at the top. The façade is asymmetrical with an enclosed porch supported by very small posts. The foundation is of stone, not cut granite like others in the area, with a high basement to offset the grade of Charlotte Lane.

36 Dock Street – George Gracie House (1780)

Listed in the Canadian Register of Historic Properties

Although George Gracie was blind, he was a successful merchant, ship owner and Member of the Legislative Assembly of Nova Scotia. He emigrated from Scotland to Boston prior to the American Revolution and then came to Shelburne as a UEL. He was one of the few Loyalist merchants and ship-owners to survive the severe economic decline and depopulation of Shelburne that occurred from the late 1780s onwards. Typically, the house was both a residence and store.

The house is distinctive as a Georgian building with early Italianate influence. Georgian features include a steeply pitched hip roof; three bay symmetrical façade; two-quarter inset chimneys; moulded trim and a four-light transom surrounding front door; sixover-six and four-over-four paned windows, and front shutters; two-storey bay window with moulded trim framing the upstairs of the bay. Italianate features include deep eave overhang and support brackets around the house including the decorative support brackets under the overhang of the two-storey bay window; bracketed hoods over windows; widow's walk².

The house and adjoining carriage house have undergone renovations and presently both are operated as The Cooper's Inn.

Christopher Sharpe is Emeritus Professor of Geography at Memorial University of Newfoundland, a member of the Board of Heritage Trust of Nova Scotia, and a resident of Shelburne

Endnotes:

¹The following history is derived in part from the detailed account in Marion Robertson's book *King's Bounty: a History of Early Shelburne, Nova Scotia;* Halifax: Nova Scotia Museum (1983). ²Canadian Register of Historic Places (https://www.historicplaces.ca/en/rep-reg/place-lieu. aspx?id=2446&pid=0)

LECTURE The John Tremain House, 5500 Inglis Street, Halifax

Heather Watts

This is a summary of the talk presented by the author at the Trust's Annual General Meeting, 21 June 2018, in the Universalist Unitarian Church, the building that was the subject of her lecture.

The talk opened with a brief audio clip read by a familiar voice that many recognized. Former CBC announcer Don Tremaine (later generations spelled the name with an 'e') quoted from a petition to the House of Assembly by his ancestor John Tremain in 1826:

My father was a native of Great Britain, and commenced business as a Rope Maker in the United States of America ... When war broke out between Great Britain and the Colonies, being a Loyalist, he was compelled in consequence of it to abandon his property and trade in that country which he then carried on to a considerable extent, whereby he was made subject to great loss and came to this Province in the year 1785. Soon after his arrival he purchased a tract of land in the neighbourhood of the town of Halifax near the Freshwater River and there erected a Rope Walk and expended large sums of money in the purchase and importation of machinery and in the erection of buildings required for carrying on the business of a Rope Maker in all its branches.

The 50-acre block of land that Jonathan Tremain bought was on the south side of what is now Inglis Street and stretched from South Bland Street, where the long narrow walk for twisting the rope was located, almost to Tower Road. Later he divided the larger western portion, known as the Rope Walk Field, into 11 long, narrow lots, one for each of his 11 children.

Two of Jonathan's children, John and young Jonathan, worked with him in the rope works until 1818, when John Tre-



This painting by Lt-Col [later General] Alexander Cavalié Mercer, Royal Artillery, shows the Tremain House on 24 August 1841, when it was being rented out by Enos Collins; inscribed "Road [now Inglis Street] from Col. Bazalgette's down to Freshwater (or Kissing) Bridge/ House Capt. G. Dalton R. Eng. lived in," water colour over pencil on wove paper (credit: Library and Archives Canada, acc. no. 989-397-54, copyright expired)

main became the sole owner. Pleased with his success, John soon decided to build a house on the adjacent large lot. He mortgaged the rope walk to finance it. John's brother Richard Tremain described the activity as the property was developed:

He erected a dwelling house and outhouses at an expense I should suppose of £1,000 to £1,200 and cleared and cultivated part of the land at the south end of the lot and also improved that part under cultivation, made a garden, planted fruit trees, etc. at a considerable expense

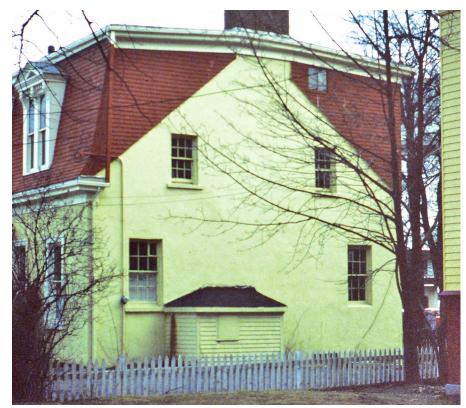
The house was probably completed by 1823 and the family was living in the house in 1825, when John's daughter Catherine was married to Charles Twining, the Tremains' solicitor.

The one-and-a-half storey cottage with a pitched roof was built of undressed slate and ironstone set in mortar and had solid two-foot thick walls. The cellar kitchen had south-facing exterior doors and windows, indicating a lower ground level at the time. The ground floor had a centre hall plan with double parlour to the right and two rooms to the left of the front door. A narrow hall ran behind the staircase giving access to the cellar. Three fireplaces warmed the rooms. Upstairs were four bedrooms, the largest with a fireplace, while a trap door led to two low rooms under the eaves. The interior window recesses throughout were panelled and fitted with folding wooden shutters. Some of the early woodwork survives, particularly in the upstairs and cellar.

Just as things seemed to be going well for the Tremains, an Order in Council was passed in London making Halifax a free port. There was no protection for local businessmen, who now must compete with cheaper American imports. But John Tremain was an optimist and his credit was good. One of his last extravagances may have been the cast iron fence that once stood along the street front and bore the date 1832.



The house circa 1930, showing the three dormers in the mansard roof and the iron fence dated 1832 (courtesy Frieda Chipman)



Gable-end view of the house in 1979, showing original roof line (as seen in the Mercer painting) with Victorian mansard superimposed (courtesy of the author)

He continued to mortgage property and borrow money. Unfortunately, one of the people to whom he owed increasing amounts was Enos Collins, the wily and experienced merchant banker. Collins finally cornered Tremain in the cholera year of 1834 and forced him into bankruptcy, becoming the owner not only of the rope walk but also of the Tremain family home. He installed tenants in the house and after clearing up most of the court cases against Tremain to his own advantage, set about looking for a new owner. At about the same time Lieutenant-Colonel Alexander Cavalié Mercer set up his easel beside the road from Freshwater Bridge to paint a watercolour which shows the Tremain/Collins house before any of the subsequent changes.

In 1843 John Bayley Bland, an Englishman engaged in the shipping business in Newfoundland and Nova Scotia, acquired the home. It was he, with his second wife Mary Maude Porter of Halifax, who was to begin a series of major changes to the house they called 'Dorset Cottage'. Carpenters were engaged to add a ballroom on the east end and a library with wine cellar beneath on the west. Before the plaster was applied to the walls the carpenters signed their names and below them the date, 1849. The land was also put to good use and by the 1860s the Blands owned one of the finest properties in the south suburbs.

When John Bland died in 1870 the southern portion of the property known as 'Bland's Fields' was divided into 23 lots. The northern half, with the house, was sold to Joseph Seeton, for a time an Alderman of the City of Halifax. He lived here for 14 years, but later he and his wife moved into the Halifax Hotel, selling off more parcels of land and renting the house. Tenants included James Scott of the Army and Navy Depot and, briefly, the American Consul.

Upon Seeton's death the now much reduced property was sold to Harry L. Chipman and four generations of the Chipman family continued to live there. They undertook the second major expansion in 1895, making a double house by building around the Blands' ballroom and over the pitch to make a Halifax mansard roof right across the new construction, giving it the look it still has today. In 1952, a young Chipman daughter was accidentally knocked off her bicycle by a customer of the new tavern that had opened at the foot of Inglis Street. Her parents decided it was time to move from a neighbourhood which seemed to be declining. The home was purchased for use as a rooming house and allowed to deteriorate.



Panelled window recess in upstairs bedroom of the original cottage; radiator added later (courtesy of the author)

In 1960, the small Universalist congregation, which had been in Halifax since 1837 and once owned the Church of the Redeemer on Brunswick Street, was beginning to make a recovery and was looking for larger space. When two of their board members, who were also working with the Halifax Nursery School to find new space, saw the dilapidated double house on Inglis Street, they knew they had found the answer for both groups. The Universalists bought the property, rescued the panelled shutters from the basement, swept and cleaned eight years of debris and dirt from the rooms, and gradually fell under its spell. Small changes were made to allow for institutional use by both groups and a new chapter in the history of the house began. By1973, the Universalist Unitarians, as they had now become through amalgamation, required more

seating space than the double parlour could provide. Despite some protest, the interior downstairs walls of the original house were removed and the central staircase was relocated.

In 1984 the building received provincial heritage designation, the primary reason being the clear evidence of a double house that had evolved from Georgian cottage beginnings according to the needs and circumstances of its owners. Don Tremaine, as well as Seeton and Chipman descendants, came to the party when the plaque was unveiled.

The congregation has considered several studies and proposals for an expansion of the building, but none has yet been brought to fruition. Perhaps one day the last remnant of John Tremain's garden will be sacrificed for a

continued on page 19

continued from page 9 Anita Jackson

years later, the Nova Scotia Horticultural Society formed a committee to start a public garden. James Irons did the original layout in 1851. Richard Power was the designer who, in 1874, brought the two former properties together to create the garden as it is laid out today. He trained at the Duke of Devonshire's estate in Lismore, Ireland. The gardens are lush with rhododendrons, carpet beds, floating beds, tropical beds, rose beds, and many others. A number of restorations have taken place over the years, including the refurbishment of the fountains. Substantial reconstruction work was done on the pond and stream after damage resulting from Hurricane Juan. There are zoning regulations in place to restrict overshadowing by highrise buildings in the area.

Jackson's favourite gardens are the Fisherman's Life and Prince's Lodge. She says these gardens are another way to explore our past. "It's an experience of going back in time," Jackson says. "And so, it's very experiential. You're going into something you can see, smell, and touch. There's rain and wind. It's really an experience of going through a piece of the past." Jackson says there was an increase of one third of the flora now in the province because of the plants brought in by settlers. "The impact of humans on the environment has been quite significant, in terms of the plant material that was brought in and was able to naturalize."

More about Jackson's work can be found at https://www.anitajacksonde-sign.com/.

Suzanne Rent is on the Board of Heritage Trust of Nova Scotia and manages the Facebook group Save Prince's Lodge Rotunda

Ground Penetrating Radar in Nova Scotia Archaeology

Jonathan Fowler and Sara Beanlands

Most of Superman's powers would be wasted on archaeologists. Being more powerful than a locomotive would increase productivity, but things then start to get complicated.

Leap tall buildings in a single bound? Hollywood has converted this ability to flight, so it will probably require a Special Flight Operations Certificate from Transport Canada, especially if it is being done for business or research¹. Stick to terra firma, then, but someone is bound to get dirt in the eye with the crew working faster than speeding bullets. Speaking of eyes, X-ray vision - long considered a very suspect superpower - wouldn't actually permit you to see through the ground. With practice, you might learn to characterize the soil's elemental composition, but ionizing radiation is dangerous, and zapping the earth requires X-ray fluorescence certification from Natural Resources Canada².

If you really want a good look at what's happening underground, stow the superpowers and turn instead to geophysical survey equipment. A variety of instruments adopted from the environmental and mining industries have useful applications in archaeology. In terms of depth of penetration and visual acuity, Ground Penetrating Radar (GPR) is one of the best methods currently available. Boreas Heritage Consulting Inc. and Northeast Archaeological Research Inc. recently joined forces to bring the power of GPR to archaeology in Nova Scotia, and we are currently examining how this technology sees our region's archaeological heritage.

GPR is not a new technology. Radio waves were theorized and artificially created in the 19th century before being harnessed in the early 20th century as the workhorses of wireless communication. In 1929 scientists began propagating radio waves into glaciers to measure



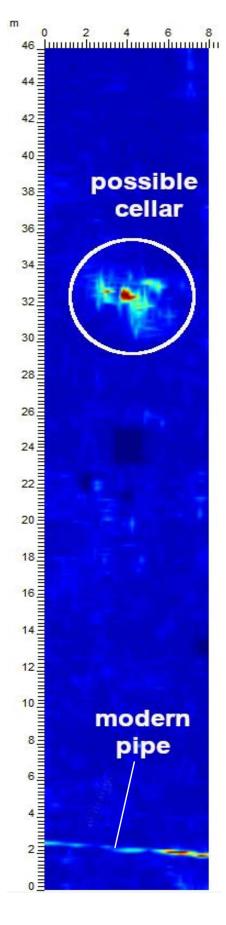
Mowing the lawn? No, a GPR survey in progress at Grand-Pré. Elements of the destroyed pre-Deportation community are buried in this area but are no longer visible at the surface (photo courtesy of Pamela MacDonald).

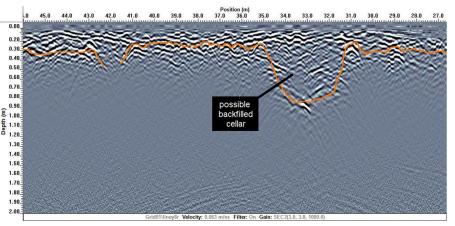
ice thickness (Canada's famed ice roads are still regularly inspected by GPR), and by the 1930s the military applications were becoming apparent³. The US military coined the term RAdio Detection And Ranging (RADAR) in 1940 and soon afterward the technology proved instrumental in saving Britain from the Luftwaffe⁴.

Today's GPR operates according to the same principles as its antecedent systems, though it directs its energies earthward instead of skyward. An antenna propagates pulses of electromagnetic radiation (radio waves) into the ground, and an antenna picks up the reflections. All of this happens fairly quickly. A radio wave travels about 0.3 m per nanosecond (ns), one billionth of a second, in the open air, but slows to about 0.16 m/ns in dry soil and 0.12 m/ns in rock⁵. Differing velocity values such as these are the key to understanding how GPR detects buried features. When the propagating waves encounter discontinuities (changes in soil type, soil voids or cavities, buried structures), they respond with electromagnetic jujitsu by reflecting, diffracting, deflecting, halting, transmitting, etc³. Identifying their signature moves is the key to interpreting GPR data.

How far down can a GPR see into the soil? It depends. The nature of the material is one major factor, for, as we have already seen, radar waves have different velocities in different media. Dry sand is a favourable medium, whereas wet clay is not. Saline soils, as one might encounter in a coastal marsh environment, are also hostile to radar.

The other major factor is the fre-





GPR profile data showing a rubble-filled cavity in the earth (the x-axis represents the distance in metres along a single survey transect, while the y-axis represents depth of the reflections in metres); this pattern of radar wave reflections may represent a backfilled cellar from a colonial-era house: there is no sign of it at all at the surface (courtesy of the authors)

quency of the wave: 1 cycle per second equals 1 Hertz (Hz). Our instrument nominally transmits waves at 500 MHz, or 500 million cycles per second, and under favourable soil conditions it can see approximately 2 m down. Lower frequency radars (e.g. 100 MHz) can see deeper, but only by sacrificing sharpness of vision, while higher frequency radars (e.g. 1000 MHz) are sharply focused but myopic⁶. Civil engineers often use them to inspect rebar in bridge decks and buildings. For our purposes, the 500 MHz GPR offers a good balance in that it can see relatively small targets at a reasonable distance.

Our instrument is mounted in a cart and so one conducts surveys much like one mows a lawn, though more obsessively. First, a grid is set up over the survey area. The instrument is then pushed back and forth across the site in a series of parallel transects, first in one orientation, then, when this grid is complete, it is surveyed again in a perpendicular orientation. The survey area is thus traversed with a tight mesh of transects. The distance between survey lines depends on the quality of

Time slice map of the suspected cellar seen in the profile image; this plan view offers a horizontal map of buried features at a depth of approximately 90 cm beneath the surface; survey grid scale in metres (courtesy of the authors) the data required. More lines yield more highly resolved data and more detailed mapping, but this also takes more time to complete than surveys containing fewer lines. In general, we prefer 50 cm transect intervals, but difficult targets, such as graves, require even tighter intervals.

Sophisticated software is used to process the resulting data. We can digitally correct survey geometry and employ filters to enhance or tamp down various aspects of the data. The results were traditionally viewed as a series of profiles, in which wave reflections are displayed along individual survey transects. Advances in computing power and software now allow us to rapidly generate three dimensional maps of the survey area, resulting in a "cube" of data (length, width, and depth). We can then digitally slice the cube like an upended loaf of bread to produce maps representing various depths. These maps are often referred to as time slices or depth slices.

One of the main advantages of GPR – and one shared with other geophysical methods – is its ability to detect and map buried features without touching them. Archaeological excavation, for all its power and wonder, is a transformative act. Our sites are never quite the same after our trowels have cut through them. Not so with geophysics, which

AWARDS

many practitioners regard as a more sustainable form of archaeological practice.

There is a further benefit, and this one is particular to GPR. Because radio wave velocities are sensitive to even subtle changes in soil composition and compaction, this is one of the best methods available for identifying unmarked graves. This explains why GPR is commonly used in forensic investigations around the world.

In the months ahead, we will continue to test this new technology at archaeological sites in and around Nova Scotia. We have already used it with great effect at the Halifax Citadel and Grand-Pré national historic sites, and at early colonial sites in Kings and Hants counties. To learn more about GPR, or to see if this technology may assist you in one of your projects, please contact the authors at the co-ordinates below.

Jonathan Fowler is an Associate Professor (Archaeology) in the Department of Anthropology at Saint Mary's University (jonathan.fowler@smu.ca) and Principal of Northeast Archaeological Research Inc. Sara Beanlands is Principal and Senior Archaeologist with Boreas Heritage Consulting Inc (sbeanlands@boreasheritage.ca).

Endnotes:

¹This, at any rate, is the requirement for drone operators. https://www.tc.gc.ca/eng/civilaviation/opssvs/applying-special-flight-operationscertificate.html – perhaps Superman could just volunteer?

²Archaeologists are increasingly using X-ray technology to study the elemental compositions of soils and artifacts. The certification: http://www.nrcan.gc.ca/mining-materials/non-destructive-testing/19572

 ³Conyers, L.B. 2012. Interpreting Ground-Penetrating Radar for Archaeology. Walnut Creek: Routledge.
⁴Buderi, R. 1996. The Invention that Changed the World. New York: Simon and Schuster.
⁵Sensors and Software. 2016. Utility Locating with GPR Course. Mississauga: Sensors and Software, 42.
⁶Conyers, L.B. 2006. Ground-penetrating radar. In Johnson, J.K. (ed.) Remote Sensing in Archaeology: An Explicitly North American Perspective. Tuscaloosa: University of Alabama Press, 144-145.
Gaffney, C. and Gater, J.A. 2006. Revealing the Buried Past: Geophysics for Archaeologists. Stroud, Gloucestershire: Tempus Publishing, 48.





Garry Shutlak

Over many years, members of the Trust involved in one way or another in research and the use of archival records have come to appreciate the essential role played by two long-term and distinguished archivists at the Nova Scotia Archives in Halifax: Garry Shutlak and Philip Hartling.

Garry Shutlak is recognized as being a great resource for the serious researcher as well as the less experienced. For decades, he has been a regular contributor to *The Griffin* and is a continuing source of information about maps, architects, and any and all older buildings in the Halifax area.



Philip Hartling

Philip Hartling recently retired after more than four decades' service in the Archives. A researcher and author, he co-wrote one of the Trust's books, *Lakes, Salt Marshes and the Narrow Green Strip.* Philip was instrumental in the development of NSA's digital built heritage resource. He has been a faithful and long-time member of Heritage Trust and an active supporter of The National Trust for Canada.

For these remarkable contributions, Philip Hartling and Garry Shutlak were awarded Honorary Life Memberships in the Trust at the Annual General Meeting in June.

continued from page 16 The John Tremain House

new extension, while the main building that has steadily evolved over nearly 200 years will be preserved. Its owners may not often have been leaders but they were worthy and respected citizens of Halifax, all of whom contributed to their community. The Universalist Unitarian Church, in a different way, is continuing that tradition. Heather Watts is an historian and a life member of HTNS, now living in Wolfville. Her previous publications include Halifax's Northwest Arm: an Illustrated History, co-authored with Michèle Raymond and published by Formac in 2003.

Programs Sponsored by Other Societies

Colchester Historeum

29 Young Street, Truro, NS

The Accidental Farmer: Who was the Real Hero of *The Story of Ross Farm*? Joan Watson and Murray Creed, September 27, 7:30 pm.

Concert by Clary Croft: October 4, 7:30 pm, tickets \$20.

The Impact of the Spanish Influenza on Nova Scotia, 1918-1920: Allan Marble. October 25, 7:30 pm. *Waterfalls of Nova Scotia: A Guide:* book launch by Benoit Lalonde, November 22, 7:30 pm. More info: www.colchesterhistoreum.ca or Facebook

Fortress of Louisbourg

58 Wolfe Street, Louisbourg, NS

Return to the Past, Louisbourg 1749: a Historical Lantern Tour: Tuesdays at 7 pm; September 18 to October 23, \$30 plus tax (purchase tickets at http://returntothepast.bpt.me). More info: http://www.fortressoflouisbourg.ca; 902-733-3548

Hammonds Plains Historical Society Hammonds Plains Road, HRM

A Look at Past Connections with Lumber Mills: presentation following general meeting. September 24, 7 pm, at Cornerstone Wesleyan Church, 1215 Hammonds Plains Road.

Hammonds Plains of the 1950's – a Period of Transformation and Transition: presentation following general meeting, November 26, 7 pm, at Hammonds Plains Community Centre, 2041 Hammonds Plains Road.

More info: http://www.hammondsplainshistorical-society.ca or Facebook

Kings County Museum

37 Cornwallis Street, Kentville, NS Members Antique Show and Tell and meeting: September 25, 7:30 pm.

Concert with Folklorist Clary Croft: September 28, 7 pm, \$20.

The Northwest Passage in Story and Song: David Newland, September 29, 2:00-3:30 pm, \$20. Soldiers Social: October 26, 8 to 11 pm, \$30.

Adaptation to the Natural Environment in Prehistoric Atlantic Canada: David MacInnes, October 30, 7:30 pm.

A talk with Union Street Café and Kitchen Party cookbook author Jenny Osburn, November 27, 7:30 pm

Kings Historical Society's Annual Yuletide Tea: December 1.

More info: www.kingscountymuseum.ca; 902-678-6237.

Memory Lane Heritage Village

5435 Clam Harbour Road, Lake Charlotte, NS Musique Royale Concert & Heritage Dinner: September 15, 5 pm, tickets \$55; email info@ heritagevillage.ca or purchase on website. Nova Scotia Forest Festival: October 13, 11 am to 4 pm, free admission, donations welcome. More info: www.heritagevillage.ca; 1-877-287-0697

Nova Scotia Archaeology Society

Lectures held in Burke Theatre B, Saint Mary's University, 923 Robie Street, Halifax Coastal Erosion and Cemetery Excavation: How a centuries old dilemma is providing new opportunities at the Fortress of Louisbourg, NS: Amy Scott; September 25, 7:30 pm. Lecture TBA: October 23, 7:30 pm.

The Threads That Bind Us: Acadian Women and Local Vernacular in Dress (a material cultural analysis of dress-related artifacts from Beaubassin, Belleisle, Melanson, and Louisbourg): Hilary Doda, November 27, 7:30 pm.

More info: www.nsarchaeology.com or Facebook

Ottawa House Museum

1155 Whitehall Road, Parrsboro, NS Christmas Tea and Bake Sale: September 23, 2-4 pm.

Museum is open daily from 10 am to 6 pm until September 30

More info: www.ottawahousemuseum.ca or Facebook.

Ross Farm Museum

4568 Highway 12, New Ross, NS Christmas in the Country: part of New Ross Christmas Festival, December 8 and 9, admission fee. More info: https://rossfarm.novascotia.ca

Royal Nova Scotia Historical Society

Lectures held at Public Archives, 6016 University Avenue, Halifax, 7:30 pm Wednesday evenings 'Halifax was Plunged into Gloom', the Impact of the Spanish Influenza Pandemic on Nova Scotia, 1918–1920: Allan Marble, September 19. Coastal Stories: a History of the Eastern Shore Islands: Sara Spike, October 17. Encountering the Indigenous Other in Historic Nova Scotia, 1749–1900: Richard Field, November

a Scolla, 1749–1900: Richard Field

Charlie's War: the Life and Death of a South African Soldier in the No. 2 Construction Company, 1917–1918: Kirrily Freeman, December 12. More info: www.rnshs.ca or Facebook.

Shand House Museum

21

389 Avon Street, Windsor, NS Shand House Museum Open House: September 23, 1 to 5 pm, admission by donation. More info: https://shandhouse.novascotia.ca

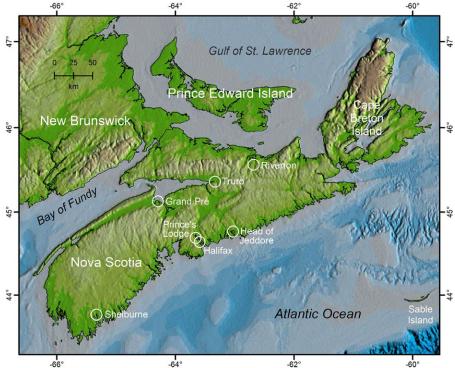
Sherbrooke Village

42 Main Street, Sherbrooke, NS Old Fashioned Christmas: various events, November 23-25 and December 1.

Le Village historique acadien de la Nouvelle-Écosse

91 Old Church Road, Lower West Pubnico, NS Olde Fashioned Tea: Wednesdays in September, 1:30-3:00 pm, \$3 per person. More info: https://levillage.novascotia.ca

Locations of subject matter in this issue



Base map data courtesy of Geological Survey of Canada, Natural Resources Canada