

Beyond the preservation of perhaps the most significant Third-System fort in the country, CDSG's interest includes the five Endicott-Era batteries. Three of them (DeRussey, Church, and Anderson-Ruggles) stand separated from each other along the North Beach waterfront, on property to be managed by NPS. They are fenced and not open to the public. The remaining two batteries (Parrott and Irwin) adjoin the original Fort, outside the moat facing the harbor entrance channel, and are likely under FMA control. None of the batteries has its original ordnance, yet both mount smaller relocated period weapons which are the only modern weapons remaining at the fort. The interior areas of Battery Parrott were somewhat built-out and occupied by the army, and offer a good opportunity to house some interpretation of what modern coast defenses were.



Battery Parrot, Fort Monroe (Terry McGovern)

FMA is faced with two near-term challenges: 1) devising a plan meets the desires of a wide range of interested parties, and 2) determining what to do the various facilities at the site (including both family housing and most of the buildings inside the old fort). Until the closing, most of the 1.5 million sq. ft. of floor area had been occupied and was in reasonable condition. The exceptions were some town-house-type dependent housing that had been storm damaged, and hence are being demolished.

FMA's guiding tenets are threefold: preserve the past, Tell the story, and Achieve financial stability. The presence of NPS plus the support of groups like ours among the stakeholders should assist FMA with meeting the first two tenets. The third tenet is the difficult one.

Many of the local residential and community groups are looking to find both open spaces available to the public (which are apparently in short supply around Hampton Roads), as well as areas dedicated for wildlife habitat. NPS has contributed to the open land and wildlife refuge desire by controlling the North Beach area. However, there is pressure by several parties to "connect" and extend the open space to the other NPS tract, namely the Monument, which would require some concessions by FMA.

FMA currently operates under an annual budget of \$13.2M (excluding any funding for needed capital improvements), \$6.8M of which comes directly from Richmond. When FMA was organized, the state did so under the assumption that FMA had the ability to be self-sustaining over the near term, thus backfilling the state subsidies.

Slightly over \$2M of the current income is from leasing existing facilities, overwhelmingly family housing units in the "historic village." About 110 of the existing 175 family units are currently being rented, both inside and outside the old fort. Until the land is officially turned over to FMA, neither the housing units nor the commercially-adaptable buildings can be resold to private parties, which is the logical solution to making FMA self-sustaining, as well as providing funding for capital improvements.

Unlike the free-fall and problems of some other BRAC posts known to CDSG, the FMA is well positioned to transfer the property into the non-military private sector, to open an historic site to the general public, and to do so using the value of both the location and appeal of the property under its control.

Another area of interest for CDSG members is the Casemate Museum. While the Army will relinquish the facility and withdraw its current staff, operation will be transferred to FMA, and all of the artifacts on display will remain on permanent loan.

Both the FMA master plan and the official transfer of the property are expected to be completed within 6 to 9 months. If any CDSG members would like to be part of the "rebirth" of Ft. Monroe, they might want to explore the option of leasing one of the residential quarters on the ex-post.

\* \* \* \* \*

## The CDSG Annual Meeting 2012

May 15 - 20, 2012

St. Babs XXX, the 30th meeting

The Great Lakes Forts

Mark Berhow and John Weaver

The 2012 meeting has completed the CDSG's official visitation of the complete full circuit of American continental seacoast defense sites. The group has now been to all the fortified harbors that were part of all the various American fortification programs in the contiguous 48 states, the last being the defenses along the Great Lakes. These defenses, built and rebuilt from colonial times through the middle of the 19th century, saw their most intense action during the War of 1812.

The French established posts along the Great Lakes water route ranging from the entrance to the St. Lawrence River, through Quebec, Montreal, Niagara, Detroit, and on into the Mississippi River tributaries. After the expulsion of the French, the British maintained a series of posts along the Great Lakes, which were (mostly) pulled back to the Canadian side of the lakes after the end of the Revolutionary War in the 1780s. Expansion of American settlement and political control into the Northwest Territories brought on a new series of wars with the native tribes in what would become Ohio, Indiana, Illinois, and Michigan, and triggered a slow expansion of the American Army as the government struggled for control of the area.

These Northwest Territory conflicts contributed in part to the American declaration of war on Great Britain in June of 1812. Most of the forts that remained in the area around Lake Ontario and Lake Erie were involved in the numerous campaigns of 1812 to 1814 as the US and Great Britain struggled to what was essentially a draw.

As a result of that conflict, the Third System of American seacoast fortifications were planned and built, which included a number of significant forts along the Great Lakes such as Fort Wayne, Fort Niagara, Fort Ontario, and the fort at Rouse's Point, built to control the Lake Champlain-Richelieu River waterway. Forts Ontario, Niagara, and Wayne were maintained by the US army as military posts through World War II and beyond. An impressive number of fortifications were also built on the British/Canadian side of the border from the same era. The Canadian government maintained several around Kingston well into the 20th century.

This trip was organized by John Weaver and Glen Williford, along with the help of Carol Sikler. John and his crew did a wonderful job of scouting and planning the route, making the contacts to get the group in the door and making accommodation arrangements. This trip was a bit different than our usual trips, in that the locations we were going to visit were spread from the northeast end of Lake Ontario to the western end of Lake Erie, resulting in stays at three different hotels in Kingston, Ontario; Niagara-on-the-Lake, Ontario; and Detroit, Michigan.

The meeting coincided with the preparations for the 200th anniversary of the War of 1812 and we were able to see some of the restoration and enhanced interpretation efforts stemming from that anniversary celebration. This also afforded me the opportunity to reacquire myself with the history of that conflict, by browsing through a number of well-stocked gift shops along our route. I was especially impressed with J.C.A. Stagg's concise history of the war (*The War of 1812: Conflict for a Continent*, Cambridge University Press [www.cambridge.org](http://www.cambridge.org), ISBN 978-0-521-72686-3, 2012) and an updated version of Donald Hickey's history (*The War of 1812: A Forgotten Conflict*, Bicentennial Edition, University of Illinois Press, [www.press.illinois.edu](http://www.press.illinois.edu), ISBN 978-0-252-07837-8, 2012). The meeting went well, the stops were magnificent, and the weather, for the most part, was superb.

We gathered our smaller-than-usual group at the Peachtree Inn in Kingston, Ontario on Tuesday May 15. After checking in, we had a nice meet-and-greet, and John Weaver gave an overview of what we were going to be visiting over the next few days. Charlie Bogart provided a short presentation on the War of 1812 events in the area.

### Wednesday May 16: Kingston Defenses

We started off the day by gathering at Fort Henry, a large masonry fort with an impressive ravelin on a hill overlooking Kingston Harbour, built to protect the Royal Navy Dockyard. The fort was (and still is) used by the Royal Military Training Academy of Canada, and it is the home of the Fort Henry Guard, uniformed military interpreters who staff the fort and conduct extremely authentic demonstrations of British military life and drills. The fort, now a national historic site, plays host to a number of special ceremonies and events.

Fort Henry was the key fort protecting the Royal Navy Dockyard, the harbor of Kingston, and the entrance to Rideau Canal. This magnificent fort, placed high on a hill overlooking the surrounding area, has two major sections. The Lower Fort is the main defensive structure, covering land defenses as well as



Fort Henry

some seacoast guns. The Upper Fort is a ravelin with defensive barracks connecting to the ditch of the main fort.

The lower fort is an irregular hexagon, with demibastions protecting the gorge. Protecting the other faces are counterscarp galleries and a caponier. It occupies the southern end of a peninsula, so the land defenses are oriented northward - the only route of approach. Sealing the flanks of the fort are two ditch extensions, anchored at the water by towers and at the fort end by rifle galleries. The ditch towers are taller and smaller in diameter than Martello towers, but similar in design. The rifle galleries are alcoves in the counterscarp wall commanding the ditch.

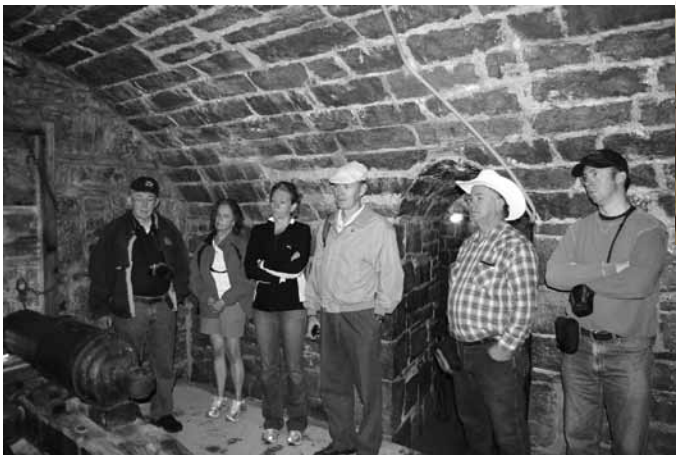
The counterscarp galleries have a combination of carronade embrasures and loopholes. Unique features are a "pit" in front of the gallery - a deep area of the ditch with masonry revetment, and beveled stone panels designed to deflect musket balls fired from the counterscarp loopholes. The caponier is of conventional design, with loopholes down each flank.

The main fort is casemated on all fronts, with a large central parade. The casemates were designed for barracks, officer quarters, and support functions, with loopholes that open onto the ditch. All the heavy guns were mounted en barbette on the masonry-paved terreplein, along with a paved banquette for small arms.

The primary seacoast armament is emplaced on the flanks of the lower fort and along the southern fronts of the upper fort. Connecting these fronts to the ditch of the lower fort are two long, narrow support buildings. These buildings were bombproofed through a complicated roof design involving a thick layer of loose rubble to absorb the impact of shot and shell.

Entry to the fort is obtained by passing one flank of the fort, crossing the ditch extensions on a bridge, entering one of two





Fort Henry

sally ports to the upper fort, then passing through the sally port of the lower fort. This long path covers several layers of defense, a very effective and intricate system.

Next stop was at Murney Tower, one of the four Martello towers around Kingston, now meticulously restored by Parks Canada. Murney Tower is a classic Martello tower with a second-floor entrance and the provision for two heavy guns mounted en barbette on the upper level. Currently, only one gun is mounted. Embrasures on the second level provide openings for carronades, two of which are in place. Three small caponiers around the base provided defense against a land assault, as did the very steep masonry counterscarp wall. The glacis extending from this counterscarp wall allowed direct fire from the second-level carronades. A wooden roof, held in place by iron rods and turnbuckles, protected the barbette guns from the weather. This roof could be readily released - revealing the guns - if an attack was imminent.



Murney Tower

At Murney Tower, and the other Kingston Martello towers, the landward wall is substantially thinner than the seaward wall. We were told that this feature allowed the tower to be readily destroyed should it fall into enemy hands, yet provided a strong defense against shipboard cannon. Because of the thicker wall to seaward, the angle from the parapet to the scarp was much steeper, causing the tower to look lower on the seaward front when viewed from the exterior. In actuality, the parapet was of constant height - only the angle of the superior slope was different.

Next stop was Fort Fredrick, on the grounds of the Royal Military College of Canada. This fort is part of the Canadian military and is open to the public, but has not received the extensive renovation or support that the Parks Canada sites have received.

This fort stands at the mouth of the Rideau Canal and is adjacent to what was the naval yard for Kingston. It was designed for three purposes: 1) defense of the naval yard through crossfire with Fort Henry; 2) close-in defense of the Rideau Canal; and 3) a link in the chain of fortifications guarding Kingston Harbor.

Fort Frederick consists of a classic Martello tower similar to Murney Tower, surrounded by small fort. The tower itself has four levels - one more than Murney Tower. Two of these levels were barracks, with howitzer embrasures for land defense. The lower level comprised magazines, storage rooms, and three caponiers



Fort Fredrick

identical to the caponiers at Murney Tower. The top level had three barbettes, and three guns are mounted under the removable wooden roof.

The surrounding fort is square, but with an asymmetrical design. It has three bastions on the seaward fronts, and a pan coupe at the salient of the landward curtains. This pan coupe is protected by a masonry demilune, which also served as a guardhouse.

The seacoast fronts of the surrounding fort are earthen, while a loopholed masonry wall closes the landward fronts. The fort stands at the tip of a peninsula, and the guns of Fort Henry command the length of that peninsula. It would not be plausible to mount a siege of the fort from the peninsula, so the only landward threat would be a coup de main. A masonry wall with loopholes provides an adequate defense for that type of attack.

The only artillery threat to the fort, therefore, was from the lake. The seacoast fronts are masonry-revetted earth, approximately 20 feet thick. This provided protection from the most powerful shipboard guns of the day. These earthen walls mounted seacoast cannon, smoothbore and later RMLs.

Two additional Martello towers were not available for entry, but could be viewed from the exterior. Shoal Tower (aka Victoria Tower) stands just off the downtown area, while a fourth tower stands on a nearby island. Ruins of Fort Frontenac and Market Battery were also visible, though little remains of those two fortifications.

The last stop of the day was Fort Wellington about 75 km down the St. Lawrence River in Prescott, Ontario. The fort was

built during the War of 1812, used during the rebellions of late 1830s, and maintained through the American Civil War and the Fenian raids that followed. The location has a brand new interpretive center and an enthusiastic staff. The grounds are in excellent shape and we had a great guided-tour of the site.

This earth-and-wood fort, with masonry elements, was built opposite the American defenses in Ogdensburg, NY. A wooden palisade stands in the ditch, with a wooden fraise about halfway up the rampart. Barbette gun positions and a banquette stand behind the parapet, and an earthen parade slope marks the rear of the covered way.

A masonry sally port supports a carronade/howitzer position, and a very nice caponier - reached by a tunnel through the rampart - guards the ditch facing the St. Lawrence River. A blockhouse with a masonry first and second floor and wooden third floor stands in the middle of the parade. The third floor has machicolis overlooking the masonry walls, with restored barracks making up the mass of the blockhouse on both upper floors. Two additional support buildings stand on the parade as well.

A unique feature of the fort is the palisade protecting the gorge. This palisade stands proud on the glacis, with every-other post breast height with the remaining posts at full height. This provides continuous musketry positions along the entire palisade.



Fort Wellington



Fort Wellington has a very nice masonry caponier at the mid-point of the riverfront of the fort. Loopholes provide a defense of the ditch; there are no carronade or howitzer positions. Access to the caponier is from the parade; a long, masonry-revetted tunnel passes under the ramparts.

The evening found us back in Kingston for the CDSG workers dinner and an evening of presentations by Dale Manuel and Karl Fritz.

#### Thursday May 17: Around Lake Ontario

Thursday morning we checked out of the hotel in Kingston and headed south, back into the United States. The first stop was Fort Ontario in Oswego, NY. Built initially by the British to defend Oswego Harbor, it was manned through 1794 when it was turned over to the Americans, where the post saw action during the War of 1812. Various engineers built the masonry fort existing today during the Third System period, each making his own contribution to the final design. The fort was used by the



Fort Ontario



Fort Ontario

US army up through 1946, and a few of the post-1900 building remain. The fort is now a New York State Historic Site and home to a crew of volunteers and re-enactors.

Fort Ontario is a masonry pentagon with bastions at each salient. An interesting feature of the fort is that each bastion differs from the others. This is attributed to the changes in engineers during the construction process, as well as the variation in the vulnerability of different fronts to land attack. The landward bastions had provisions for howitzer embrasures, while the bastions fronting the lake had only loopholes. The loopholes, however, varied in design. The oldest loopholes were very tall, allowing more depression of the rifle or musket at the expense of a larger, more vulnerable opening. The loopholes constructed later were the smaller, more common loopholes.

In addition to the very nice restorations of the interior buildings of the fort, a gun on the barbette facing the lake had a very nice reproduction weather shield. This is the only one of its kind that I have seen.

Next stop was Fort Niagara State Park in Youngstown, NY. Situated on a critical bluff overlooking the mouth of the Niagara River where it empties into Lake Ontario, the location has been fortified pretty much continuously from the early 1700s by the French, British, and Americans. The fort was the site of significant actions during all three periods of warfare. The current fort has been variously rebuilt and renovated by various owners, and today has been restored to represent the various periods of its use. The Americans rebuilt the land defenses during the late Third System period and used the fort as a military base through WWII.

The old fort has elements from most of these periods, with the original French Castle dominating the lakefront. The landward



Fort Niagara



Fort Niagara

front, built during the Third System, carries the hallmarks of land defenses of that period. The entire fort is very well maintained, and the outworks have been very nicely reconstructed. Of additional interest are the siege lines that have been simulated outside the landward front of the fort.

Today the area is a large day-use park with a myriad of soccer fields, a few post-1900 army buildings and the historic fort, which has a large visitor center. We were led on a guided tour and at the end let into the research center, housed in an army quartermaster building. This is really a great site to see the various stages of frontier military post development from the French, British, and American perspectives.

After Fort Niagara, we headed across the border to Niagara-on-the-Lake for our stay at the Niagara Residence and Conference Centre, part of the vocational arts programs of the Province of Ontario. Gordon Bliss and James Conway gave evening presentations.

#### Friday May 18: The British Defenses of Niagara

Friday morning began with a drive south along the Niagara River to Fort Erie, a masonry fort guarding the Niagara River where it opens into Lake Erie. The site features a new visitor center and an extensive living history and reenactment programs.

The fort was designed by the British as a square fort with bastions. It was not completed, however, before the Americans captured it early in the War of 1812. The trace was modified to make the work defensible, with two bastions not connected to the finished portion of the work closed in as detached works. A wooden palisade was used in conjunction with earthworks to close in unfinished portions of the fort, leaving it relatively strong as a defensive structure.

In addition to guns in the main work, a ravelin facing the lake provided additional gun positions. The lakefront of the

fort contains the sally port, which is protected by the ravelin. A second wooden sally port, with a fully restored functional drawbridge crossing the outer ditch, allows access to the area between the ravelin and the main sally port, providing an extra measure of protection.

On the landward side of the fort, siege works have been constructed to show how an attacker would approach the fort. These are complete with a siege cannon firing through a wooden embrasure in the earthworks, a Coehorn mortar position, and a position for Hargreave rockets. A new visitor center with an introductory video and museum complement a very enthusiastic and well-trained living-history staff.



Fort Erie



Heading back down the Niagara River and past a number of War of 1812 battle sites, we gathered at Fort George, the large earthwork post that was the base of military operations for Upper Canada after the withdraw from Fort Niagara in 1794. This was a large infantry post, and it has been restored to its appearance just after the end of the war. The site also features a nice visitor's center and an extensive interpretation and reenactment program.



Fort George

Fort George was constructed opposite Fort Niagara to act as a counterpoint to Niagara's control of the mouth of the Niagara River. It is a long rectangle, with numerous gun positions along the river face of the fort. There are bastions at each corner of the fort, as well as near the midpoint of each long wall. The palisades, ditches, and buildings have been meticulously restored, and an excellent living-history program adds to the impact of the fort.

Of particular interest is a wooden ravelin at the short, landward face of the fort. It contains a small blockhouse protected by a palisade and accessed by a tunnel from the main fort. In addition, the original powder magazine still stands on the parade of the fort, restored to its appearance during the fort's occupation.

The final stop of the day was Fort Mississauga, the masonry replacement for Fort George. The fort is currently protected by a golf course – we dodged golfers as we crossed the fairways to reach the structure. A descriptive sign at the sally port provides a layout of the fort and provides a small amount of historical information. The fort is open to the public during daylight hours, but is not manned or interpreted.

While originally designed to be much larger than the current fort, the design was cut back when tensions across the border eased. It was placed on higher ground than Fort George, as a significantly stronger counterpoint to Fort Niagara, a short distance away across the mouth of the Niagara River.



Mississauga Tower

As constructed, Fort Mississauga was an earthwork fort with a masonry sally port and masonry magazines cut into the earthen rampart. On the center of the parade stands the dominant feature of the fort, a three-tier square tower. Unfortunately, the tower is closed to the public due to structural issues, but the magazines are accessible. A masonry postern tunnels under the ramparts of the fort, with a path leading to the river's edge some distance below.

Opposite the main sally port is an earthen ravelin, the least preserved portion of the fort. While its outline is clear and the terrain makes it easy to see the remains of the surrounding ditch, it does not have the restored profile of the remainder of the fort.

That evening found us at an excellent banquet put on at the "training" university restaurant, a quick and short business meeting and back for an evening presentation by Terry McGovern.

#### Saturday May 19: Detroit Defenses

Up and on the road, we drove across "Upper" Canada to the other end of Lake Erie. Our first stop was the remains of Fort Malden, an earthwork built on the Canadian side of the Detroit River after the British withdrawal from Detroit in 1794. It was the base of operations for the early British campaigns in 1812 and 1813, before being abandoned during Harrison's 1813 campaign. Only a part of original fort remains, but it has been restored nicely.

The fort had a square trace with bastions, with several buildings located on the parade. A portion of the earthworks has been carefully restored, with cannon mounted in two bastions. The



Fort Malden

museum was temporarily closed due to a structural issue resulting from a recent storm, but the restored enlisted barracks was open and well furnished with the uniforms and accoutrements of the day. The “defensible kitchen” was also restored – an interesting masonry structure that served as a kitchen during normal situations and a loopholed citadel during a battle.

The strategic location of the fort, near Bob-Lo (originally Bois Blanc) Island in the Detroit River, was born out by the size and number of large ships that passed the fort during our visit. With Fort Wayne on the American side of the river controlling downriver traffic, Fort Malden was designed to create a stalemate by controlling upriver traffic. Thus neither American nor British/Canadian shipping could freely use the waterway.

Across the river and back again in the United States, the last stop of the day was Fort Wayne, the masonry fort built during the Third System, overseen by Montgomery Meigs. The fortification features a unique bastion-flank sally port, a riverside masonry ravelin, and a beautiful stone barracks in the parade. The military base around the old fort was in use through the 1960s and a large number of post-1800s and post-1900s buildings remain. We gathered in the Fort Wayne Preservation Association’s base of operations at the old post PX for our tour through the Third-System fort and the remaining fort grounds.

The square fort has a masonry scarp and four casemated bastions, containing embrasures for flank howitzers and loopholes for rifle fire to defend the ditch. The casemates are accessed from the bastions, with recently restored wooden covers over the stone staircases.



Fort Wayne

All seacoast guns were mounted en barbette. The ditch and counterscarp retain their original shape quite well, and a portion of the glacis is intact. The ravelin overlooking the Detroit River has further gun positions, and there are remains of a hot-shot furnace on the terreplein of the ravelin.

Dominating the parade of the fort is a beautiful four-company barracks. While the interior of the barracks has been modified over the years, the exterior is unchanged – other than some deterioration of the wood of the windows and balconies.

The location was in active use; a number of soccer games were ongoing during our visit, and cub scouts were occupying the barracks. It was sadly evident that the City of Detroit is losing the battle over the preservation of both the fort and the buildings. The lack of budget dollars has left the location in the hands of volunteers who are struggling to just keep things from deteriorating further. This is a very nice example of Third System architecture, and I hope it will remain open to the public.





Fort Wayne HQ

Heading to the Marriot Courtyard near the Detroit Airport, a smaller group of attendees watched a nice video by Dale Floyd on the Civil War defenses of Washington, D.C.

#### Sunday May 20: Fort Meigs

The last stop on the conference was Fort Meigs, the American supply base on the Maumee River during the War of 1812, just south of downtown Toledo, OH. The fort was a very large earthwork with a large parados, several artillery positions, and a number of blockhouses. The fort has been extensively restored



Fort Meigs

and is now a large state memorial park, featuring a large visitor center and an extensive program of interpretation and reenactments. We had a very nice guided tour of the site.

Guarding a critical portage around rapids in the Maumee River, during the War of 1812 Fort Meigs successfully withstood two sieges – remaining in American hands and blocking the British advance along the Maumee. Of particular note is the Grand Traverse, the parados that runs the length of the fort. It was constructed during a siege to prevent cannon balls from rolling across the parade, and was bordered by trenches on each side to catch the cannon balls.

A series of well-restored blockhouses guard both the corners and the long fronts of the fort, and provide a venue for a nice set of interpretive displays. Additionally, the cannon positions on the river front have been reconstructed and in some cases armed.

This concluded the official conference. I headed back to Illinois via several other War of 1812 and Indian Wars sites, which made this all in all very nice and timely conference.

The CDSG should thank John Weaver, Glen Williford, and Carol Sikler for all their efforts in setting up and organizing this meeting. I know that John work especially hard at making the contacts need to arrange to get us into the various sites, especially since several were not open for their regular hours when we wanted to visit.

The site hosts at Fort Henry, Mississauga Tower, Fort Fredrick, Fort Wellington, Fort Ontario, Fort Niagara, Fort Erie, Fort George, Fort Malden, Fort Wayne, and Fort Meigs were especially helpful and deserve the thanks of the membership. They were especially helpful, and contributed tremendously to the success of the St. Babs. Multiple people at each fort worked with our group, and put on special guides and interpreters to assist us. Fort Wellington went so far as to bring in the director of interpretation for the province of Ontario and a retired site director to assist in our question-and-answer sessions! It was very clear throughout the trip that the site managers and interpreters were very dedicated, enthusiastic historians who took our visit very seriously. From the most senior professional staff to the recently hired summer helpers, the staffs of the various forts did their best to provide us with solid historical data and to show us every nook and cranny of each of the forts.



St. Babs 30th attendees group photos in front of Fort Ontario (Alex Holder)



Fort Ontario 1930s (NARA)