2.8 Steamboats and Canals on the Ottawa River

The Ottawa River was once the only way to access the Upper Ottawa Valley, to travel between Montreal and Ottawa and beyond. It was a viable option for military and commercial access to the Great Lakes. Before roads and even railways were built, the Ottawa River was literally the one and only highway, carrying merchandise, people, and mail in both directions. From Montreal, there were two main routes inland: the St. Lawrence – Great Lakes system, and the Ottawa River – Lake Nipissing – Georgian Bay to Upper Great Lakes route (Canadian Public Works Association 113).

Figure 2.63   Canoe on the River, 1841

Source : Philip John Bainbrigge/Library and Archives Canada/C-011815

At first, canoes plied the waters of the Ottawa, carrying First Nations Peoples, explorers and voyageurs into the interior of the land. But the development of the lumber industry in the Ottawa Valley and the related settlement in its upper reaches soon required larger boats. These boats faced logistical challenges hoisting themselves up or around the many sections of chutes and rapids they encountered along the Ottawa. A series of canals, initially built for military purposes, facilitated the transportation of goods and people along the river.

Figure 2.64   Steamer, "Duchess of York"

Source : Library and Archives Canada/C-003949

Steamboats appeared on the Ottawa River during the construction of these canals, enabling a more reliable and efficient transportation system. The canals only circumvented certain rapids. Others, such as the Chaudiere Falls, still represent an obstacle to navigation. Steamboats were therefore confined to particular sections of the river. Therefore, transportation by steamboat often involved changing steamboats, which required loading cargo onto portage railways or even a horse-drawn railway to by-pass the rapids. The Ottawa-Rideau canal system, built to ensure the military security of the then-British colony, was too small to accommodate commercial steamships, and was enlarged in the late 19th century. For a limited period of time, it was possible to get from Montreal all the way to Mattawa via a series of steamboats.

Forwarding (shipping) companies developed, first along the stretch from Montreal to Ottawa and then along the Upper Ottawa. The Ottawa River witnessed a colourful, thriving and boisterous steamboating era at its heyday in the mid-19th century. The steam-driven paddleboat was a common sight on the Ottawa River for just over one hundred years, from the 1820s until the 1920s. Often luxurious, steamboats carried tourists and dignitaries up and down the river. This activity continued on the Ottawa even after the commercial decline of steamboating when faster and more efficient railway service was established by the 1880s. Although many traces of the canal and steamboating era have disappeared or been submerged by recent hydroelectric dams, some visible evidence along the river still remains, including a small lock leading to the original Carillon canal and the guard lock at Grenville.

2.8.1 Navigation Before Steamboats and Canals

The Ottawa River drops 338.5 metres along its length, creating powerful rapids and falls that have been a challenge to navigation for all craft (Lamirande xi). In the 17th century, French explorers and voyageurs enlarged portages around waterfalls and rapids initially cleared by First Nations Peoples. Two centuries later, eight primitive canals were built to circumvent the 20 kilometres of rapids at Carillon, Chute-à-Blondeau and the Long Sault on the Lower Ottawa. This initial canal system only included one lock and consisted of simple trenches. It is not known who built these first canals, all traces of which were submerged by the Carillon dam in 1963 (Lafrenière 17).

In the period from 1800 to 1820, before the first steamers appeared, goods could be shipped from Lachine on batteaux and later on Durham boats, flat boats up to thirty metres long. In Carillon, passengers disembarked at the bottom of the rapids, while the boats were unloaded and cargo transported by land until Grenville. The boats themselves were poled and pulled by cables over 19 kilometres up the rapids. The process took over 24 hours (Labelle: "Outaouais").

The Horse Railway - A Unique Solution

Fifty-one kilometres upstream of Bytown, passengers encountered the spectacular Chats Falls. The Union Rail Road, a horse-drawn covered railway passenger car, transported passengers five kilometres through dense forest to avoid the falls and rapids. Operated by the Union Forwarding Company between 1847 and 1879, the "horse railway" delighted travelers to the region (Rivers Inc.: Ottawa River):

> *Certainly this is one of the last things you dare to hope for in the heart of the wilderness far away from either a road or a cow-path - and you must almost doubt whether it is a reality, or like the palace of Aladdin, you are not under the mysterious influence of some kind genii for your present position (James Poole, editor of The Carleton Place Herald, 1853, qtd. in Kennedy 140).*

Today a cottage road runs through part of what was the first railroad in the Ottawa Valley. In a rock cut near Lake Aumond and near a cottage road to Black Bay, marks of the ties are still visible (Kennedy 145).

2.8.2 The Construction of Military Canals on the Ottawa

Although they would never serve as such, the first proper canals on the Ottawa River were built for military purposes. British colonial authorities designed them to transport troops and military supplies between Montreal and Kingston via the Rideau Canal system in case of an American blockade of the St. Lawrence, as threatened during the War of 1812 (Lafrenière 4). Built between 1819 and 1834, the canals bypassed rapids at Carillon, Chute-à-Blondeau and Grenville, following already-existing portage routes (Legget 1975: 139). They improved communication between the Great Lakes and the sea, providing an alternate route to the St. Lawrence and facilitating travel between the military posts in Montreal (Lower Canada) and Kingston (Upper Canada). Kingston represented a vital fortress with a naval dockyard serving Lake Ontario, previously supplied via the St. Lawrence. The system also included a canal to pass the Lachine rapids in Montreal. As soon as they began operating, the canals served mostly for commercial traffic, since the events of 1812 did not repeat themselves.

The British Army's Royal Staff Corps, under Captain Henry du Vernet, built the 9.6 kilometre-long Grenville canal. Ottawa River historian Robert Legget describes this daunting project, which involved excavating 1.5 metres through solid bedrock: "The task of building a canal around the surging waters of the Long Sault with no plans or specifications as a guide, and in country that was still thick with virgin forest down to the water's edge, would have daunted any ordinary man." (1975: 139). The canal at Chute-à-Blondeau was more straightforward, bypassing a drop of only 1.3 metres. Carillon represented a larger drop and was more challenging. The unusual solution of creating a lift in the entrance lock brought ships up to a level in land overlooking the river that was easier to excavate. The North River was partially diverted by a small ditch or feeder channel to accomplish this lift, generating violent protests from the Seigneur of Argenteuil and residents of St. Andrews (Legget 1975: 143). Three locks falling only 3.3 metres followed the lift.

Work was completed in 1834, with 12.9 kilometres of canals and eleven locks. With the completion of the Lachine Canal in 1825 and the Rideau Canal in 1832, the entire system was navigable.

The building of the Rideau Canal attracted new settlers to Bytown, but otherwise construction had little direct impact on the settlement of the Ottawa River. Building the canals required the Crown to expropriate a narrow strip of land between the river and the canal. Farmers and landowners protested, sought compensation from the Crown in court and won their case in 1832 (Labelle). This affected around twenty farmers between Carillon and Grenville (Lafrenière 37). The township of Grenville experienced an increase in population because of the labour needed to build the canals: Irish and Scottish immigrants provided this labour and many settled permanently in the area.

When the military canals were built, canoes were still in use. By the time they were completed, steamboats had made their appearance. Because the first locks were initially built using military specifications, they were too small for most commercial steamboats to pass. Three of the seven locks in the Grenville canal as well as the Lachine canal were built using the smaller military scale of 33 metres by 6.1 metres. The locks at Carillon as well as those on the Rideau system were larger, measuring 40.8 metres by 10 metres. This poor planning created a bottleneck at Grenville, limiting navigation to ships under 6 metres wide (Lafrenière 25).

In 1857, the Sykes and Deberg Company built a twenty-one kilometre long railroad between Carillon and Grenville. Cargo and steamboat passengers in both directions had to take the train for a short distance before embarking in a different vessel to continue their journey (Labelle: "Outaouais"). It wasn't until the 1870s that the locks were enlarged.

2.8.3   The Steamboats of the Ottawa River

In the heyday of steamboating on the Ottawa River, from May until November of each year, steamboats provided passenger service, mail service, brought farmers to market, towed lumber barges downstream and transported politicians and dignitaries. In the 1820s, with the involvement of Philemon Wright Junior, Thomas Mears of Hawkesbury built the *Union of the Ottawa*, commonly recognized as the first steamboat on the river. It made a weekly return trip between Grenville and Hull, covering the 95 kilometres in 24 hours (Lafrenière 22 and Labelle). The vessel was 38 metres long, 9 metres wide, with a 28 horsepower engine, and a draught of only 47 centimetres (Lamirande 3-4).

Around 1827, two more steamboats appeared: the William Henry and St. Andrew, linking Lachine with St. André and Carillon, where cargo was unloaded and transported around the Grenville rapids. The number of steamboats increased rapidly in the 1830s once the canal system was completed (Labelle). Above the Chaudiere Falls, steamboats arrived in the 1830s as well: in 1832, the Lady Colborne was launched on Lake Deschênes and the George Buchanan on Chats Lake in 1836 (Lamirande xii).

The steamers were flat-bottomed sidewheelers, smaller and with shallower draughts than those on the St. Lawrence and

Figure 2.65 Launching of the Opeongo, Chats Lake

Source : Archives of Ontario. C 120-3-0-0-80. Charles Macnamara's glass negatives

the Great Lakes. Until the 1840s they were mostly powered by low-pressure, single-cylinder beam engines. Some of these vessels retained masts and sails. The steamboats burned wood as fuel for most of the 19th century, which was cut at forests along the banks and stacked at loading points. "Wooding up" was picturesque but hard work (Legget 1975: 163).

Figure 2.66 Steamer, "Anne Sisson"

Source : Ottawa River Heritage Designation Committee

Travel by steamboat was often luxurious, and steamboats such as the *Peerless* and the *Empress* have been described as palatial, boasting their own brass and string band and equipped with mahogany cabins and bars (Lamirande 50). Steamboats carried the social elite, and must have been considerably more comfortable than 19th century travel by rail. The christening of these steamers was a social event attracting the "beauty and fashion of the Town" and inspiring local pride in the craftsmanship (VMC: "Champlain Trail Museum"). Dignitaries and politicians also graced the steamboats, and Sir John A. Macdonald is said to have had a permanent stateroom on one of the Ottawa River steamers (McGoldrick: "Sailing"). A visit by steamboat by the Prince of Wales was truly an event:

> *The most distinguished traveler of these years was His Royal Highness, Edward, Prince of Wales, a youth of nineteen in 1860. He was one of the first royal visitors to Canada; his large entourage was headed by the Duke of Newcastle. In the course of a crowded itinerary, he opened the great Victorian Bridge carrying the Grand Trunk Railway (now CNR) across the St. Lawrence at Montreal, and then he traveled up the Ottawa River in order to lay the foundation stone for the new parliament buildings. He left Montreal early on the morning of 31 August 1860, traveling by rail to Ste Anne de Bellevue. Here he boarded a new steamer, named Prince of Wales in his honour, and sailed on it to Carillon. He was received by a great assembly (estimated at 5,000) including two troops of cavalry. Addresses were given, and three distinguished local citizens were presented to the prince before he boarded the little portage train for the journey to Grenville. Here*

were another local display and more presentations, but eventually he boarded the Phoenix *for the journey to Ottawa. The climax of his river journey was a greeting by about 1,000 lumbermen, all in similar gay costumes, paddling in 150 canoes, who met the steamer two miles below Ottawa and escorted it to its wharf (Legget 1988: 177).*

A growing number of tourists enjoyed traveling the Ottawa by steamboat. The *Prince of Wales* jumped the Lachine Rapids 1,800 times (Lamirande 32)! Steamboats traveling between Pembroke and Des Joachims would stop at Oiseau Rock where the captain would blow the whistle and the sound would echo off the face of the rock (CLD du Pontiac: "The Oiseau Rock"). Travel by steamboat could be both thrilling and harrowing. Running the 33 kilometre Lac des Chats in high water in the *George Buchanan* in 1854 inspired the following description:

As she neared the dreaded channel, the passengers gathered in clusters on the forecastle – the fireman selected his choicest fuel – the engineer screwed up his slackening bolts and greased his rickety bearings – the captain stood by his bell. By judicious steering and hard paddling the lower current was surmounted, and the little craft glided into the eddy which led up to the very vortex of the rapid; suddenly the engine ceased its revolutions – an ominous silence reigned throughout the boat, as taking advantage of the eddy which bore her slowly up to the scene of her laurels or her shame, the boiler gathered steam for the approaching contest. The engineer rolls up his sleeves – the fireman pokes the fire – the captain eyes his enemy – and when the friendly eddy is exhausted nervously rings the bell for 'full steam'. The engineer throws off the eccentric and seizes a lever in each hand – for full steam cannot be depended upon from the wobbling shaft or crazy eccentric. As the cylinders are charged, a cloud of steam fills the waist of the boat, looming through which a spectral figure is seen frantically working the steam port valves as if life depended on the result. If the feat is performed and the little boat has secured a safe position above the rapids - the captain comes down from his perch - the fireman pops up through his hatch, and the engineer rushes out from his misty den, when, looking back with grim satisfaction on the vanquished waters, mutual congratulations are exchanged on the forecastle (qtd. in Kennedy 17).

Figure 2.67 Steamboat Captains From the Ottawa River Who Served With the Canadian Nile Contingent, 1884

Source : Library and Archives Canada/C-00986

Indeed, the full trip from Montreal to Mattawa was one of the most exciting and picturesque trips at the time in North America. This trip was no longer possible in 1876 when the "Grand Portage" was abandoned, as was the steamboat service on Muskrat Lake (Lamirande xix). A typical mid-19th century journey up the Ottawa began in Montreal, and involved several days of travel (Lamirande xix and author's extrapolation):

DAY 1 – Montreal to Ottawa

7:00 a.m.   Board the train from Montreal to Lachine.
                       Board the *Prince of Wales* steamer for a 4-hour cruise to Carillon.
                       Dock below the Carillon rapids and board the portage train, a 35-minute, 19-kilometre ride to Grenville.

Board the massive *Peerless.*

5:30 p.m.   Arrival at Queen's Wharf in Ottawa, after a full day's travel from Montreal.

DAY 2 – Ottawa to Pembroke

6:00 a.m.   The next morning, take an omnibus leaving from local hotels and destined for Aylmer.
                   Board the *Jessie Cassels* and eat breakfast while crossing Lake Deschênes.
                   At Pontiac Village, take a 5 kilometre horse-drawn railcar ride around the spectacular
                   Chats Falls.

11:00 a.m.   Board the *Prince Arthur* at Union Village on Chats Lake to go to Portage du Fort.
                   Dine onboard after the ship leaves Arnprior.
                   Enjoy an exhilarating ascent of Les Chenaux rapids.

4:00 p.m.   Reach Gould's landing.
                   Choose between two options to reach Pembroke: the shorter route consists of the "Grand
                   Portage", an omnibus ride for 20.8 kilometres to Cobden on Muskrat Lake. The longer
                   involves boarding the *Jason Gould* in early evening.

8:30 p.m.   Arrival in Pembroke.

DAY 3 – Pembroke to Mattawa

7:00 a.m.   The *Pontiac* departs from Pembroke.

12:00 p.m.   Arrival at Des Joachims.
                   Enjoy the "Deep River", the most romantic part of the Upper Ottawa Route.
                   Join the intrepid few continuing above Des Joachims to reach Mattawa via three portages
                   and three different steamers: the *Kippawa*, the *Deux Rivières* and the *Mattawan*. The
                   steamers are smaller and the portages more difficult.

Stopover at the Symmes Hotel

Built in 1831, the Symmes Hotel lodged passengers in transit between the portage route from Hull and
the steamer on Lake Deschênes. Located in Aylmer (formerly Symmes Landing) on Lake Deschênes, this
hotel and busy wharf was the point of departure for travelers and merchandise traveling northwest up
the lake on the *Lady Colborne* and other steamers (Legget 1975: 241).

Charles Symmes, nephew of Philemon Wright, built the hotel in stone. Its unique architecture using local
stone was restored when the building was designated a historic monument in the mid 1970s. It now
houses the regional history museum of Gatineau, Musée de l'Auberge Symmes (CCQ: "Hôtel Symmes").

The Navigation Companies

Numerous navigation and forwarding companies developed during the 1800s. During the 19th century,
most traffic on the Ottawa canals actually consisted of barges, such as those owned by John R. Booth,
transporting lumber down the canals of the Ottawa River, up the Richelieu to Lake Champlain and New
York (Lafrenière 64).

Some shippers were major lumber companies with their own transportation facilities, such as Bronson
and Weston, a company set up near the Chaudiere Falls in 1853 (Lafrenière 64). Others boasted luxurious
passenger vessels. In 1839, the Ottawa and Rideau Forwarding Company operated four steamboats on the

Ottawa, as well as a number of barges. With warehouses at Lachine, Carillon, Grenville, and Bytown, the company employed 650 people (Labelle). In 1841, five shipping companies operated on the canals of the Ottawa River. By 1872, some 15 companies operating 241 barges and 45 steamers on the Ottawa River employed 2000 men (Lafrenière 63).
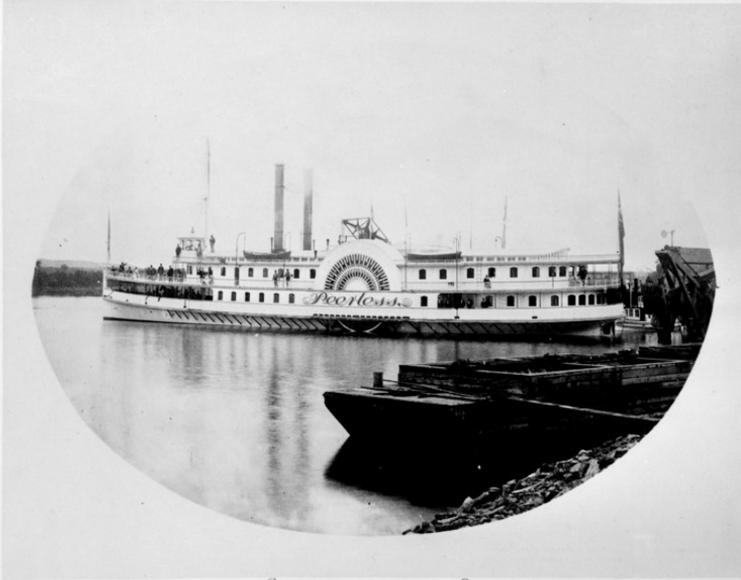
Figure 2.68   Ottawa River Navigation Company – Steamer

In 1892, most of the transport companies involved with forest products merged to form the Ottawa Transportation Company. Owning over 250 boats and barges, this was the most powerful navigation company in the history of the Ottawa River canal system. The Ottawa River Navigation Company provided transportation and leisure service until 1909 (Lamirande xii). Of note also is the Union Forwarding and Railway Company, which eventually gained a monopoly over the forwarding trade (Lamirande xii).

Commercial Navigation

Increased settlement in the Ottawa Valley, along the Rideau Canal and near the Great Lakes meant transporting immigrants up the Ottawa River. Steamboat companies vied for the "immigrant" trade to Upper Canada, carrying up to 400 immigrants per trip (Lamirande 12). New settlers needed goods, supplies and equipment. Large quantities of lumber that was produced in the Valley needed to be transported downstream to markets in Ottawa, Montreal and New York. Commercial navigation benefited from these many lumber camps as the birchbark canoe, still in use through the 1830s, no longer sufficed (Lafrenière 19).

A triangular trade route developed linking Montreal, Bytown and Kingston. Barges were towed by steamers via the Ottawa and Rideau canals to Kingston carrying immigrants, merchandise and staples including hay, oats, turnips, potatoes, barrels of pork, flour, oatmeal, beef, fish, molasses and salt (Lafrenière 59). These same barges were reloaded in Kingston with products from the Great Lakes, and then shot down through the rapids of the St. Lawrence River and the Lachine Canal, carrying staples for the Atlantic trade such as wheat, flour and potash back to Montreal (Canadian Public Works Association 117).

At mid-century, freight down the Ottawa River mainly consisted of steamboats towing sawn lumber on barges or in rafts. The lumber traveled by barge to New York via the Ottawa military canals, the Richelieu River canals and the Lake Champlain-Hudson River system for the American market (Canadian Public Works Association 123). Steamboats also towed rafts of squared timber (Lamirande xix). Upstream transport continued, with agricultural products to feed the lumber camps, until around 1870 when camps became more remote and the region more agriculturally self-sufficient. In the later 19th century bituminous coal, sugar, salt and miscellaneous merchandise traveled upriver (Lafrenière 59).

Steamers also provided regular mail, passenger and ferry service. The Ottawa Steamer Company began carrying mail up the river in 1850 (Legget 1975: 147). Ottawa River Mail Steamers ran from Bytown to Montreal several times a week in the 1850s, stopping to deliver mail at almost all the small wharves along the way (Legget 1975: 163). Mail delivery extended to the upper reaches of the river, representing the only source of mail or news in these isolated areas (Legget 1975: 148).

The Wharves of Prescott-Russell

When commercial navigation was at its peak on the Ottawa River, there were some 41 wharves serving the steamships in the United Counties of Prescott and Russell. The wharves were prosperous from the 1830s on and were at their peak in the late 1880s, with intense commercial activities associated with them. They also served as ferry landings.

The early wharves were wooden, built with timber-crib boxes. The *caissons* technique was common,

consisting of square timber filled with earth and stone as permanent piers. Later in the 1800s, concrete wharves and wharves on piles were built.

The wharves were built to serve the steamships where hamlets already existed, such as Pointe Fortune, L'Orignal and Hawkesbury. Steamships brought and picked up goods at the wharves. Local products were shipped to city markets. The steamships picked up mail and passengers, carried students to school and medical patients to Ottawa. Stagecoaches carried passengers to and from the wharves.

Industrialists, merchants, farmers and entrepreneurs owned the wharves, and set up commercial buildings near the wharves, including mills of all kinds, warehouses, granaries and general stores. The wharves brought prosperity to the local villages. The downfall of the wharves came in the early 20th century with the decline of the lumber and forwarding trades and the increasing popularity of the railroad. Some of the wharves became marinas. Remains of others are submerged as ruins, mostly hidden underwater (Beaulieu: "Forgotten Wharves").

By 1842, a regular passenger service linked Montreal and Hull using a combination of stagecoaches and steamers. In 1879, the Ottawa and Hull Ferry Line ran steamers between Ottawa and Hull every 15 minutes (Lamirande). In 1894, the Minister of Railways and Canals reported over 2600 steam and sail vessels on the various Ottawa River canals, carrying timber, clay, sand, lime and various grains. 13,828 passengers passed through the canals (Labelle: "Outaouais").

The spread of steam railways in the Valley presented stiff competition with the steamers, eventually shutting down some services, including the horse railway in the 1870s and passenger service between Ottawa and Deux Rivières (Lamirande). The paddleboat was becoming obsolete. Despite all the competition, steamboats were prevalent on Lake Temiskaming after 1882 and prospered until the mid-1920s. Most of these were screw-propelled. Passenger service from Ottawa was available until 1910. During the decline of the lumber era from the 1920s until the 1960s, new products such as sand and gravel traveled downstream to Montreal by barge (Lafrenière 60). Fuel oil came to the Ottawa region this way until the pipeline was developed. The last paddleboat on the Ottawa River was the Hamilton in 1949 (Lamirande). Now only old photographs and underwater wreck sites attest to the days of the Ottawa River steamships.

Underwater Shipwrecks of the Ottawa River

Dozens of the Ottawa River's steamboats ended their lives on the bottom of the river, many succumbing to fire. The Underwater Society of Ottawa, founded in 1963, uncovered many of these shipwrecks using archival records, diving and dragging techniques. Most of these wrecks were sidewheelers, and many are familiar names, including the *Lady Colborne* and the *Emerald* under the waters of Lake Deschênes, and the *Dauntless*, *Pontiac* and *Prince Arthur* between Pembroke and Mattawa (Séguin 62-65).

2.8.4   Canal Improvements

The existence and maintenance of the canals was key to the economic development of the Ottawa River valley region. When Upper and Lower Canada united in 1841, Britain helped fund a Board of Public Works focusing on waterway improvements. The government of Canada acquired ownership of the

military canals of the Ottawa-Rideau system in 1856 when they were transferred from Britain (Canadian Public Works Association 124).

In the early 1840s, the Department of Public Works built a canal at the confluence of the Ottawa and the St. Lawrence rivers to improve the Ottawa-Rideau canal system. Previously, steam navigation was limited because private companies built and controlled their own small wooden lock at the Vaudreuil rapids, charging exorbitant fees to rival companies wishing to use the lock (Lafrenière 22). Although the Vaudreuil lock was not part of the military canal system, it had strategic commercial importance. The monopoly continued until a channel was discovered through the rapids at St. Anne's that was navigable by steam. In addition, the government built a lock at St. Anne's representing the downstream entrance of the Ottawa River canal system (Lafrenière 35). The new lock was a single cut-stone masonry lock, 58 metres by 14 metres with a 1.8 metres depth of navigation (Canadian Public Works Association 121).

In the 1830s and 1840s, the Ottawa-Rideau military canal system dominated the import trade of the Canadian interior. This continued until the completion of the St. Lawrence canals system (Canadian Public Works Association 121). Starting in 1851, after the St. Lawrence locks were enlarged, all freight destined for Lake Ontario traveled up the St. Lawrence rather than taking the less direct Rideau-Ottawa route. River traffic continued to grow regardless because of increased settlement in the Ottawa Valley (Legget 1975: 147).

But the bottleneck at the Grenville canal hindered commercial traffic on the Ottawa. In the 1850s, the canals began to show signs of wear. In 1866 unsold sawn timber piled up in vast timber yards in Hull because the canals could not carry the quantities of timber being produced. Prominent lumbermen petitioned the government to improve the system, and the Canal Commission upgraded it during the 1870s (Lafrenière 44). The Commission built a second Carillon Canal from 1873-1882 with two locks and a semicircular timber crib dam above the village of Carillon (Canadian Public Works Association 124). The dam drowned out the rapids at Chute-à-Blondeau, creating a direct navigation route from Carillon to Grenville. The Grenville canal was improved from 1871 to 1884 with five locks that had the same dimensions as the Carillon locks (Labelle: "Outaouais"). The Ste. Anne's canal was enlarged from 1879 to 1883. All the new locks were built using cut-stone masonry, 61 metres by 14 metres with 3 metres of water on the sills (Canadian Public Works Association 124).

The final, perhaps most dramatic changes to the Ottawa River military canal system occurred from 1959 to 1962 when Hydro Quebec constructed a power dam at Carillon, flooding the former Carillon and Grenville canals (Canadian Public Works Association 124). The new lock at Carillon boasted a lift of nearly 20 metres. Its official opening in 1963 marked the end of commercial navigation on the Ottawa River canal system (Lafrenière 60).

The only place you can still see evidence of both the first military canal and the second Ottawa River canal is at Grenville. The upstream lock of the second Grenville canal is visible: it is a masonry ship lock with carefully carved stone quoins (Legget 1975: 133). The walls of the old canal can be seen downstream from the lock (Lafrenière 51).

Carillon Canal National Historic Site

Today, the Carillon Canal is a prominent heritage site and recreation area run by Parks Canada and visited annually by 20 000 pleasure boaters and 30 000 people who use its banks (Parks Canada: Carillon). One of the highest locks in North America, the Carillon lock is an impressive facility. Locking operations raise or lower boats across a 20 metres difference in water levels, equivalent to 7 stories. It takes 25 million litres of water to fill the lock. The power dam at Carillon has the most generating capacity on the Ottawa River (McGoldrick: "Sailing").

The lower lock on the original (1870s) Carillon canal is visible and was restored in the 1960s (Lafrenière 28). A section of the feeder canal from the North River is also visible. The residence of the superintendent and the canal collector's house have been preserved and now house the Museum of the Argenteuil County Historical Society. This masonry building was originally a British military structure built in 1829 as barracks for the troops stationed at the canal when it was still controlled by the British army. The Museum contains models of historical steamships (Legget 1975: 228).
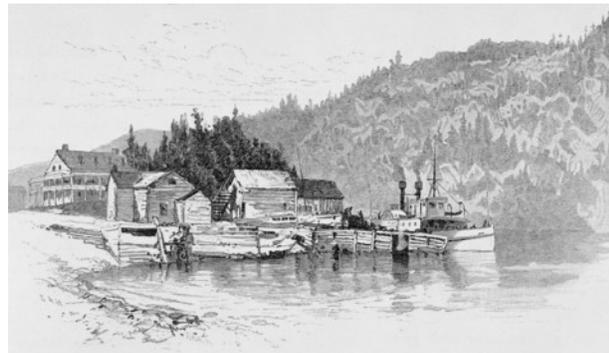
2.8.5   Canal Construction on the Upper Ottawa

As early as the 1830s, settlers and businessmen argued for canal development on the Upper Ottawa. Many different proposals to develop a complete navigation system were developed, including the Montreal to Lake Huron Route (via the Ottawa, the Mattawa and the French). Settlement on the border of Lake Chats suffered from the dangerous navigation around Chats rapids (Kennedy 131). In 1854 the government awarded a contract to dig a four kilometre long canal around Chats Falls and rapids. After two

Figure 2.69   Des Joachims Landing, 1882

Source : G.M. Grant/Picturesque Canada/Library and Archives Canada/C-082899

Figure 2.70   Steamer "Argo" on Lake Temiskaming

Source : W.M. Harmer/Library and Archives Canada/C-026396

years of excavating through hard igneous Canadian Shield by hand, the project was abandoned. It cost nearly $483,000 (Canadian Public Works Association 124). The great cut can still be seen. In 1931 a block dam was built across the upriver end of the abandoned canal for the Chats Falls Generating Station, drowning the rapids (Kennedy 133).

A survey for the Ottawa River – Lake Huron route was carried out in 1856 by snowshoe. Despite the belief that this route would open up the country for iron ore, waterpower, and the cereals of the west, the only other canal construction on the Upper Ottawa was at the Rock Portage on the northwest end of Allumette Island (Kennedy 135).

Lumber interests persuaded the government to build a canal on the Culbute channel at the Calumet Rapids, known as the Rock Portage. Construction of the locks took place from 1873-1876, involving two combined locks and opening up 124 kilometres of interior river navigation (Canadian Public Works Association 124). The Culbute Locks were outmoded before they were even completed. They were abandoned soon after their construction (Legget 1975: 174).

2.8.6   Navigation on the Ottawa River Today

Although steamships are a thing of the past, the river is still busy with pleasure craft and their associated docks, wharves and marinas. It is still possible to do the "Golden Triangle" by navigating from the Lake of Two Mountains to Ottawa to access the Rideau Canal system (Legget 1975: 219). Each year a few people paddle the Ottawa by canoe (221).

Several cross-river ferry services remain. These include:

* Oka to Como across the Lake of Two Mountains
* Pointe Fortune to Carillon (St. André East), offering a splendid view of the Carillon dam
* Lefaivre (Ontario) to Fassett (Quebec) near Montebello. This becomes an ice bridge in winter months.
* Thurso (Quebec) to Clarence, near Rockland (Ontario). This service was so popular that in 1962, a small canal was excavated through Clarence Island to make the route more direct. Two Ottawa-area businessmen plan to revive this ferry service using a cable ferry.
* Masson to Cumberland
* Quyon wharf to Fitzroy Harbour, providing a view of the powerhouse and dam at the former Chats Falls (Legget 1975: 222).
* Deux-Rivières to Quebec Road 834 east of Mattawa

2.8.7   Sites Related to Steamboating

* Carillon Canal National Historic Site. The lower lock on the original Carillon canal is visible and restored.
* Traces of the Horse Railway. Ties are visible in a rock cut near Lake Aumond
* The Rideau Canal
* The Bytown Museum, Ottawa
* Musée de l'Auberge Symmes. A regional history museum in Aylmer.
* The wharves of Prescott-Russell. Some of these are now marinas, and others are underwater ruins.
* Underwater shipwrecks of the Ottawa River. Some can be seen by divers.
* The original military canal. The upstream lock of the second Grenville canal and evidence of the first canal are visible.
* Museum of the Argenteuil County Historical Society. Housed in the historic residence of the superintendent and the canal collector's house. Also former British military barracks. The museum includes models of historic steamships.
* A section of the feeder canal from the North River is still visible.
* The cribs of the Culbute canal dam are still visible.
* Various cross-river ferry services connecting Quebec and Ontario.

Summary

Today it is hard to imagine the lively steamboating traffic and trade that was so intertwined with the economic development and settlement of the Ottawa River region. The canals that permitted this traffic only exist as traces, most having been submerged by the dam at Carillon. The canal and steamboating era brought localized transformations of the Ottawa River environment. With these modifications, the Ottawa River permitted extensive travel along the Ottawa for immigrants and goods. As an important part of the industrial heritage of the Ottawa River, canals and steamboating accelerated the settlement and economic development of communities along the waterway.