



Taking a break on River Styx

## Rideau Paddling Guide 2

### Kingston Mills Locks to Upper Cataraqui River

*(includes Colonel By Lake and River Styx)*

Rideau Canal National Historic Site & World Heritage Site, Ontario, Canada

by

**Ken W. Watson**

This area bounded by Kingston Mills Lockstation to the south and the head of River Styx to the north. It includes all of Colonel By Lake and River Styx. Both lakes are open and subject to wave action so paddlers, particularly canoeists, should ensure that they do a weather check to make sure the winds are light prior to heading out on these lakes.

No specific route descriptions have been given for paddling the lakes. The map included in this guide can be enlarged (while viewing the PDF) to any level of detail you desire as an aid for travel planning.



### This Guide

This guide is designed for the day/weekend paddler. Those planning to paddle all or a major section of the Rideau Canal will want *Watson's Paddling Guide to Rideau Canal* which contains all 18 day paddling guides in one package. It can be downloaded from: [www.rideau-info.com/canal/paddling/](http://www.rideau-info.com/canal/paddling/)

### Water Access

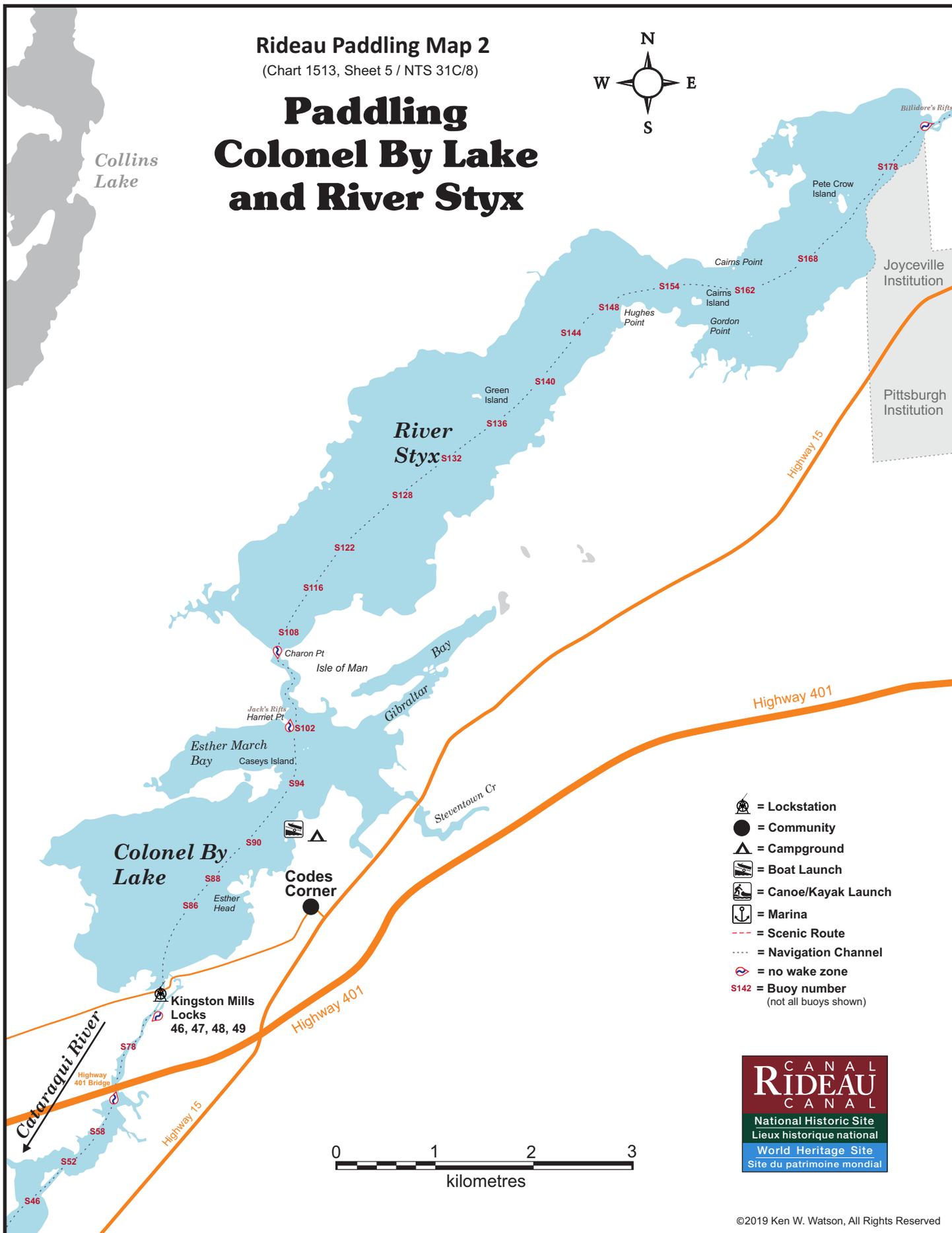
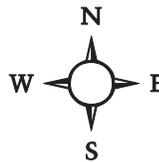
**Colonel By Lake:** The lake can be accessed from either **Kingston Mills Lockstation** (portage from the parking area to the dock at the head of the locks) or the beach or ramp at **Rideau Acres Campground** (44° 18.440'N - 76° 25.560'W). It is recommended that Rideau Acres Campground be used for those wishing to leave their vehicle overnight.

**River Styx:** The lake can be accessed from **Lower Brewers Lock** (2.6 km / 1.6 mi to the north of River Styx). A short portage from the parking area is required to bring boats to the lower dock.

# Rideau Paddling Map 2

(Chart 1513, Sheet 5 / NTS 31C/8)

## Paddling Colonel By Lake and River Styx



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## **Facilities**

**Lodging:** If you're paddling and camping, the lockstations are a good choice for camp spots (a camping fee applies). There is also a campground and few B&Bs (Kingston). For information about local accommodations see: [www.rideau-info.com/canal/](http://www.rideau-info.com/canal/) and general lodging sites (i.e. Airbnb, bbcanada).

**Supplies:** A local source for supplies is Kingston (full services) or Seeleys Bay (grocery, some hardware).

## **Big Boats**

You'll be sharing the Rideau with big power boats (cruisers). The Rideau is generally not a crowded waterway and often you'll find the large boats in "packs" – travelling from lock to lock – once they pass by you won't see any for a while. Some of these boats can generate a large wave. The general rule for a paddler and large waves is to meet them head-on, this can actually be fun in a kayak (not as much fun in a canoe). If you see waves approaching, turn into them.

The main navigation channel is shown on the maps as a blue dashed line – this is where the big boats will be travelling. So, if you wish to avoid these, pick a route away from the navigation channel. Many paddlers prefer paddling near shore, it's more interesting (i.e. wildlife, cottages) and it keeps you farther away from the waves produced by big boats.

There are several "no wake" zones on the Rideau – these have been marked on the maps. Boaters within these areas are supposed to be travelling at a slow enough speed (less than 10 kph) that their boat doesn't generate any potentially damaging or dangerous waves.

Most power boaters are considerate of the paddler and slow down, although this can sometimes cause a problem as a big boat goes from high to low speed, generating a large wave in the transition. These large transition waves can also be generated at the start and end points of No Wake zones (the locations where power boats slow down or speed up). So, be on the lookout for this type of wave.

## **Wind**

A question often asked is which way does the wind blow? The prevailing wind, powered by the jet stream, is from the southwest. That's about the only rule of thumb. If a front is moving in then the wind can come from any direction. I've been on several paddles where I've been paddling into the wind on the way out in the morning and into the wind on the way back in the afternoon because the wind swung around 180 degrees (for some reason it never seems to work the other way around - at your back both ways). So, if you're going to travel the entire Rideau, going from Kingston to Ottawa improves the odds of having the wind at your back - but be prepared for anything.

## **Etiquette**

Your trip planning should include a "leave no trace" approach - carry out what you carry in. Many areas are un-serviced (no garbage cans) - so plan to be self-contained. The lockstations provide waste disposal facilities.

## Preparation & Safety

Please read the trip planning information on [www.rideau-info.com/canal/paddling/](http://www.rideau-info.com/canal/paddling/). While these lakes are easy paddling, normal paddling preparations should be made (all required safety gear, maps, food, water, first-aid kit, etc.). Zebra mussels are present in many areas along the Rideau, so a pair of water shoes (to avoid cut feet) is recommended.

Please take all normal safety precautions, including checking the weather forecast before you head out and making sure that someone on shore knows your planned travel route and itinerary

## Navigation

While the Rideau is generally easy to navigate, taking along a set of maps is a must (in addition to any GPS you might have). Although the map in this guide is an accurate 1:50,000 representation of the waterway (when printed to 8.5" x 11"), you may also wish to also have the 1:20,000 hydrographic chart for this section (Chart 1513). For power boat navigation, the charts are an absolute must (the map in this guide should not be used for power boat navigation). The charts are also very handy for the paddler, since they show the Rideau in great detail, including depths (which can be helpful when looking for wildlife habitat or just interesting places to paddle).

The charts also show all the navigation buoys. These are all numbered (red buoys have even numbers, green buoys have odd numbers) and so can be used as an aid in locating yourself on the map when you're on open water. A subset of those buoy numbers have been included on the paddling guide maps.

For those wishing to go off the beaten path or want to know more of the topography and geographic features of the surrounding countryside, the 1:50,000 NTS map for this section is 31C/8.

## The Locks

Most Rideau lockstations offer facilities such as washrooms, water, recycling cans, waste cans and picnic tables. Most also allow camping for paddlers travelling the Rideau for a modest camping fee. Paddlers can portage the locks for free, but you owe it to yourself to lock through at least one lock in order to get the full experience of paddling the Rideau Canal. See [www.rideau-info.com/canal/](http://www.rideau-info.com/canal/) for the current fee schedule.

## Distances:

Circumference distances are approximate, following the main shorelines and bays. The navigation channel is shown on the map.

- Kingston Mills to top of River Styx along navigation channel: 13.1 km (8.1 mi)
- Kingston Mills to Lower Brewers Lock along navigation channel: 15.7 km (9.7 mi)
- Colonel By Lake circumference: 22 km (13.7 mi)
- River Styx circumference: 24 km (14.9 mi).

## The Lakes

### Colonel By Lake

In the pre-canal era this was a meandering section of the Cataraqui River which wound its way to Cataraqui Falls (location of Kingston Mills Lockstation). The damming of the river at Cataraqui Falls with the building of the first mills in 1784 created the initial lake – a mill pond that extended to just south of Caseys Island. The lake was expanded to its current size with the completion of canal dam and extensive berms at Kingston Mills in 1831. This raised the water level at this end of the lake by 26 feet (7.9 m).

The lake is shallow, the deepest point is 25 feet (7.6 m) and the lake averages about 10 to 15 feet (3.0 to 4.6 m). The shallow nature of the lake and the fact that it's at the lower end of the watershed means that it is nutrient loaded, the water normally being green (algae). A potential hazard located outside of the marked navigation channel are stumps (drowned trees), mostly in the northern part of the lake, with the tops just a few inches below the water at normal navigation level. Shallow drafting vessels such as canoes and kayaks will normally not have any problems with these except in times of low water. The green algae in the water make the stumps very hard to see.

The land bordering the lake is privately owned except for the federal lands around the lock. Much of the lake has moderate density cottage and summer home development.

### River Styx

Similar to Colonel By Lake, this was a meandering section of the Cataraqui River that was drowned by the raising of the canal dam and berms at Kingston Mills. After the opening of the canal in 1832, this region and Colonel By Lake were collectively known as the "Drowned Lands." The area of River Styx had been a standing forest, the navigation channel was chopped out and the rest of the forest drowned. An 1851 painting shows it as "River Sticks (Styx)" but by the early 20th century it was known solely as River Styx.

It is a very shallow lake, it averages only 7 to 10 feet (2 to 3 m) deep in the navigation channel.

The lands bordering the lake, with the exception of the federal lands of Joyceville Institution (a penitentiary) are privately owned. Most of the lake is surrounded by farmland with a few areas of moderate density cottage/summer home development.

## POINTS OF INTEREST (listed south to north)

**Kingston Mills Lockstation:** This lockstation features four locks, three in-flight and a detached lock. The total lift is 48.0 feet (14.6 m). The lockmaster's house (Robert Anglin House) now serves as a visitor's centre for the locks. The small blockhouse dates to 1832 and is one of only four built along the Rideau. It has been restored to the military period and is sometimes open with an interpreter [closed by Parks Canada in 2012 due to budget cuts].

An interesting configuration at Kingston Mills is the basin formed by the old dam and the new dam. Originally there was just the stone dam with incorporated waste water weir (sitting on the bedrock head of Cataraqui Falls). When it was proposed to add a hydro generating station in 1913, a new concrete dam was built below the stone dam – this formed the basin. The configuration is such that the Rideau Canal (Parks Canada) maintains full control the water flow (via their weir).

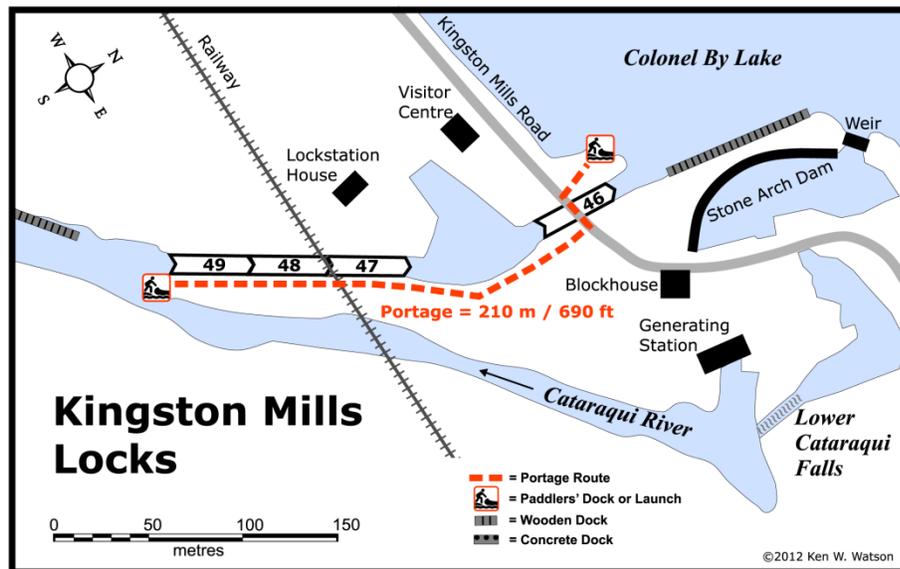
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Note too the large berms (rebuilt in 2004) to both the east and west of the locks. Originally, two locks were going to be placed farther upstream (at Jack's Rifts and Billidore's Rifts), but as with all the lockstations, plans had to be changed to meet conditions. It was decided to put all the locks at Kingston Mills and raised the water from here all the way to Lower Brewers. This meant creating these large embankments (berms) to help impound the water.

The original bridge across the upper lock was a double leaf timber drawbridge built in 1831. It was replaced some time later by a wooden swing bridge (easier to use than a drawbridge). In 1956 a steel through plate girder swing bridge was installed. That bridge was replaced by another steel swing bridge in 1988. This bridge was rehabilitation in the fall/winter of 2016-17.

The first bridge at Kingston Mills was a fixed timber bridge, placed across Cataraqui Falls, when the Kingston-Montreal road was completed in about 1801. In 1909 a steel bridge was built to replace the previous wooden structure. This fixed bridge was replaced during the fall/winter of 2016/17.

The locks bypass Cataraqui Falls of which only the lower portion is visible today (the canal dam is built on the head of the falls). A native portage used to lead around the falls. These falls, which originally had a drop of about 20 feet (6.1 m), were the site of the first mills in the area, the King's Mills, built in 1784. A succession of both timber mills (1794-1863) and grist mills (1794-1904) were built and used here.



**Colonel By Lake:** The west side of this man-made lake is mostly undeveloped (farm frontage) while the east side has cottage and summer home development - so you'll find the best wildlife viewing opportunities along the west shoreline. The foot of the channel at the head of the lake (Harriet Point) is the location of Jack's Rifts - a small set of rapids (now drowned) where a lock was originally proposed.

**Colonel By Lake Stumps:** If you're off the navigation channel in the northern part of the lake, you may notice some stumps sitting a few inches underwater. These are what is left of the forests of the region, which were drowned when the water was raised with the building of the locks, dam and embankments at Kingston Mills. These are still rooted trees, if you're carrying the navigation charts you'll be able to see how tall these are (if you see a stump in 20 feet of water, you're looking at the top of a 20 foot tree trunk).

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When the Rideau Canal was built, Colonel By had a wide (about 60 m / 200 ft) swath cut through the existing forest in the vicinity of the Cataraqui River between Kingston Mills and Upper Brewers before the area was flooded. This cut path followed a much straighter line than the meandering river and this is what today's buoyed navigation way represents. Canal era maps show this cleared route in relation to the original meandering river. The forests on either side of this cleared channel were simply drowned.

Most of these and other stumps that you will see in standing water on the Rideau Canal date to about 1831, when the canal dams were completed and the area above those dams flooded. If the tree was 100 years old when flooded, then you're looking at a tree stump that started off as a sapling in 1731.

In the case of Colonel By Lake, the original mill dam (for the King's Mills and subsequent timber and grist mills) flooded the Cataraqui River and surrounding forest up to the area of Caseys Island, starting in 1784. So, some of the stumps in that area may date back to that time. Originally they were full size dead trees. A few were cut but most have simply been broken or rotted off at the ice line.

A painting showing River Styx in 1844 shows a forest of dead standing timber, many with either an Osprey or Great Blue Heron's nest near the top. Herons in particular prefer to make a nest at the top of a dead standing tree, there are still heron rookeries (nesting areas) today in swampy areas with dead trees bordering the Rideau Canal.

**Jack's Rifts:** The foot of the channel between River Styx and Colonel By Lake (Harriet Point) is the location of Jack's Rifts - a small set of rapids where a lock was originally proposed. These rapids were drowned by the water raised by the canal dam and berms at Kingston Mills.

**River Styx:** Much of the shoreline of this man-made lake is undeveloped (farm frontage). Keep your eye out for Green Herons, a colourful smaller member of the heron family. As with Colonel By Lake, you may see stumps off the navigation channel, remains of the drowned forest, and the reason for the original name of the lake as River Sticks.

As noted in the Colonel By Lake writeup, the buoyed channel doesn't directly follow the original channel of the Cataraqui River, which was more of a meandering creek. As of this writing, the present navigation channel and old meandering creek channel can be seen in satellite photos (i.e. Google Earth) at the head of River Styx.

**Joyceville Institution:** This is a medium-security federal penitentiary.

**Billidore's Rifts:** The head of River Styx marks the location of Billidore's Rifts, a small set of rapids where a lock was originally proposed. These rapids were drowned by the water raised by the canal dam and berms at Kingston Mills.

**Cataraqui River:** Today the Cataraqui River is a deeper, straighter river than the original meandering creek. Much of today's navigation way was cut through the pre-canal forests (to straighten the route). But you can still spot some of the meanders of the original creek. The river was significantly deepened by the building of the canal dam at Kingston Mills.

Just south of Lower Brewers, you'll find some apple trees growing on the banks of the river (presumably grown from seeds blown from the apple orchard located near Lower Brewers). So, if you're paddling that area in September and want a snack, you may find some nice apples within picking range from your boat.

## Route Suggestions

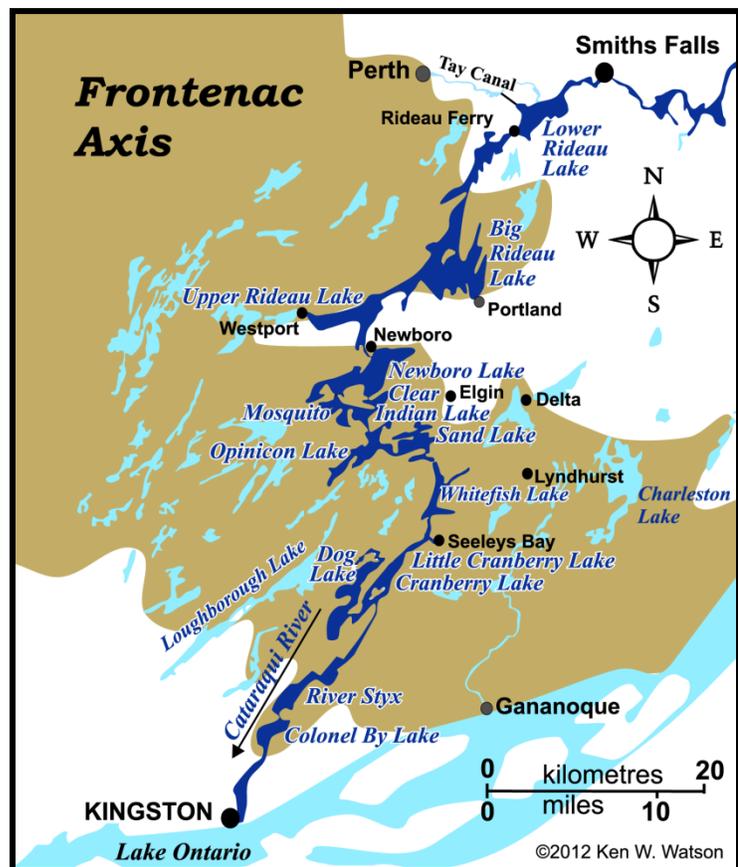
No specific route suggestions have been provided.- These lakes are most interesting for shoreline putterings.

## Geology of the Rideau Canal

As you paddle the Rideau Canal, the route you follow is defined by its geology. The area is underlain by part of an old mountain range, the Grenville Mountains, eroded down over many millions of years. Much of this eroded mountain range has been covered by younger sedimentary rocks, but portions of the old mountains are exposed, partly a result of their original topography and partially due to the eroding away of younger overlying rocks. This area is known as the Frontenac Axis. In essence, if you paddle from Kingston to Smiths Falls, you'll be paddling over a (very old) mountain range.

The Frontenac Axis can be thought of as a ridge connecting the extensive area of the Canadian Shield to the north and the Adirondack mountains to the south. On the Rideau, the southern irregular boundary of the Frontenac Axis is near Kingston Mills and the northern irregular boundary is on the northern reaches of Big Rideau Lake. The Frontenac Axis is made up of rocks formed 1.35 to 1.06 billion years ago (Precambrian: middle to late Proterozoic age) and then deformed and metamorphosed 900 million years ago. The rock types that you'll be able to see as you travel through the Frontenac Axis include granite, syenite, monzonite, migmatite, gabbro, quartzite, marble, gneiss and pegmatite. Many of the lakes are underlain by marble (crystalline limestone) which provides some buffering against acid rain.

To the north and south of the Frontenac Axis are younger, 520 to 460 million year old (Paleozoic: Cambrian to Lower Ordovician age) rocks including limestone, sandstone, dolomite, shale and conglomerate. Most of these rocks were laid down in a shallow sea that covered this area, which was near the equator at that time (part of Laurentia which eventually became part of North America due to continental drift). The rocks near Kingston are dominated by limestone which provided much of the building material for the early town (hence the nickname, Limestone City). In the centre part of the Rideau, on the margin of the Frontenac Axis, the younger sedimentary rocks tend to be dominated by sandstone. Beyond that, from Smiths Falls to Ottawa the rocks are mostly dolomite, limestone and shale.



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More recently, three events have impacted on the landscape - the ice last age, glacial Lake Iroquois and the Champlain Sea. During the last ice age, which peaked about 20,000 years ago, the Rideau area was covered by ice up to 1.5 kilometres (1.0 mi) thick. The ice polished and moved rocks, excavated some of the landscape and left large deposits of sand and gravel. The weight of the ice depressed the landscape by about 175 m (575 ft) below where it is today.

By 14,000 years ago, the climate began to warm up, melting the glaciers and forcing them to retreat. In the area of Lake Ontario, today's exit of the lake down the St. Lawrence River was blocked by ice and a large lake, about 30 m (100 ft) higher than today's Lake Ontario, formed. That lake, known as Lake Iroquois, extended as far north as Perth and Smiths Falls.

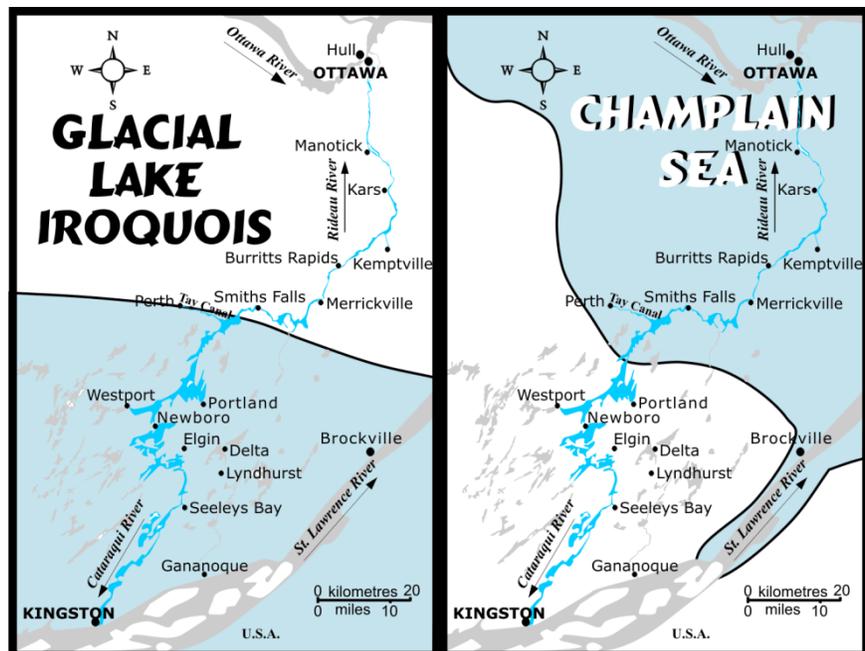
Evidence of that lake exist today in form of glaciolacustrine (a big word for glacial lake) deposits. These include near shore sediments such as gravel and gravelly sand, and deeper water deposits such as silt and clay. These deposits are found all over the southern Rideau, including on heights of land, such as near the top of Rock Dunder. This is because the overall landscape was depressed, and features such as Rock Dunder formed part of the bottom of this large lake.

By about 13,350 years ago a channel opened up in the ice dam (near Rome, NY), rapidly draining much of the lake. At the same time the land was rising as the weight of the ice was removed (this rising is called "isostatic rebound").

As Lake Iroquois and subsequent glacial lakes were getting smaller, the glaciers were continuing their retreat from the St. Lawrence lowlands. About 13,000 years ago this allowed waters from the Atlantic Ocean to mix with glacial melt-waters and river drainage to create a brackish sea known as the Champlain Sea which extended past (west and south) of Ottawa.

The southern limit of this sea on the Rideau Canal was near Nobles Bay of Big Rideau Lake. If you were paddling the sea back then, you would have been enjoying it in the company of whales. The bones of a humpback whale were found near Smiths Falls and beluga (white) whale bones have also been found in Champlain Sea deposits. This sea retreated as the glaciers moved north and the land continued to undergo isostatic rebound. By about 11,100 years ago, the central Rideau had risen above sea level and the land that we see today was being revealed. Rivers and streams continued to modify the landscape up until the building of the Rideau Canal.

There are a some interesting geological features in the Ottawa area. The northern part of the Rideau River is the youngest part of the waterway (outside of canal altered sections) since, in the immediate post-glacial period, the Ottawa River had a channel to the south of where it is today, across much of urban



**Very generalized representations of glacial Lake Iroquois and the Champlain Sea in the Rideau region.**

Ottawa to the Mer Bleue area (where the trace of the old Ottawa River channel can be clearly seen). It eventually shifted north (due to isostatic rebound) to its present location and cut a deep channel. The faster excavation by the Ottawa River, through the underlying limestone rocks, compared to the Rideau River, formed Rideau Falls.

Another geological feature at Ottawa is that much of the area is underlain by a thick clay layer, a type of “quick clay” known locally as Leda clay (named after a type of small clam found in the clay deposits). Quick clay is a clay that is not well bonded and is subject to liquefaction, that is, when vibration is induced, it can turn into a liquid and flow. When undisturbed, it looks and acts like a normal solid form of clay. It was formed by glacial silt settling out on the bottom of the Champlain Sea. There it formed a stable type of marine clay, “glued” with salt. When the sea retreated due to the rising land, this clay was exposed to rainfall that removed much of that salt bonding, creating the unstable clay that is present in much of the region today. Earthquakes can cause this clay to liquefy, leading to landslides. Ottawa is a seismically active region (earthquake prone) and, in the future, an earthquake is going to play havoc with the city (if I lived in Ottawa, I’d check to see if my house is sitting on bedrock or on clay).

## **Mining in the Rideau Region**

The rocks of the Frontenac Axis are host to some small mineral deposits, several of which were mined in the mid-late 1800s and in the early 1900s. In the Rideau Canal region, minerals such as apatite (for phosphate, used as a fertilizer), mica, feldspar, graphite and iron were mined. A few of these old mining areas have been noted in the guides.

Some of the earliest mining in the region was for rocks to be used for the dams and locks of the Rideau Canal. Rocks of the Frontenac Axis were not suitable for this purpose (too hard and often fractured) and so quarries to mine rocks for the canal were established in the younger sedimentary rocks, mining sandstone or limestone. You can see the local geology reflected in the type of rocks used for the building of the locks and dams along the Rideau; limestone in the southern area, sandstone (Potsdam sandstone) in the central Rideau and dolomitic limestone and limestone in the northern part.

The first mine on/near the Rideau Canal (excluding the small scale iron mining near Lower Beverley Lake in the early 1800s) was the iron mine on Iron Island near Newboro opened by the Chaffey brothers, John, Benjamin and Elswood, in about 1850. Phosphate mining (for fertilizer, most was shipped to England) started in the Rideau area in about 1867 and continued to the early 1890s. By the late 1880s, mica mining was also underway. Apatite (phosphate) and mica form in the same geological environment, so several mines which started off mining phosphate were later mined for mica. Mica mining ended in the 1920s as the value of the mineral fell to uneconomic levels.

Today, mining in the region is mostly surface quarrying for sand, gravel, and stone.

## **Wildlife of the Rideau Canal**

The Rideau spans a wide variety of ecosystems, due in part to the underlying geology and man’s activity in the last 200 years. The Frontenac Axis, a section of the Canadian Shield (Precambrian rocks - very old) underlies the Rideau from Kingston Mills to Lower Rideau Lake. These hard rocks form rugged topography (hills, ravines), including the basins for the lakes on the system. Most of the lakes are underlain by crystalline limestone which acts as a buffer against acid rain (hence the lakes are very productive for fish and other aquatic life). Outside of the Frontenac Axis, younger (Palaeozoic) flat lying

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sedimentary rocks form the underlying bedrock (it is from these rocks that the stones for the dams and locks were quarried).

The area has been actively logged since before the canal was built, the entire area cut over several times. Most of the region (including many of the islands in the lakes) was farmed or used for cattle pasture at one time. By the early 20th century, small farms on poor Frontenac Axis lands were being abandoned in favour of better (more productive) pastures.

So today, along the Rideau you'll find forested areas (some now 100 years mature), active farmland, scrubland and abandoned farmland, low density cottage/summer home developed (rural) land and urban land. The forests are generally mixed, deciduous trees (oak, maple, ash, basswood, birch, elm) and conifer trees (most commonly white pine, white spruce and cedar). On flat lying topography you'll find cedar swamps, hardwood (black ash & silver maple) swamps, and bogs. Along the margins of the Rideau Canal you'll find cattail marshes. All these areas support a varied and healthy wildlife population.

The following is a list of the most common wildlife that you might spot on your Rideau journey. Note that photos of many of these birds and animals can be found on my Rideau website at:

[www.rideau-info.com/canal/ecology/fauna.html](http://www.rideau-info.com/canal/ecology/fauna.html)

### **Water Birds**

**Common Loon** - on all the lakes, this bird is distinctive for its haunting call. It's a diving bird, swimming underwater to catch fish

**Great Blue Heron** - along the entire Rideau, a large bird usually seen wading near shore.

**Green Heron** - most commonly in the shallow water sections (Colonel By Lake, River Styx, Rideau River) this is a small heron. Usually seen perched in a tree.

**Canada Goose**- yes, we have these (more each year)

**Ducks** - most commonly the Mallard duck (quacks when flushed), American Merganser duck (a pointed red bill) and Wood duck (squeaks when flushed).

**Pied-billed Grebe** - In some areas you'll also spot the reclusive Pied-billed Grebe (a small diving bird).

**Ospreys** - now common along the Rideau - often spotted in their large nest made of sticks perched high in a pine tree or a power line stanchion. It dives to catch fish (quite spectacular to see)

**Ring-billed Gull** - a gull with mark on bill

**Terns** - the Common Tern, a large white tern with dark bill and the Black Tern, small tern with black body (adult)

**Trumpeter Swans** - An extirpated native species in this region, they were re-introduced in the 1990s. Favourite haunts include Opinicon Lake and Big Rideau Lake (near Narrows and Portland).

### **Other Birds**

There are many other types of birds that you might spot in the near-water environment; red-tailed hawks, red-winged blackbirds, turkey vultures, turkeys, ruffed grouse and many more (bring along your bird book).

## Reptiles and Amphibians

**Turtles:** we've got lots of turtles - most common are the Common Map Turtle (a peaked shell and yellow-orange lines on the skin and shell); Midland Painted Turtle (a flat smooth shell with bright red splotches along the edge) and the Common Snapping Turtle (can get very large, a prehistoric looking turtle). You'll often find Map and Painted turtles sunning themselves on logs and rocks. The Snapping turtle almost always stays in the water, you'll find it floating or slowly swimming near marshy areas. There are also three other less commonly seen turtles, the Stinkpot Turtle (aka Musk Turtle) a small turtle found in areas with aquatic plant growth; Blanding's Turtle with a "war helmet" type shell and bright yellow chin and throat, usually found in wetlands and the Spotted Turtle, a small turtle with bright yellow spots on its shell, usually found in areas with aquatic plants and a silt bottom.

**Frogs:** we have lots of frogs that will provide you with a nightly serenade. The two biggest are the bullfrog and the green frog. Also the leopard frog, spring peeper and many others.

**Snakes:** we do not have any poisonous snakes. The two largest snakes are the Northern Water Snake and the Black Rat Snake - both generally found near water. The common garter snake can also be found throughout the region.

## Mammals

In the near shore environment you'll likely spot muskrats and beavers. You may even spot the somewhat reclusive river otter (found in the lakes here as well as rivers). And there are the usual Eastern Ontario mammals to be sometimes found near the water: raccoons, black, grey and red squirrels, chipmunks, foxes, coyotes, white-tailed deer and skunks. Black bears, although quite rare in the region, are present.

## Fish

The Rideau is home to healthy populations of many fish species. The lakes and most of the rivers are home to species such as Large Mouth Bass, Small Mouth Bass, Northern Pike and Crappie. Lake Trout are present in some lakes that have depths in excess of 80 ft / 24 m (i.e. Big Rideau Lake). There are Walleye in some areas (i.e. Upper Rideau Lake and the Rideau River) and Muskellunge (Musky/Maskinonge) in some sections of the Rideau River.

## Aquatic Plants:

The Rideau hosts quite a variety of aquatic plants.

**Submerged Plants:** Waterweed (like aquarium plants); Pondweed; Smartweed (holds flower above surface of water); Tape-grass (like underwater grass, flower on coiled stem); Coontail (like a thick furry coon's tail); Water-milfoil (one species an invasive plant).

**Aquatic Plants ( floating):** White Water-lily (white fragrant flower); Bullhead Water-lily (round yellow flower); Frogbit (invasive alien, small floating leaf like water lily); Duckweed (food for ducks, tiny plant)

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**Aquatic Plants (emergent):** Cattail (big brown seed heads); Pickerelweed (blue flowers on stalk); Flowering Rush (invasive alien); Arrowhead (arrowhead-pointed leaves, white flowers); Purple Loosestrife (invasive alien, now controlled by beetles in some areas).

Oh - and those amorphous green blobs floating under the water in near-shore areas. They are benign (not due to pollution), a type of filamentous green algae. Their abundance is due to zebra mussels which don't eat this type of algae, but do eat their competition (single-celled algae) - and so, by removing the competition, have allowed these blobs to expand in numbers and length of season.

*My thanks to Simon Lunn and the Rideau Roundtable ([www.ridearoundtable.ca](http://www.ridearoundtable.ca)) for assistance with the wildlife and aquatic plants information.*

Those interested in some tips for taking good photos of wildlife should view "The Nature of Wildlife Photography" on my website at: [www.rideau-info.com/canal/ecology/nature-photography.html](http://www.rideau-info.com/canal/ecology/nature-photography.html)

One photography hint, a very simple one, is to choose a paddling route that puts the sun to your back for most of the day. Try to choose a route that has you on a west shore in the morning, a north shore at mid-day and an east shore in the afternoon. For those doing the entire Rideau, this means going from Kingston to Ottawa rather than the other way around. This will put the wildlife that you see on your paddle in the best light.

### **Errors**

If you find any errors or omissions in this guide, please let me know ([rideauken@gmail.com](mailto:rideauken@gmail.com)) and I'll get them fixed.

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