



Paddling through Kilmarnock Lock

Rideau Paddling Guide 12

Edmunds Lock to Merrickville Locks

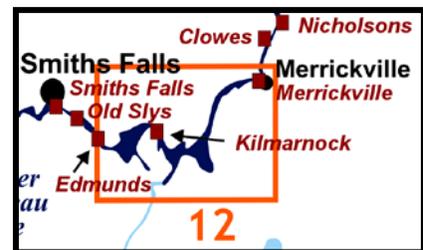
(along the Rideau River)

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

by

Ken W. Watson

This is an easy paddling river section of the Rideau River, with lots of marshland bordering the river in this area. 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.



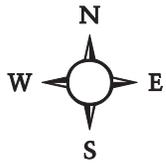
Water Access

Water access is available at Edmunds Lock, Kilmarnock Lock and at Merrickville. For the paddler the easiest is either **Edmunds** (ramp - 44° 52.600'N - 75° 59.020'W), **Kilmarnock** (shoreline - 44° 53.060'N - 75° 55.820'W) or the canoe launch in **Merrickville** (44° 55.980'N - 75° 50.690'W - on the rec centre grounds, just past the public library). There is plenty of parking at all these locations. In Merrickville, another option is the ramp in the Lions Park Campground (44° 55.020'N - 75° 50.580'W).

Facilities

Lodging: If you're paddling and camping, the lockstations are a good choice for camp spots (a camping fee applies). There is also the Lions Park Campground in Merrickville, a host of B&Bs and several hotels (Merrickville and Smiths Falls). For information about local accommodations see: www.smithsfalls.ca, www.realmerrickville.ca, and www.rideau-info.com/canal/ and general lodging sites (i.e. Airbnb, bbcanada, TripAdvisor).

Supplies: A local source for supplies is the town of Smiths Falls which has which full facilities (grocery stores, pharmacies, hardware stores).

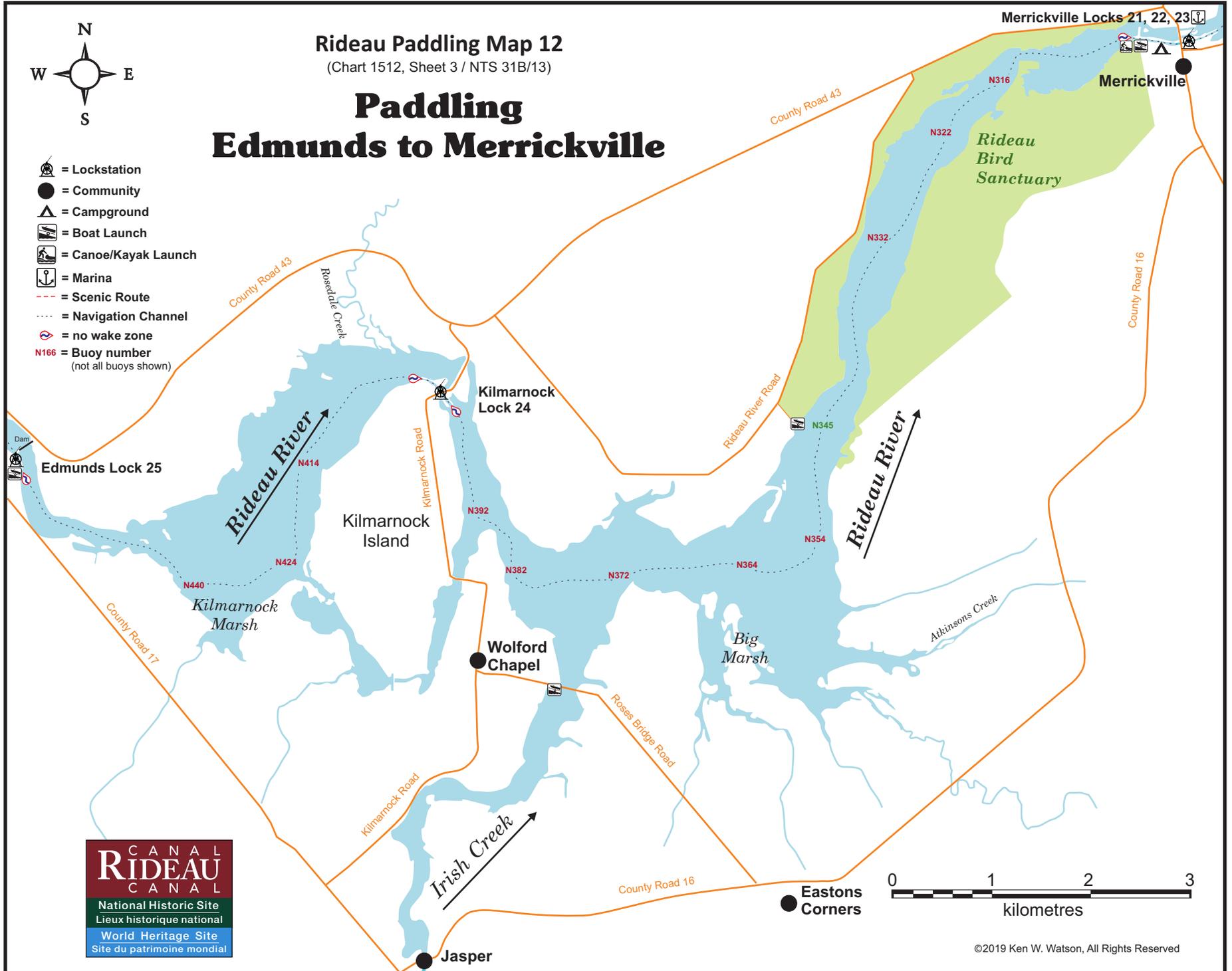


Rideau Paddling Map 12

(Chart 1512, Sheet 3 / NTS 31B/13)

Paddling Edmunds to Merrickville

- = Lockstation
- = Community
- = Campground
- = Boat Launch
- = Canoe/Kayak Launch
- = Marina
- = Scenic Route
- = Navigation Channel
- = no wake zone
- N166** = Buoy number
(not all buoys shown)



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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 awhile. 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).

The main navigation channel is shown on the map 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. .

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/. 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

Rideau Paddling Guide 12: Edmunds Lock to Merrickville Locks by Ken W. Watson

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 1512). 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 31B/13.

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/ for the current fee schedule.

Distances:

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

- Edmunds Lock to Kilmarnock Lock along the navigation channel = 6.0 km (3.7 mi)
- Kilmarnock Lock to Merrickville Locks along the navigation channel = 12.5 km (7.8 mi)
- Edmunds Lock to Merrickville Locks along the navigation channel = 18.5 km (11.5 mi)
- Edmunds to Kilmarnock - shoreline circumference = 14 km (8.7 mi)
- Kilmarnock to Merrickville - shoreline circumference = 36 km (22.5 mi)

The Rideau River

The Rideau River is generally a slow moving river, the only appreciable currents will be from the outflow of the canal weirs during times of high water. The main hazard are these same weirs, some of which have overflow dams. These are well marked on the upstream side and paddlers should avoid getting too close to these. Zebra mussels are present. Aquatic vegetation growth is present in most sheltered areas with a depth of less than 10 ft (3 m).

Edmunds Lock to Kilmarnock Lock

In the pre-canal era, the river was about 2 ft (0.6 m) lower than it is today at the foot of Edmunds, and about 6 ft (1.8 m) lower at the head of Kilmarnock. The completion of the lock and weir at Maitland's Rapids (today's Kilmarnock) in the fall of 1831 raised the water in the river to the level it is today.

Rideau Paddling Guide 12: Edmunds Lock to Merrickville Locks by Ken W. Watson

The river channel has a maximum depth of 10 ft (3 m). The water depth outside of the marked channel averages about 4 ft (1.2 m). The land bordering the river is all privately owned except for the federal lands at the lockstations. There is little cottage/home development in this section, just a few spots where there is road access to non-marshland shorelines.

Kilmarnock Lock to Merrickville

In the pre-canal era, the river was about 3.5 ft (1.1 m) lower than it is today at the foot of Kilmarnock, and about 6 to 8 ft (2 to 2.5 m) lower at the head of Merrickville. The completion of the lock and weir at Merrickville in 1831 raised the water in the river to the level it is today.

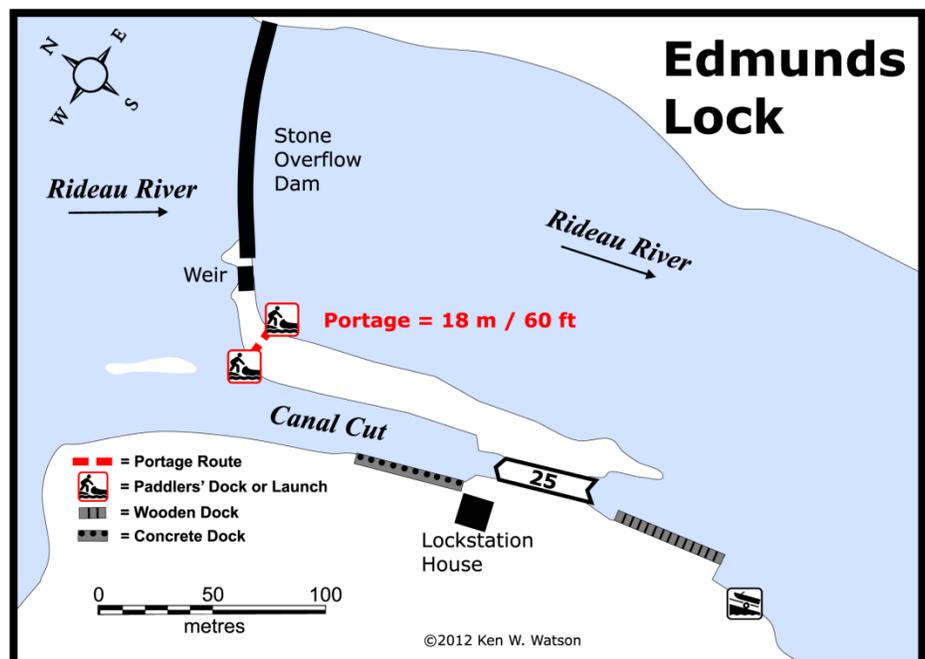
The river channel has a maximum depth of 15 ft (4.6 m). The water depth outside of the marked channel averages about 4 ft (1.2 m). The land bordering the river is all privately owned except for the federal lands at the lockstations. There is only a few spots with cottage/home development in this section, locations where there is road access to non-marshland shorelines.

POINTS OF INTEREST (listed south to north - see Map 12 for locations)

Edmunds Lock: This lockstation has a single lock, a weir and an overflow dam. The lock has a lift of 9.2 ft (2.8 m). A two-storey lockmaster's house is located on site (the lockstation office today). It was built in 1905, replacing an earlier stone defensible lockmaster's house that had been built here in the 1840s. Edmunds, accessed by road from County Road 17 (south side of the Rideau River) features extensive grounds (verdant lawns with large shade trees), lots of parking, and a boat launch.

This lockstation features a stone arch overflow dam. Originally, all of the dams designed by Colonel By and the other Royal Engineers were to be overflow dams (including the largest, the huge dam at Jones Falls). But, after seeing the effect of spring flooding, By quickly changed his plans, making many into non-overflow dams and adding waste-water weirs to all of them. In the case of Edmunds we have a combination of both - an overflow dam with a waste-water weir. He explained the weir in an 1830 report noting "the addition of a Waste Weir to preserve the Dam from the effects of Spring Floods." The dam has been doing a great job, it's only required normal maintenance. The weir was rebuilt in 1906-07.

Edmunds or Edmonds? The lock is named after James Edmunds, the first settler in this area. Over the years his name has been spelled Edmunds, Edmonds and even Edmons. Currently



Rideau Paddling Guide 12: Edmunds Lock to Merrickville Locks by Ken W. Watson

Parks Canada used Edmunds and the Canadian Hydrographic Service (charts) uses Edmunds. Either is fine. At one point this lock was known as Mills Lock (after the name of the first two lockmasters), removing the issue of how to spell Edmunds.

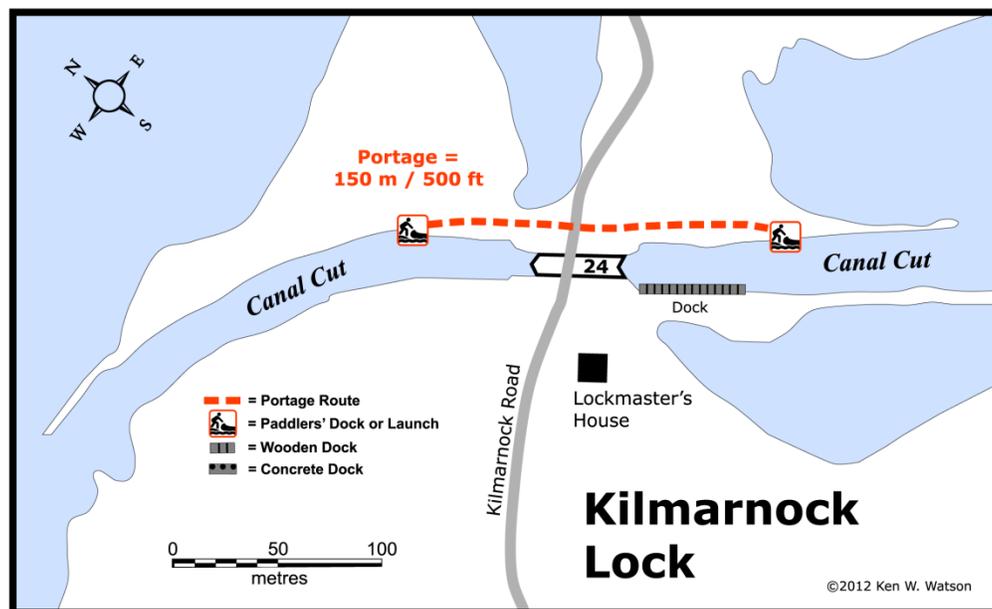
Rideau River – Edmunds to Kilmarnock: This peaceful section of the Rideau River provides lots of wildlife viewing opportunities along the marshy borders of the river.

Kilmarnock Lock: This lockstation has a single lock and a weir. It has the lowest lift of any lockstation on the Rideau at only 0.7 m (2.2 ft). It also has one of only four remaining unequal arm, center-bearing timber swing bridges on the Rideau. It has a two storey lockmaster's house, used today as the lockstation office.

The low lift is due to many difficulties encountered during construction. A significant problem was the boulder filled mud in the original location for the lock. The boulders were very difficult to remove with the technology of the day, as Colonel By noted "more difficult from their hard Nature to remove than Solid Rock." So, he knocked two feet off the original height of the dam and lock, moved the location of the lock to where bedrock had been found and excavated a channel into the head of the lock (this channel was deepened in 1900).

The lockmaster's house started off as a defensible one-storey house, built in the 1840s. In the early 20th century, a second storey was added and the loopholes in the original building were filled in.

The original name for this lock was Maitland's Lock (named after the location, Maitland's Rapids). The name Maitland comes from an early settler in the area, James Maitland, who operated a ferry across the river in this location. Maitland also became the first lockmaster (from 1832 to 1846). Over time, the local name, Kilmarnock, came into general use.



Rideau River - Kilmarnock to Merrickville: Extensive marshlands, including the Big Marsh, affords marshland wildlife viewing opportunities. The river also passes by the outlet of Irish Creek, once considered as a route for the Rideau Canal (see below).

Irish Creek: This creek has its origins in Irish Lake. The building of the canal flooded the creek up to Jasper. In his 1816 survey of the Rideau Route, Lt. Joshua Jebb of the Royal Engineers recommended that the route be taken by way of Irish Creek rather than through the Rideau lakes. The canal would have gone up the creek to Irish Lake where a five mile long railroad was proposed to link the route to Upper Beverley Lake and from there to Lower Beverley Lake and up Morton Creek to re-join the present-day route of the Rideau Canal. The Irish Creek route was discounted by the next survey, that of Samuel Clowes in 1823/24. Clowes pointed out two flaws with the route, it wasn't any lower than a route by the Rideau lakes (and so would require the same number of locks) and the top of the route had no water (unlike the Rideau lakes route, where the top of the route is a lake). For a paddle description, see Irish Creek in the Off the Beaten Path section.

Big Marsh: This marshy area offers some very good bird viewing opportunities. It actually provides a larger marshy area for wildlife viewing than the Rideau Bird Sanctuary.

Rideau Bird Sanctuary: This is a designated Canadian Migratory Bird Sanctuary, some 800 ha in size. The designation primarily means no hunting within the sanctuary (there are no restrictions on development). This area is used as a staging area in spring and summer for migratory waterfowl. The wetlands bordering the Rideau River in this area provide a good food source for these migrating birds. A total of 20 different species of geese and ducks have been observed using the sanctuary. You may also see wetland mammals such as muskrats, beavers and otters in the sanctuary. A word of caution is that there are submerged stumps in parts of this area (the children of a local paddler refer to parts of the RBS as "stumpland").

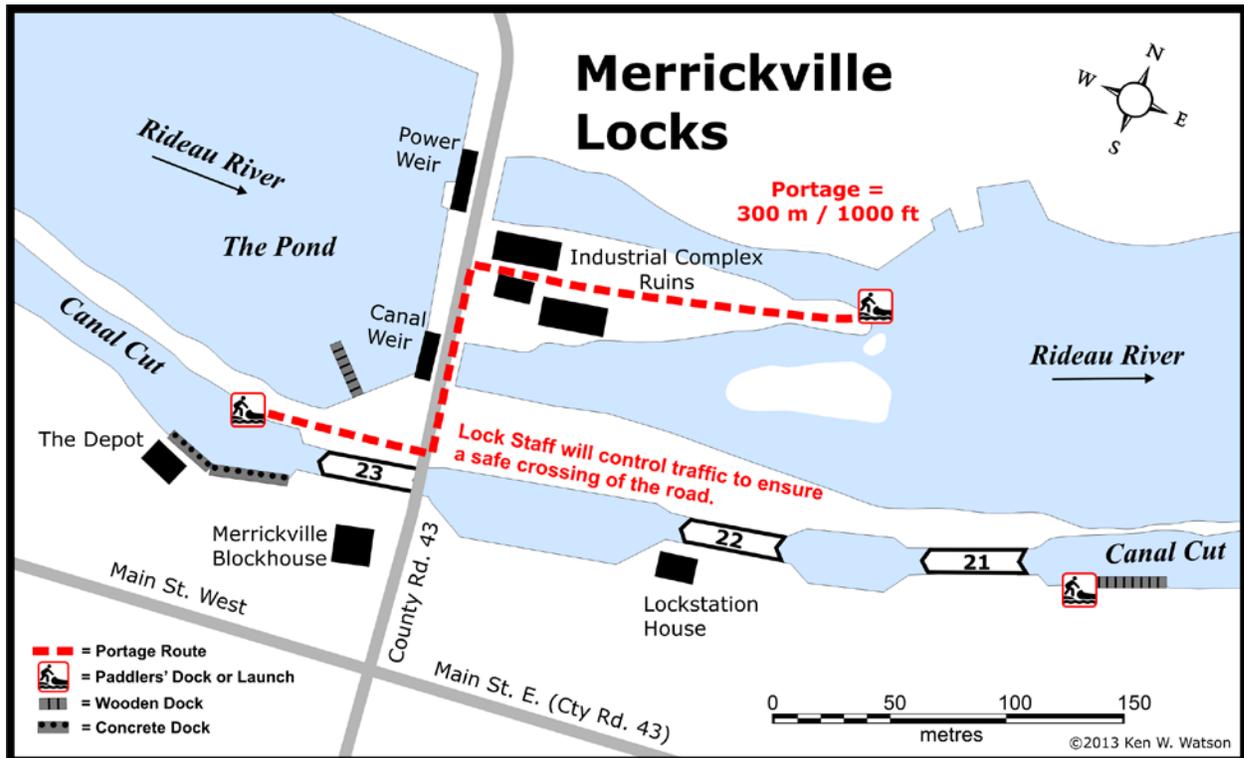
Merrickville Locks: There are three detached locks at this location (total lift of 7.6 m / 25.0 ft). The lockstation office is located adjacent to the middle lock. The largest blockhouse on the Rideau Canal is located beside the upper lock. The locks are spread out as three separate locks in order to take advantage of the topography, if they had been built as three locks "in-flight" (combined) it would have required much more excavation and/or embanking.

The original water control dam was at the head of the canal cut (see Depot to Dam Trail below). A stone dam extended partway across the river with a timber/gravel dam and waste water weir placed in the main channel. It was placed in this location to avoid interfering with the mills, which had their own dam (at or near the location of the present day dam and roadway). With the canal dam upstream in this location, the water level of the Rideau River going into the canal cut could be controlled, with most of the flow of the river going unhindered to the mills.

However, the timber construction of the weir led to all sorts of trouble and it wasn't strong enough to withstand high water flows. It was swept away in 1841 and rebuilt somewhat stronger. However, that threatened to give away in 1847 and only with the help of many residents of the town were the dam and weir saved. It was damaged again in 1862 but survived. In 1912, the position of the weir was relocated to where it is today, in alignment with the upper lock. The original weir was removed, leaving just the stone portion of the dam.

The first bridge was a rolling bridge positioned across the upper lock. It was replaced by a timber swing bridge, also across the lock, in 1843. In 1892 a steel bridge was installed on a new alignment, just below the upper lock (so that small boats could pass in and out of the lock without having to swing the bridge). The current electric swing bridge was installed in 1990.

The present day paddler's portage has one dangerous road crossing. The lock staff will be happy to provide traffic control so that you can safely cross the road.



Merrickville Blockhouse: This is the largest blockhouse on the Rideau Canal. It is open to the public during the summer season, operated by the Merrickville and District Historical Society. The grassy picnic area beside the upper lock is known as Blockhouse Park. The blockhouse was built in 1832 to help defend this critical spot (near the road to the St. Lawrence River, a likely route for American invasion forces). The building served as a home to the early lockmasters, although by the 1870s it was starting to deteriorate. The resident at the time, Lockmaster Matthew Johnson noted that "The building generally is minus of its original evenness." The foundations were sinking and the roof had separated from its support posts. In 1909, the second floor, which at the time was made of masonry, had to be removed. The government was ready to tear the building down in the early 1960s, but fortunately heritage prevailed and the building was rehabilitated in 1962-65. For more info see: www.merrickvillehistory.org.

The Depot: This is the summer home of Friends of the Rideau, who operate it as a visitor centre and retail outlet (including the sale of many books about the heritage of the Rideau). The building dates to about 1857, originally built as a storehouse with a wharf in front of it. For more info see: www.rideaufriends.com.

Merrickville: This very pretty village is filled with various artisan shops and stores that cater to visitors. It is located at the site of the "Great Falls" – a waterfall (4.2 m / 14 ft) in the Rideau River. In about 1790, this water power attracted a miller, Roger Stevens, to set up a sawmill here (he had settled in a spot a bit downstream from this location in 1789). By 1793, the year that he died of drowning, he had apparently sold it to William Mirick. William continued to develop the site and by the early 1800s, a small community, known as Mirickville was developing. The coming of the Rideau Canal allowed Merrickville to become a full-fledged village. Incorporated as Mirickville in 1860, it formally changed its

name to Merrickville in May 1862. The Rideau River continued to power a series of mills, foundries and factories through the 19th century. A heritage walking tour brochure of the town can be found at several locations and on-line.

Industrial Heritage Complex: Located on what was an island between the original channel of the Rideau River and a flood channel of the river, this area housed several stone buildings, which included at various times a grist mill, a woollen mill, an oatmeal mill, a sawmill and a foundry. Today, only ruins remain of these buildings. In the old foundry you'll find many interpretive displays created and maintained by Parks Canada.

Depot to Dam Trail: This is a trail that leads from The Depot, across the upper lock and then south, to the entrance of the canal cut. The path then goes along the top of the stone dam (the original canal dam) that extends from the canal cut to the original channel of the Rideau River. An interpretive brochure for the trail is available at The Depot (also available on-line at www.rideaufriends.com).

Off the Beaten Path

Irish Creek

Once considered as a potential route for the Rideau Canal, this is a slow moving meandering creek. The total distance from Roses Bridge (at the outlet of the creek into the Rideau River) to Irish Lake is 16.4 km (10.2 mi). The distance from that bridge (44° 51.490'N - 75° 54.860'W) to Jasper is 4.4 km (2.7 mi). This is a section flooded from the canal dam at Merrickville and features large areas of marsh and lily pads. If you want to launch right into Irish Creek, you can use the small gravel launch at Roses Creek Bridge (44° 51.490'N - 75° 54.890'W).

At Jasper, you'll find a very low concrete bridge. Depending on water levels, you should be able to slip a canoe or kayak under the bridge (remember to duck). The distance from Jasper (44° 50.015'N - 75° 55.900'W) to Irish Lake is 12.0 km (7.5 mi). The creek may be dammed in places by beavers, a few years ago I encountered the first beaver dam 2.5 km (1.5 mi) upstream from Jasper.

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.

Rideau Paddling Guide 12: Edmunds Lock to Merrickville Locks by Ken W. Watson

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.

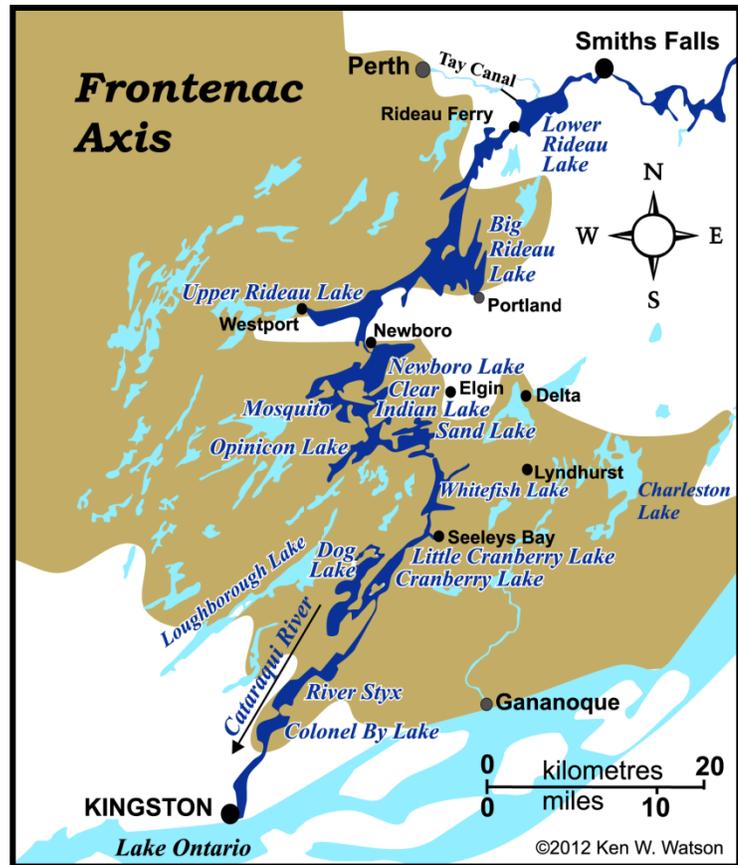
More recently, three events have impacted on the landscape - the ice last age, glacial Lake Iroquois and the Champlain Sea. During the last ice age, which peaked about 20,000 years ago, the Rideau area was covered by ice up to 1.5 kilometres (1.0 mi) thick. The ice polished and moved rocks, excavated 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.

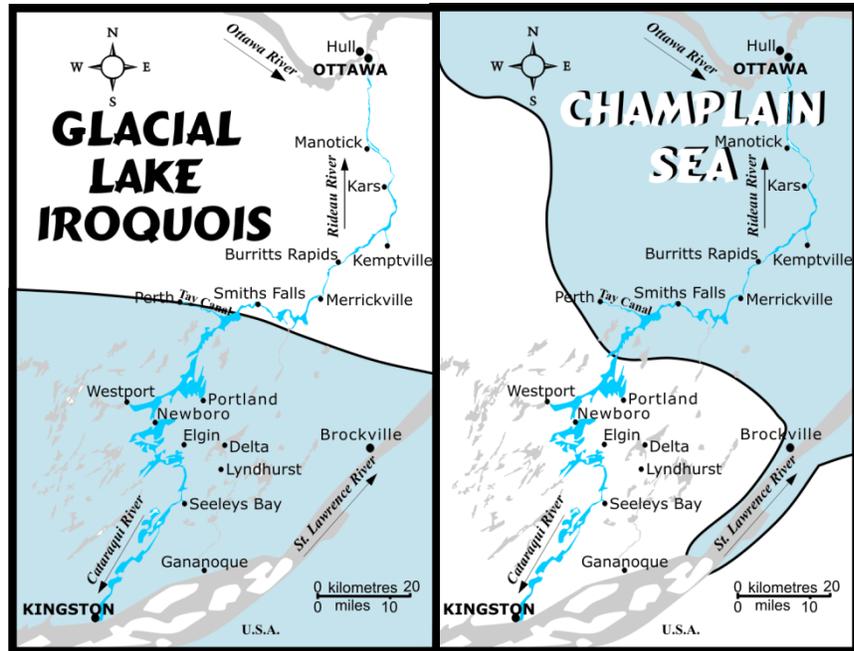
Evidence of that lake exist today in form of glaciolacustrine (a big word for glacial lake) deposits. These include near shore sediments such as gravel and gravelly sand, and deeper water deposits such as silt and clay. These deposits are found all over the southern Rideau, including on heights of land, 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.



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

There are 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 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), 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 sedimentary 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 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

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)

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) 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

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) and I'll get them fixed.

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