



RIPARIAN READS

Newsletter of the Kennebecasis Watershed Restoration Committee

SPRING 2020



Angling in the Kennebecasis Watershed

The ice is moving out of the rivers and if you're like me you are already thinking about casting that first line over a trout. The Kennebecasis is home to many fish species and anglers have lots of opportunity to enjoy the river in this activity. Before you go out though, it is important to know the rules that are in place to help keep the recreational fishery sustainable for years to come.

One of the management tools implemented on the Kennebecasis is the "**Catch and Release, Fly Fishing Only**" (C&R) reach. This starts at McCully Station Road (behind the Nutrien Mine in Penobsquis) and goes upstream to Ketchums Brook in Portage Vale. We are often asked why this rule was put in place. This stretch of the Kennebecasis has a number of deep, cold water pools; ideal gravel substrate where trout can lay eggs; good vegetative cover for protection from predators; and a relatively healthy trout population. "Fly fishing only" in the C&R reach reduces the harm to fish and makes it more likely a caught fish can be more safely released. Ideally, this will help sustain the trout fishery on the Kennebecasis for future generations of anglers (and fish).

Another sustainable management practice is respecting the annual warm water protocol period on the main stem of the Kennebecasis river starting July 1st. As of this date, the entire main stem of the Kennebecasis, from Bloomfield Bridge up to the Goshen Road covered bridge, is deemed a "fly fishing only" fishery. Fly fishing

is a more technical method of angling compared to bait fishing, which makes it more challenging and exciting for anglers when they successfully catch a fish. Many fish, during low or warm water periods, retreat to the deep pools in the main stem and to reduce the risk of someone easily fishing out an entire pool, the fly fishing only rule was implemented. The advantage for the fish is that it helps maintain population levels by limiting the number caught during the warm water conditions that place added stress on fish.

Other rules are in place to manage the small mouth bass fishery and changes are likely to be in place for that species in 2020. There are also rules around striped bass, landlocked salmon, and sturgeon so be sure to check out the 2020 Provincial Fish Guide on **NB Department of Natural Resources and Energy Development's website**.

~ Ben Whalen, KWRC Project Manager

UPCOMING KWRC WORKSHOPS & EVENTS

May 3-4 – NB Envirothon
(Mt. Allison University, Sackville, NB)

June 6th – NB Fishing Day Festivities
(Lighthouse Centre, Hampton: 9:00am-1:00pm)
(Cassidy Lake Fishing Derby: 7:00am start time)

Help us stop the spread of invasive Eurasian Water Milfoil

If you are on the water this spring and summer, be sure to keep your eyes peeled for the invasive Eurasian Water Milfoil (*Myriophyllum spicatum*). As the name suggests, EWM is native to European and Asian countries and is much less of a concern throughout its native range. This is because the plant's population is controlled by an insect called a milfoil weevil that feeds on the stems. The problem with EWM in North America is that, without any animals or insects that feed on it solely, the plant itself grows in dense mats throughout the water column.



Photo of a patch of milfoil in the St. John River.
Credit: CBC News New Brunswick

Eurasian water milfoil has taken over numerous water bodies in Ontario and Quebec and has been confirmed in 4 locations in the Kennebecasis River (see link below), and throughout the Madawaska River and Saint John River. It can grow so thick that it can block out enough light that it can make it difficult for other plants to grow. When large swaths of EWM die, its decomposition eats up huge amounts of oxygen in the water column that is vital for the survival for our native fish populations and other organisms.

A major concern for boaters in affected areas is motors becoming bogged down by the thick foliage of the plant. When EWM takes hold in a recreational water body, activities like boating, fishing, and swimming, can become next to impossible.

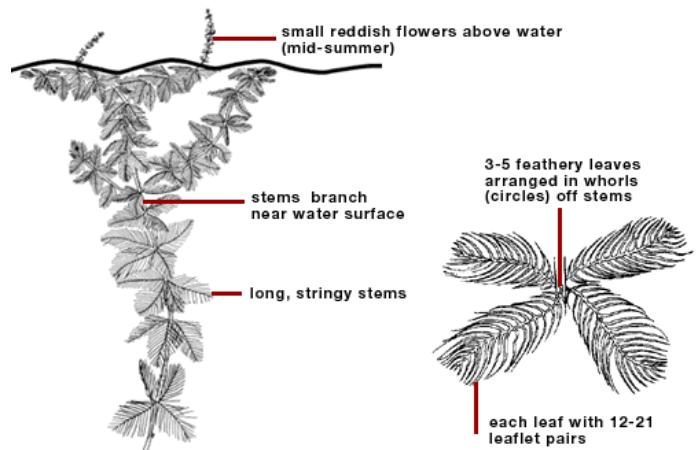


Photo of identifying features of Eurasian Water Milfoil.
Credit :Minnesota Sea Grant

The best defense against preventing the spread of EWM in New Brunswick is to follow the Canadian Council on Invasive Species' **Clean, Drain, Dry** protocol:

Clean

Inspect and clean plants, animals and mud from watercraft, trailer and gear.

Drain

Drain all water from your watercraft, trailer and gear (e.g. buckets, well, bilge, ballast etc.)

Dry

Dry all parts of your watercraft, trailer and gear completely between trips.



To report a possible patch of Eurasian Water Milfoil submit your observation to the **Eastern Charlotte Waterways, Atlantic Canada Invasive Species** project on [iNaturalist.org](https://www.inaturalist.org/projects/atlantic-canada-invasive-species):
<https://www.inaturalist.org/projects/atlantic-canada-invasive-species>

Here is a map of confirmed sightings of Eurasian Water Milfoil as of 2019.

<https://drive.google.com/open?id=19qmXmeZOeJWLdGt1Ft1QvNrLSpEV2wC1&usp=sharing>

Birds of the Kennebecasis

Spring is an exciting time in the watershed. We start to hear the rivers, brooks, and creeks open up with the sound of running water and the woods - which are often silent in winter months - begin to liven up with the calls of birds preparing for the coming nesting season. Although the watershed is home to many species of birds, we thought we would feature three of them which you may see or hear over the next couple of months and where you might find them.

Northern Cardinal (*Cardinalis cardinalis*)

Northern cardinals nest in cedar hedges, and are seen where alder grow, on fence rows, in ditches on road sides, and they often come to feeders in early morning or just before dusk.

In the spring you can often hear both males and females singing to each other, which sounds like “cheer, cheer, cheer” This link lets you hear the call :
www.allaboutbirds.org/guide/Northern_Cardinal/sounds



Credit: Paul Martin



Credit: Paul Martin

Barred Owl (*Strix varia*)

Most of our owl species are nocturnal (active at night) and the Barred Owl is one of the most common and recognizable with its song “Who cooks for you, who cooks for you all.” It can be heard at this link;
www.allaboutbirds.org/guide/Barred_Owl/sounds.

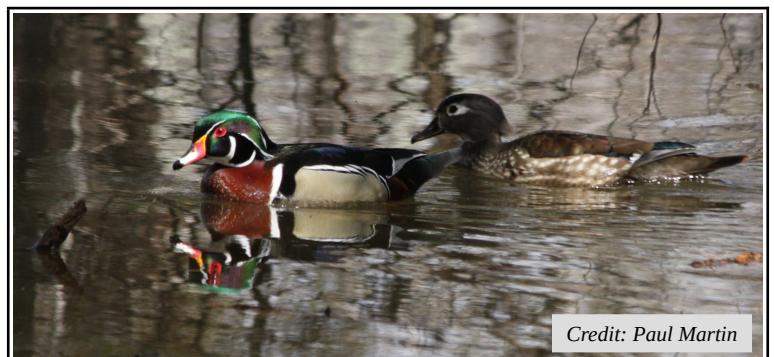
Barred Owls are often found in mixed mature forests and will nest and roost in tree cavities. Their mating season is in late winter-early spring and though you can hear owls hooting most of the year the best time to hear them is February and March.

Wood Duck (*Aix sponsa*)

We are in the process of cleaning and maintaining duck boxes at our restoration sites which are built by elementary school children though our **Habitat in a Box** program.

One of the species that utilizes duck boxes is the wood duck. One of the prettiest duck species, wood ducks are often seen swimming in the spring high waters near trees, in beaver ponds, and on slow moving rivers in wooded areas.

Females make a loud “oo-eek, oo-eek” sound and males have a zeeting whistle call which can be heard on this link;
www.allaboutbirds.org/guide/Wood_Duck/sounds



Credit: Paul Martin

~ Paul Martin, KWRC Restoration Supervisor

Microplastics and what you can do to reduce their presence in our watershed

Microplastics are extremely small pieces of plastic that can end up in the natural environment through various pathways – a major one being improper, or inadequate, waste disposal. The effects of microplastics on key ecosystem functions (such as food chains) is not yet clear, but there are teams of researchers studying microplastics around the globe to learn more and shed light on their impacts. One of these teams is in search of microplastics in the waters of the Kennebecasis watershed.

Researchers at the Environmental Change and Aquatics Biomonitoring (**ECAB**) Lab at Mount Allison University spent some time taking water and sediment samples in the watershed last summer as part of a larger study of the Saint John River watershed and our monitoring team spent some time observing and assisting them with their samples taken above and below the Sussex wastewater treatment plant.

ECAB Postdoctoral Fellow, **Andrew Labaj**, is still summarizing the results of the sampling, but shared the following information with us:

“...at present we do not have the facilities to conclusively differentiate the different types of fibers that we are finding (this requires very specialized equipment and training to operate it), so it is likely that many of the fibers we have found are actually cotton or other materials (which also likely have consequences on river health)...Our results have generally shown higher levels of suspected microplastics downstream of wastewater treatment plants on the Kennebecasis compared to upstream, likely suggesting that wastewater treatment plants

are a point source. Many of these are probably coming from laundry – clothes shed many fibers when they are washed. There are products on the market now that can filter and remove many of these from washing machine wastewater. Wastewater treatment plants are generally fairly effective at removing microfibers from wastewater, but obviously some do make it through the treatment process and are released to the environment. Furthermore, sludge from wastewater treatment plants (where most of the trapped microfibers are contained) is occasionally spread on farm fields as fertilizer, providing a route for these into the environment and into waterways, even though they had previously been removed in the water treatment process.”

We look forward to learning more of the results of their research in the Kennebecasis when it becomes available. In the meantime, if you are wondering what you can do to reduce microplastics entering the watershed, Dr. Labaj suggests:

- Wash clothes sparingly, and install a lint trap.*
- Choose clothing made of natural fibers when possible.*
- Reduce usage of plastic bags when shopping. Buy foods with less packaging. Use re-usable bags.*
- Recycle properly, ensure that plastics are re-used or repurposed as much as possible.*
- Clean up plastic litter when you see it!*
- Reduce plastic usage whenever possible, and when it can't be avoided, dispose of it properly.”*

~Sarah Glinz, KWRC Education Outreach Coordinator

KWRC STAFF



Ben Whalen
Project Manager



Melissa Rafuse
Monitoring Coordinator



Sarah Glinz
Education & Outreach
Coordinator



Paul Martin
Restoration Supervisor



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