Newsletter Winter 2022



Grant Summary: Tracking Bacteria in the Lamprey River

For many years, people have asked LRAC members if the water in the river is safe for fishing and swimming. From all the data we have found and based on NH classifications, the river as a whole is fishable and swimmable. But the devil is in the details and those are not always easy to find. The state tests public beaches for bacteria, but the Lamprey River does not have any public beaches.



In the summer of 2021, Dr. Steve Jones and his team from UNH took monthly water samples at four locations along the Lamprey River: where Moonlight Brook empties into the Lamprey River in Newmarket, Newmarket harbor, the impoundment at Wiswall Falls in Durham, and the Public Canoe Access in Lee. They looked for overall fecal bacteria counts and then determined the DNA source of those bacteria: human, dog, cow, horse, geese, gull, and mammal.

Students taking water samples in Newmarket Photo by Steve Jones

Here are some of the key findings:

- Evidence of animal fecal bacteria was found at all sites on all sample dates, but the sources and concentrations varied.
- Dog fecal bacteria were detected at all sites except for Moonlight Brook. Cow bacteria were detected at all four sites in June.
- Human fecal contamination at concentrations that exceed accepted safety levels was found in 4/5 of samples at Moonlight Brook. Contamination at Moonlight Brook appears to be a public infrastructure problem, not a river or watershed issue. Local and state authorities have been alerted to address this.

Back to the original question: Is the Lamprey River safe for fishing and swimming? The overall answer is still yes, the river is clean enough for fishing and swimming. But the devil is in the details! When you have recreational contact with water, assume that the water might contain things that could make you sick, especially if you are vulnerable. Do

not expose open skin wounds to untreated water. Try to keep untreated water out of your eyes, mouth, and nose; if it happens, rinse with fresh water. Scoop dog poop and dispose of it properly. Avoid direct contact with surface waters after a heavy rain storm.

To read the full report, please visit <u>www.LampreyRiver.org</u> and type "bacterial tracking" in the search box. For more guidance about safely recreating on surface waters such as the Lamprey, type "recreational precautions for bacteria" in the search box.

To Feed or Not to Feed? Oh, Deer!



http://extension.unh.edu

Humans know that winter is a hard time. We do our best to take extra care of our families, our homes, our animals, and our neighbors. So what about our deer friends? They are outside. They look cold and hungry. They surely must need our help. Or do they?

Deer have evolved behavioral and physiological strategies to help them survive winter. They build up their fat reserves during the summer and fall. They lie low when snow is abundant, so they do not waste valuable calories. They create pathways through the woods so they can evade predators. They gather in small groups for warmth.

Many people feed deer in winter with hay, corn, white cedar brush, vegetable scraps, or livestock pellets. Such feeding is done with good intentions, but even the best of intentions can have serious, negative impacts. These good intentions can go terribly wrong: more deer starve than would occur naturally, the land near the feeding station is degraded or destroyed, diseases are more likely to spread through the deer population, the youngest deer incur the greatest harm, predation increases, deer lose their wildness and become dependent on people, and more deer are killed in collisions with cars. Feeding is a non-productive, short-term activity. What can landowners do to help the deer in the long term?

- Provide deer opportunities to build their fat reserves before winter.
- Protect the deer's natural habitat:
 - Leave a variety of trees on the property for browse: beeches, white cedars, hemlocks, oaks, fruiting trees and shrubs.
 - Let white cedars grow naturally: do not prune them. Over its long lifetime, a white cedar's natural litterfall can feed many deer for many years and its boughs and branches provide shelter. A cut cedar feeds a herd for one day.
 - Perform light timber management activities in winter when the deer need the browse most.
 - Distribute browse areas and winter cover areas throughout the property: discourage concentrating resources. Small herds are desirable, but large

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gatherings of deer cause problems both to the deer themselves and to the landscape.

For more information about feeding deer, please see <u>Do Not Feed Deer | Wildlife | New</u> <u>Hampshire Fish and Game Department (state.nh.us)</u>

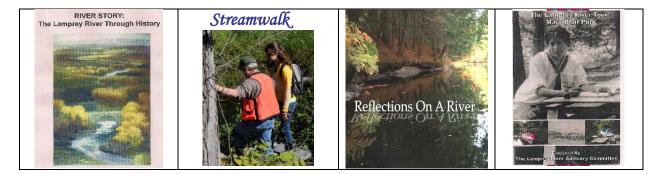
New Year, New Opportunities

The Lamprey River watershed connects fourteen towns and six rivers. It covers 214 square miles. The main stem Lamprey River alone traverses 49 miles, making it longer than the State of Rhode Island. Despite these impressive details, the number of individuals participating in the Lamprey River Advisory Committee is small, too small. We invite you to consider joining us!

Being a town representative means you play a key role in protecting the river for today and the future. You help to decide how best to manage and protect important resources, from clean water, habitats, recreational areas, and historic sites, to commenting on development projects that are being proposed in the river corridors. As a Partnership Wild and Scenic River, the committee receives funding from the National Park Service to implement the River Management Plan, a plan written by the committee. Each town is allowed up to four representatives. Representatives can have a focus on wildlife, agriculture, local business, history, education, recreation, or simply have a desire to give back to the river that means a lot to them. Joining forces with diverse people from neighboring towns can have a really powerful impact.

Meetings, scheduled for the third Tuesday evening of the month, are open to the public. We invite you to attend and meet the committee members or to contact us with any questions or suggestions. We hope to see you in 2022.

Visual Appeal



The LRAC's website, <u>www.LampreyRiver.org</u>, has several well-made videos available to view when the weather or other circumstances keep you at home. You can learn about Lamprey River history, protection, habitats, Wiswall Mill, and interviews with David Carroll, NH naturalist, artist, and author. Check them out!

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