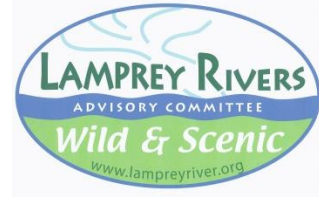


## **Newsletter Summer 2018**



### **Improving Access to the Lamprey River**



The Lamprey Rivers Advisory Committee (LRAC) is assisting several towns to improve access areas for paddlers and other visitors.

In Newmarket, the new Schoppmeyer Memorial Park is taking shape. The site is located behind the Newmarket Community Church and features benches, picnic tables, and carry-in boat access. The town's park advisory committee is also looking into the possibility of including a handicap-accessible kayak launch. The LRAC donated money for the purchase of the site and will help with the design of a kiosk dedicating the park in memory of Chris Schoppmeyer.

In Epping, the canoe landing at the Route 87 bridge crossing is in need of repairs and reconfiguration. This is the finish area for the annual Lamprey River Canoe Race. The Epping Conservation Commission and LRAC are looking at improving the canoe launch, replenishing gravel for the parking lot, doing trail maintenance on the flood plain educational path, and adding or updating signage.

In Epping and Lee, the LRAC is partnering with Trout Unlimited to remove sections of downed trees that block canoe passage. The wood removed will be placed back into the river to provide necessary cover for fish. This work is being supported by a grant from the New Hampshire Charitable Foundation.

### **NH Water and Watershed Conference Highlights**

Scientists and managers from across New Hampshire gathered on March 23 to hear the latest science and issues pertaining to water. The keynote speaker was UNH Assistant Professor Wilfred Wollheim. He accurately noted that water quality monitoring is undergoing a major shift. In the past, the condition of our

waterways was assessed by taking single samples once a week, or once a month, or even once a year. The snap-shot results revealed a few traits that are important to wildlife and humans. These include temperature (colder is better), pH (a measure of acidity), dissolved oxygen (how much oxygen gas is dissolved), conductivity (an indirect way of determining how much salt is dissolved), turbidity (how cloudy the water is), *E. coli* (bacteria associated with human and animal feces), and maybe the concentrations of nitrogen and/or phosphorus (nutrients that act as fertilizers to algae). These single tests, while helpful, were and are woefully simplistic. As Wolheim noted, "That's like trying to listen to a symphony by hearing only one note in every hundred."

The new, state-of-the-art monitoring involves deploying sampling devices that test and record multiple water traits every fifteen minutes for an entire sampling season. The amount of data that these devices record is immense, but computers can sort and graph the details. And those details are awesome and exciting. Instead of saying that Stream X had this much dissolved nitrogen at 10:00 A.M. on June 15, the graph shows that dissolved nitrogen fluctuates with changes in flow, or over the course of a rainstorm, or with daily changes in dissolved oxygen after the sun goes down and photosynthesis stops for the day. These details help researchers better understand how the stream or lake actually functions and help managers focus limited resources to obtain the best results.

The Lamprey River is fortunate to be a key study area of this exciting research. If you would like to learn more, visit <https://seagrant.unh.edu/storm-event-nitrogen-fluxes> and then click on the short video at the bottom of the article.

## Ultrasonic Nocturne: Listening for Bats



photo courtesy of Normandeau Associates

This summer, you might catch a glimpse of this odd looking equipment; don't be concerned. The LRAC is working with Normandeau Associates to get a baseline data set of bat communities along the Lamprey River and several of its tributaries. The equipment records the high-pitched calls of bats as they hunt and communicate.

What do you think they might find? Stay tuned!

## Great Blue Heron: The Bird That Dares to Stick Its Neck out



photo by nhptv.org

We are fortunate to have some big, really big, birds living along the Lamprey River. Great blue herons stand about 4 feet tall and have a wingspan up to 6.5 feet. In flight, they tuck their long necks under them to form an “s” and let their long legs trail behind. When hunting, they pull their head close to their body and then ambush unsuspecting fish, frogs, snakes, and occasionally rodents using their razor-sharp yellow beak.

Great blue herons were once nearly wiped out by pollution and hunting, but they have made a strong comeback nationally. Their success has come about for several reasons: 1) The Federal Migratory Bird Treaty Act of 1918 makes it illegal to capture, possess, or cause harm to a great blue heron, its nest, or eggs. 2) Efforts to prevent pollution from reaching waterways have resulted in lower toxicity. 3) People now have a better understanding that wetlands are ecologically and economically critical. 4) People have stopped killing so many beavers. Beavers might seem to be an unlikely ally to these birds, but their dams create new wetlands. As a result, many trees drown. Over time, these standing dead trees provide ideal, safe nesting areas, called rookeries or heronries, for colonies of herons to raise their young.

To help these magnificent birds thrive in our increasingly populated and developed landscape, the best action we can take is to give them their space. The birds require a buffer area of at least 330 feet between them and human activity. From April through May, they will fly away from their nests if humans get as close as 400-600 feet. Not only is their sight acute, but their heron hearing is as well.



### Summer Events along the Lamprey River



- Friday, July 27: Nature activities and river walk, Epping Library, 10-11
  - Wednesday, August 8: Nature activities, Nottingham Library, 10-11
  - Saturday, August 25: Lamprey River Splash & Dash, Schanda Park, Newmarket
  - Saturday, Sept. 1: Eco-paddle, Schanda Park, Newmarket, 4-6:30
- For more information, please contact [info@lampreyriver.org](mailto:info@lampreyriver.org).