Newsletter Spring 2026

Herring Aid Is Back!

alewife *Alosa psuedoharengus*

Herring Aid will be held again this spring, when the river herring head back from the ocean to their birth places upstream to spawn the next generation. In 2025, almost 121,000 fish passed through the Macallen Dam fish ladder and back to the Lamprey River, a new record!

How many will we see this year?

- Witness first-hand the great annual migration of the river herring.
- Ask the biologists all your fishy questions.
- If you are brave… handle the river herring.
- If you are *really* brave, hold a sea lamprey or let baby American eels swim around your fingers. (At last year's event, there were dozens of lampreys to see and handle. Maybe we'll get that lucky again!

This event is free and will occur rain or shine.

Date: Saturday, May 16, 10-noon

Location: Macallen Dam, Newmarket, NH

Free parking is available along Route 108 and behind the Newmarket Public Library. Follow the fish signs to the top of the fish ladder.

river herring and lampreys
photo by RH Lord

See you there!

Coastal NH Anadromous Fish Numbers

The Lamprey River has long recorded strong runs of river herring returning from the sea to spawn in fresh water. In 2025, almost 121,000 alewives swam up the Macallen Dam fish ladder. A great run! (The best run for 2025, over 297,000, was in the Exeter River, where the Great Dam was removed in 2020. Fish migration there is now unobstructed up to the Pickpocket Dam.)

In addition to the good river herring numbers, we recently received some very exciting news from the NH Fish and Game Department. The Lamprey River used to have good American shad returns, but there was basically nothing for many, many years. In 2023, 78 shad suddenly arrived and swam up the fish ladder. In 2024, 128 shad arrived. In 2025, 566 shad arrived at Macallen Dam, swam up the fish ladder, and spawned in the Lamprey River.

Per Conor O'Donnell at NHFGD, the 566 shad were ones that migrated up the ladder and could be counted; however, many hundreds to thousands were observed below the dam that didn't use the ladder. The US Fish and Wildlife Service has been stocking shad fry (newly hatched fish) in the Lamprey on and off since 2018 and the adults are just starting to return. This is most likely a direct result of the stocking efforts and researchers are not sure if the shad would be able to sustain a run without it, but it is still exciting. The Lamprey River's 1996 Wild and Scenic River designation listed shad as an "Outstandingly Remarkable Resource" and now they have returned. Outstanding!

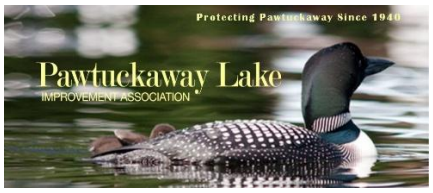
river herring: alewife (and blue-back herring)	American shad
 *image from www.wildlife.nh.gov*	 *photo from www.wildlife.nh.gov*
Adults typically range from 10 to 12 inches in length and weigh 8-9 ounces.	Adult females attain lengths of up to 30 inches and can weigh over 8 pounds. Males are smaller, weighing between 1 and 3 pounds.
The lower jaw of the alewife and the blueback herring is bent into a shovel shape and angled upward.	The lower jaw is straight and fits into a notch under the upper jaw.

To learn more about shad, please visit American Shad | State of New Hampshire Fish and Game.

Latest LRAC Grants:

New Hampshire Turtle Rescue has received a LRAC Community Grant that will be used to fabricate 3-D printed, life-size, local turtles. These models will then be hand-painted to look as accurate as possible. These plastic models will be used for public outreach and education.

While audiences, especially kids, like to see live turtle ambassadors, transporting and showing live turtles is stressful and challenging for both the turtles and staff people. Plastic models do not need to be kept at a constant temperature, they don't need to eat and poop, they can safely be touched and held, and all seven turtle species can be represented. In addition, the models will actually look like healthy turtles. Some of the turtle ambassadors at NH Turtle Rescue have had serious injuries, might have been neglected or malnourished, and might not look they way they should in the wild. This new herd of turtles should be ready in the fall. Cowabunga!



The **Pawtuckaway Lake Improvement Association** (PLIA) has received a Partnership Wild and Scenic Rivers Supplemental Grant to treat 150 acres of the lake that are being overtaken by invasive milfoil. The northern section of the lake had been milfoil-free or easily controlled, but in 2025 milfoil roared into the scene.

The PLIA has been working with NHDES to find the best way to manage milfoil. It was determined that using a very specific herbicide that targets invasive milfoil will kill nearly 100% of the plants and then specially trained divers will carefully remove the dead and remaining plants. The PLIA already has in place a strong outreach program to prevent milfoil spread and several means to detect and remove milfoil. Pawtuckaway Lake is the largest dam impoundment in the Lamprey River watershed and serves as the source of supplemental water to the river during prolonged low flows. Keeping the lake milfoil under control is critical to keeping the Lamprey River free of milfoil.

The **University of New Hampshire** has been awarded a research grant to continue important bacterial tracking work started in 2019. Monthly water samples will be taken from six recreational sites along the Lamprey River from April to November. These samples will be assessed for fecal bacterial indicators and then the bacteria present will be subjected to RNA testing that reveals which species contributed the bacteria, such as dogs, horses, cows, water fowl, or humans. Because samples from Moonlight Brook at Schanda Park in Newmarket have often shown high to extremely high presence of human fecal bacteria, six sites along Moonlight Brook will also be assessed.

Latest LRAC Grants continued…

The **Newmarket Arts, Culture, and Tourism Commission** has been awarded a community grant to help the town re-imagine the Elm Street mural. This 150-foot long outside mural was originally painted in 1997 on the foundation wall of the former Newmarket Manufacturing weaving room. It has fallen on hard times due to leachate from the adjacent parking lot. The wall will be sand-blasted, gaping holes will be filled, and the wall will be repainted a flat color. The current mural, made of 24 individual Newmarket scenes, will be digitally reproduced on 12 reversible weather-proof panels that can be rotated on a routine basis and will no longer be subjected to parking lot run-off and leachate. Four of the panels feature the Lamprey River.

The **Nottingham Conservation Commission** has been awarded a community grant to host the Nottingham BioBlitz and Wild Discovery Day to be held at the Marston Farm Recreation Area in Nottingham on May 2nd, 2026. It will feature guided walks, activity and demonstration stations, and presentations from conservation educators. This event will support the update to Nottingham's Natural Resource Inventory for the Master Plan update that the town is currently undertaking.

If you have a great idea for a grant, please email info@LampreyRiver.org.

Love Is All Around…

This figure, inspired by one created by the Cable (WI) Natural History Museum, uses data from James Taylor's *The Amphibians and Reptiles of New Hampshire* (1993).

Listen for these signs of spring! The frogs listed above are found in the Lamprey River watershed. Visit Calls of Frogs and Toads of the Northeast | Music of Nature to hear the songs.

Turtlefest

Basking painted turtles, photo by RH Lord

The Newmarket Conservation Commission is hosting a family-friendly celebration of local turtles! Free!

Date: Saturday, May 10, 9:30 AM to noon

Location: Newmarket Jr/Sr High School, 213 Main Street

Adults can attend presentations, while kids can enjoy crafts and activities.

Lunch on your own, then Rockingham Rail Trail Field Trip from 1:00-3:00 PM

Stream Team Topic #7: Livestock access to river

While seeing cows and horses out in the field is a common and peaceful scene, seeing those same animals right next to the river is a problem. Livestock can cause serious erosion, resulting in valuable soil from land to become a problem in the water. Soil clouds the water, reduces the amount of light that can reach the bottom, clogs up fish gills, and smothers aquatic invertebrates. In addition to erosion, livestock can cause health issues with their manure. Manure on land can be good fertilizer; manure that makes its way into water is pollution. The NH Shoreland Water Quality Protection Act states, “Fertilizer cannot legally be applied to vegetation or soils located within 25 feet of the reference line of any public waters. This includes organic products.”

New Hampshire RSA 485-A:13, Water Discharge Permits states, **“**I. (a) It shall be unlawful for any person or persons to discharge or dispose of any sewage or waste to the surface water or groundwater of the state without first obtaining a written permit from the department of environmental services….” This would not limit cows from being in the water, but it makes defecating in a river illegal. Also, impacting the bank of the river could be a violation of wetland laws and causing erosion that results in turbidity would violate water quality laws beyond the bacteria violations that would result from manure.

If you see livestock in or next to the river in an area that is unfenced, or livestock in a fenced area that is closer than 25 feet away from the river, please contact your town code enforcement officer, NHDES at 1-603-271-3503, or the New Hampshire Department of Agriculture, Markets, and Food at (603) 271-3551.

photo from pxhere.com

The Stream Team is a program to help river residents and users identify issues and how to report them. Please visit summary_sheet_of_issues_to_report__how.docx.pdf