

#### **OUR MISSION**

The Newfound Lake Region
Association's mission is to protect
Newfound Lake and its watershed.
The Association - through education,
programs, and collaboration promotes conservation and
preservation of the region's natural,
social, and economic resources.

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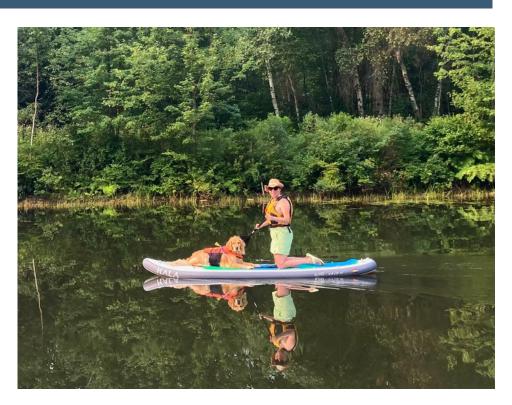
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#### FROM THE EXECUTIVE DIRECTOR



This summer marked an incredible change for both our community and our organization. The opening of the Grey Rocks Conservation Center is a giant step forward in our work to protect the lake and watershed. Already we're seeing positive impacts. We're connecting more deeply with visitors and residents—forging relationships with new folks and engaging the next generation of life-long Newfounders.

We're also expanding our work throughout the watershed, and just in time. All summer we've been studying the ecological systems that keep the lake healthy. With the discovery of the invasive spiny water flea in Newfound Lake in September, this summer's research provides critical baseline data to help us monitor and understand future impacts. (Read more about spiny water flea on page 4.)

The Conservation Center is strengthening everything we do to protect the lake today, but it's the long-term impact and potential that has me most excited. We're capitalizing on the possibilities and opportunities in front of us by developing an ambitious new strategic plan. This new plan will ensure NLRA has the momentum, trajectory,

resources, and resilience to do our job while navigating challenges and threats. Our work to protect the lake and watershed is critical. This plan is our path forward to ensure this treasured resource continues to be healthy and resilient for generations.

You, too, are an essential part of our path forward. I look forward to continuing this journey with you as we shape a future where Newfound thrives.

Gratefully,

Rebecca Hanson
Executive Director

Rebecca@NewfoundLake.org



This August, dozens of volunteers pushed off from shore for NLRA's annual Weed Stampede. Paddlers circled coves and skimmed along rocky edges, scanning over 50 miles of Newfound Lake for any signs of invasive plants. Participants reached a new record of 83% coverage of shoreline habitat throughout the two-day event, providing a snapshot of aquatic plant life across the lake. Their energy filled the water with purpose—neighbors working side by side to protect the lake they love.

The Weed Stampede is just one part of NLRA's Weed Watcher program, which trains volunteers to recognize both invasive and native aquatic species. Each summer, their careful surveys provide an early warning system for Newfound Lake. By catching invasive species before they spread, Weed Watchers play a critical role in preserving shoreline habitat and water quality.

Beyond the excitement of the Stampede, Weed Watchers have been active all season. From June through September, volunteers paddled, snorkeled, and cruised over 130 miles in Newfound Lake, recording healthy stands of native plants and scanning the water for invasives. Thanks to their vigilance, 100% of the shoreline habitat was surveyed, and Newfound Lake remains free from aquatic invasive plants.

Although the shoreline shows no sign of aquatic invasive plants, this year brought a new challenge: the discovery of spiny water flea, an invasive aquatic animal. Its arrival underscores the importance of preventing invasive plants from taking hold. With multiple threats now facing the lake, the role of Weed Watchers is critical to protecting Newfound's waters.

As we celebrate the success of remaining weed free, NLRA is exploring ways to deepen the community's role in lake protection. This summer showed us what's possible: a full survey of the lake's shoreline habitat. The next step is to build on that momentum. By involving more residents and paddlers, we can keep every mile of shoreline monitored month after month, turning this year's achievement into the new standard for lake protection.

The vision is simple: a lake fully protected by the people who know it best. The more eyes on the water, the stronger our defense against invasive species, and the deeper our connection to the lake we share.

If you are interested in getting involved in invasive species protection, contact Conservation Program Coordinator Isabella Giancola at Isabella@NewfoundLake.org or visit NewfoundLake.org/volunteer. Together, we can ensure that Newfound Lake remains healthy, resilient, and vibrant for generations to come.

#### A New Reason to Watch the Water

Spiny water flea, an invasive aquatic animal, was discovered in Newfound Lake this year. With this new threat present, keeping invasive plants out is more important than ever. Learn more about the introduction of spiny water flea and NLRA's monitoring efforts on page 4.



#### Plankton in Focus: Understanding a New Lake Invader

Why tiny plankton are so important to lake life, and how NLRA is tracking the recent arrival of spiny water flea.

From fish to frogs, bugs to birds, Newfound relies on a complex web of interactions to stay healthy and resilient. While we often look to larger species like trout or loons as hallmarks of a healthy ecosystem, some of the most important life in our lakes is nearly invisible to the naked eye. Zoom in enough on that clear lake water and you'll see a whole world of tiny organisms, called plankton, that play a huge role in keeping Newfound thriving.

In our water quality lab, NLRA is studying this microscopic

In our water quality lab, NLRA is studying this microscopic world to better understand the plankton community and keep an eye on a troublesome new invader that was identified in the lake this fall—the spiny water flea.

#### Lake Life Starts Small

Plankton make up most of the life in freshwater lakes. There are two main types:

**Phytoplankton:** microscopic plants, algae, and bacteria that use sunlight to make food. **Zooplankton:** tiny animals that eat phytoplankton and are a key food source for fish and other aquatic animals.

800

700

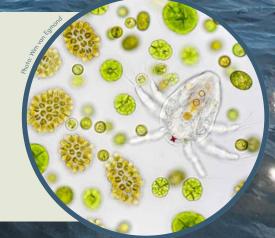
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300

Both are essential to the lake's food web. When this microscopic community is in balance, the entire ecosystem stays stable and able to support a wide variety of life. Because plankton respond quickly to changes in the environment—like warmer temperatures, pollution, or invasive species—plankton also serve as early warning signs of trouble in the lake's ecosystem.



The spiny water flea (Bythotrephes longimanus) is an invasive zooplankton from Europe that first arrived in the U.S. in the 1980s. Since then, it has spread to lakes across the country. In 2023, it was discovered in New Hampshire in Lake Winnipesaukee and Lake Winnisquam.

Spiny water flea can disrupt lake ecosystems in two major ways:

- 1. Increasing algae and bacteria levels. Spiny water flea consumes native zooplankton, the tiny animals that normally help regulate algae and bacteria. With fewer of these native "grazers," algae and bacteria can grow out of control, leading to murkier water and more frequent harmful algal blooms.
- 2. **Reducing food sources for fish and other aquatic animals.** Many fish rely on zooplankton for food, but the barbed tail of spiny water flea makes them difficult to eat. With less edible zooplankton in the lake, fish can struggle and the entire food web can be affected.

After a summer of rigorous plankton monitoring in partnership with Green Mountain Conservation Group, the first documented report of spiny water flea in Newfound Lake was made by an angler fishing in Pasquaney Bay on September 17. NLRA staff followed up with additional sampling, which revealed that spiny water flea is now found throughout much of the lake. NLRA is working with the New Hampshire Department of Environmental Services, the University of New Hampshire's Center for Freshwater Biology, and the Lake Winnipesaukee Alliance to assess the infestation and track any impacts.

Lake ecosystems are complex, and the effects of spiny water flea can vary from lake to lake. While many questions remain, here is what we do know:

- Though not harmful to humans, their tail spines snag fishing lines and foul gear.
- They eat native zooplankton that keep algae and bacteria growth in check.
- They are a poor food source for fish. Their spiny tails make them difficult to eat.
- There is no way to control or remove spiny water flea once it is established.

NLRA will continue plankton monitoring to understand the impact moving forward.

#### How You Can Help

Spiny water flea often spreads from lake to lake on fishing tackle and boats with ballast tanks or live wells. Boaters and anglers can prevent their introduction by cleaning, draining, and drying their equipment between uses. Special care is needed with fishing gear. The barbed tail of spiny water flea easily snags on fishing lines, and the species can survive for days in damp places like reels.

To stop the spread:

- 1. Wipe down fishing lines with a dry rag after your last cast.
- 2. Clean, Drain, and Dry boats and gear, including tanks and wells, completely before moving between lakes.

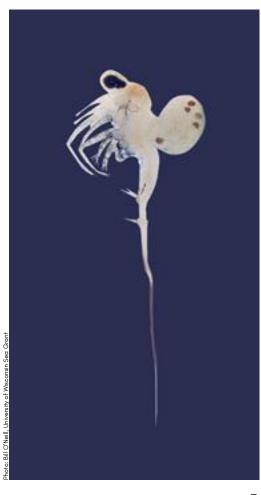
Newfound Lake has long benefited from responsible boaters practicing "Clean, Drain, and Dry." Now, it's our shared responsibility to prevent the spread of invaders like spiny water flea and protect Newfound Lake from other aquatic hitchhikers, like variable milfoil, that can damage water quality.

For more on our efforts to stop invasive species visit: NewfoundLake.org/invasives.

Top right: Sampling with fine mesh nets is one method NLRA uses to collect and study plankton. Samples are screened for spiny water flea and archived for future research.

Bottom right: Up close, you can see the gelatinous body and barbed tail of spiny water flea, which measures just 1/4-5/8" long.



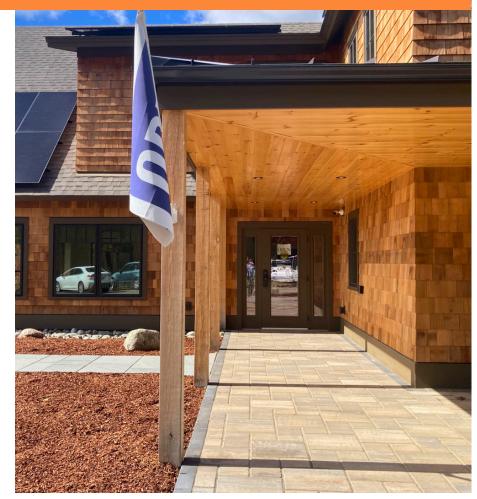




# Grey Rocks Conservation Center OPENS ITS DOORS

On a bright summer morning, a vibrant cross section of the Newfound community -students, staff, area residents, supporters-gathered in Hebron celebrate a milestone many years in the making: the grand opening of NLRA's Grey Rocks Conservation Center. Laughter and conversation carried across the water as visitors toured the new space, children spotted tadpoles and turtles at the water's edge, and volunteers got to work in the water quality lab. With events spanning three full days, the grand opening highlighted community, gratitude, and new beginnings for Newfound Lake.

What began as a vision more than ten years ago is now a vibrant hub where conservation and education meet. The energy of the grand opening quickly gave way to the daily rhythm of the center—volunteers processing water samples, visitors stopping in to view exhibits and take part in activities, and NLRA staff leading research and stewardship to safeguard the watershed. This year-round home secures a brighter future for the watershed and the people who depend on its clean water and healthy forests.





#### Visit the Conservation Center

Check out seasonal activities for all ages, enjoy backyard bird watching at our birdfeeder banquet, explore exhibits about local wildlife, and more.

Grey Rocks Conservation Center winter hours:

Monday-Friday: 9am-4pm Closed Saturday and Sunday





#### Trails are open daily!

The Grey Rocks property, including trails, picnic area, and boat launch, are open year-round from dawn to dusk and are free for public use. Download a trail map at NewfoundLake.org/GreyRocks or pick up a copy at the conservation center during open hours. Leashed pets are welcome. Grey Rocks is a carry in, carry out property.

# Eagle Scout Takes Climate Action at Grey Rocks

What happens to forests when the climate around them changes faster than trees can adapt? At Grey Rocks, an award-winning Eagle Scout project invites visitors to explore that question and consider solutions. Designed and led by Hebron Eagle Scout Mika Austin, the project highlights how climate change is reshaping New Hampshire's forests and what people can do to help.

Mika's project takes on a unique conservation challenge: unlike animals, trees and other plants can't simply pick up and move when their environment changes. Using a strategy called assisted migration, we can help give plants a head start by thoughtfully planting species in places where they're more likely to thrive today and in the climate conditions of tomorrow.

In the Newfound Watershed, climate models predict warmer temperatures and fewer, but more intense, storms. These changes are likely to shift which trees can succeed here. Cold-tolerant species like paper birch may decline, while trees such as American sycamore, which tolerate heat and wetter soils, could become more common.

To bring this issue to life, Mika created five interpretive signs that explain the science behind assisted migration and why it matters. In recognition of her work, she received the 2024 NH Eagle Scout Project of the Year award.

She also planted two American sycamore trees at Grey Rocks, offering a living example of this forward-looking approach. Beyond her work at Grey Rocks, Mika presented her project to 8th graders at Newfound Memorial Middle School, sparking conversations about climate challenges and solutions.

By blending education, community outreach, and handson conservation, Mika's Eagle Scout project inspires action and advances NLRA's mission to protect the Newfound Watershed into the future.

Visit Grey Rocks Conservation Area to see Mika's project and the American sycamore trees. You can also view the signs online by scanning this QR code.





#### Stopping Pollution One Backyard at a Time

Stormwater pollution is Newfound Lake's biggest long-term threat. Even during drought conditions like we've seen this fall, it's critical to manage stormwater to prevent erosion and protect water quality for the future.

NLRA addresses stormwater challenges by offering technical guidance and hands-on support to homeowners, neighborhoods, and towns. We also work with local and state agencies to tackle large-scale issues by convening collaborative working groups and securing funding for major stormwater projects.

Stormwater pollution is a problem we all contribute to—and one we can all help fix. Partnerships like these empower communities to take action, raise awareness of stormwater's impacts, and reduce pollution before it reaches Newfound Lake.

To learn more about stormwater and how you can manage stormwater pollution on your property, visit NewfoundLake.org/small-scale-stormwater.

#### 2025 Stormwater Project Highlights

#### Red Fox Village Tackles Steep Slopes

Water flowing downhill quickly gains enough force to erode soil, damage infrastructure, and carry pollutants into the lake. This spring, NLRA helped Red Fox Village plant 200 native live stakes, completing a slope stabilization project that began in 2024.

#### Turners Cottages Takes on Runoff

A neighborhood-wide stormwater assessment revealed several opportunities for Turners Cottages Association to reduce runoff. With guidance from NLRA, the community installed infiltration gardens, a permeable walking path, and roof runoff systems on two buildings. Together, these improvements prevent more than 42,000 gallons of stormwater from reaching the lake each year.

#### Sleepy Hollow Valley Association Beach Project

The Sleepy Hollow Valley Association's beachfront, nestled between the lake and North Shore Road, presents a tough challenge for managing runoff. With the help of a large volunteer crew, NLRA installed nine new stormwater control measures designed to curb runoff.

#### New Culverts for the Town of Hebron

NLRA partnered with the Town of Hebron to upgrade three problematic culverts on Pike Hill and Butternut Ridge Roads. Properly sized and installed culverts play a important role in diverting stormwater away from roads. Without them, clogging and washouts can threaten both infrastructure and water quality during heavy rain events.

#### Leading by Example at Grey Rocks

Ongoing landscape installation at our Grey Rocks Conservation Center will showcase stormwater-smart landscape options and native plantings as a model for others to follow.





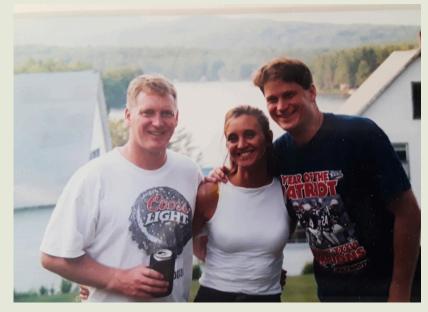
#### Lessons by the Water: Pete DeBassio's Enduring Legacy

For Pete DeBassio, two loves defined his life: summers on Newfound Lake with family and inspiring young minds as a science teacher. Whether in his classroom at East Shore Middle School in Milford, Connecticut, or on the shores of Newfound with his children, nieces, and nephews, Pete was a gifted educator who delighted in sharing the wonders of the natural world.

The DeBassio family's ties to Newfound go back generations. It started with annual family summer vacations at their grandparents' farmhouse in Rumney, where the family would open and close Wellington State Park every day of vacation. This grew into cherished summers at Bungalo Village beginning in 2000, and then the purchase of a family cabin in 2004. Pete's love for science and his time with family intertwined seamlessly—he eagerly shared lessons about the ecology of the lake, the watershed, and the weather.

With Pete's passing in 2023, his family knew they wanted to honor his memory in a meaningful way. As the two-year anniversary neared, Pete's brother, Paul DeBassio, approached NLRA to explore ways for his family to celebrate his brother's passions for Newfound Lake and science education with a memorial gift. The family was moved by the opportunity to donate to a special endowment that supported educational programming for local youth and critical water quality protection efforts that would reflect Pete's values. As part of an endowed fund, their contribution would have a perpetual impact, generating annual income to support the causes that mattered most to Pete.

In December of 2024, three generations of DeBassios launched the initiative with generous donations, then invited extended family and friends to take part. The response was extraordinary: in a matter of a few months the family raised more than \$30,000, far exceeding their original expectations. Each gift made in Pete's memory will help future generations understand and care for the natural treasures he cherished.



Above: Pete with his siblings Paul and Elaine at their annual family vacation at Newfound Lake, a tradition spanning three generations.

Below: The DeBassio family visited Grey Rocks Conservation Area over the summer to learn more about how their memorial gifts in honor of Pete will impact visitors and young learners for generations.



This summer, the family visited the site of NLRA's new Conservation Center, which will serve as a hub for the very educational programs and water quality efforts their generosity has made possible. Pete's brother Paul reflects, "As a member of the Danbury Elementary School staff, my wife has seen first-hand the educational projects NLRA leads with the students. Seeing the tools and space available at the Conservation Center, coupled with additional resources from the endowment, it is easy to imagine how many more children (and adults) will be impacted by NLRA programming." The family could see how Pete's passion will take root in this new space—a place where his love for teaching and for Newfound Lake will continue to inspire future generations.

Through this memorial initiative, Pete's influence endures in the hearts of those who knew him, and also in the experiences of countless young learners who, like Pete, may discover a lifelong love for science and Newfound Lake. To read more about Pete and the DeBassio family's memorial initiative, visit NewfoundLake.org/pete-debassio-memorial-gifts.

## From Learners to Leaders: Sant Bani Students Partner with NLRA for Conservation Education



On a cool spring morning, middle school students from Sant Bani School dipped long nets into shallow pools at Wellington State Park, filling trays with tiny aquatic invertebrates. Each wriggling creature was a clue to the health of the lake they had been studying for weeks in the classroom. Suddenly the graphs and data they had examined on paper were alive in front of them, an important reminder that science is not just numbers on a page but part of the living world all around them.

NLRA's long-term aim in working with students and teachers is to nurture connections to the environment that lead to lasting stewardship. When NLRA partnered with Sant Bani earlier this year, the goal was to connect classroom learning to real conservation in the Newfound Watershed. The program began with lessons on water quality and analyzing sampling data, and culminated with the invertebrate field study at Wellington.

Building a sense of connection that inspires students to take conservation action is often a gradual process, unfolding over years. But sometimes inspiration strikes quickly.

That spark was clear as the school year wound down and students eagerly took on a special service project: designing educational posters for the grand opening of NLRA's Grey Rocks Conservation Center. Each poster focused on a local species, weaving together facts about ecology conservation challenges and the students' own creativity.

When the Conservation Center opened its doors in July, the student-created posters were a perfect fit. Grey Rocks was built to be a hub for community education and conservation, and the very first display came directly from young watershed stewards. Visitors paused to learn about loons, turtles, and butterflies, and how they play a role in a healthy watershed.

Partnerships like this show how stewardship grows: from classroom lessons to muddy boots in the field to creative projects that ripple out into the community. For Sant Bani students, it was a chance to give back and step forward as educators. For NLRA, it's a glimpse of what's possible when we connect learning with lived experience—building a community that cares for Newfound Lake together.

# See the Posters Yourself! Shapping Turn Shapping

use this QR code to view a digital

portfolio of the students' work.



Newfound Lake Region Association 178 North Shore Rd Hebron, NH 03241

NewfoundLake.org

### WHAT IN THE WATERSHED?

Meet the water scorpion! It may look intimidating with its grasping forelegs and needle-like appendages, but it's not a threat to humans. Water scorpions feed on small fish and insect larvae, using their forelegs to capture prey, which they inject with a digestive enzyme to make it easier to consume.

Water scorpions are found in freshwater ecosystems around the world, including Newfound Lake. Stop by Grey Rocks Conservation Center and borrow one of our aquatic invertebrate nets and guides and see if you can find this lake predator!

