# Farmington River News



We have so much to tell you— take a look inside! Thank you for being a true Farmington River friend!

Activities and Issues in the Farmington River Watershed

### FRWA Heads Into a Busy Summer Monitoring Season With Some Extra Help

As the recreation season begins, FRWA staff are preparing for our busiest monitoring season yet. We will be traveling to our headwaters in Massachusetts to monitor 17 sites for *E. coli,* 5 sites for temperature, and 2 sites for conductivity. In Connecticut we will be monitoring 41 sites for *E. coli,* 23 sites for chloride, and 18 sites for temperature, and we have also assessed 23 sites for nitrate. We will continue surveying road-stream crossings throughout the watershed in CT and MA, and we will once again be monitoring Rainbow Reservoir in Windsor, CT for cyanobacteria blooms. We also plan to continue stewardship projects on the Frey Property, which was donated to FRWA by the estate of Lily Frey, and water chestnut removals on Barber's Pond in Bloomfield, CT.

FRWA is proud to welcome three new interns this sampling season! Emily, Chris, and Olivia will assist with water quality monitoring, habitat studies, stewardship projects, and public outreach along with part-time staff member Ciara Kilkenny, who returned to FRWA this spring. Ciara recently earned her B.S. in Biology with a concentration in Environmental Science and a minor in Chemistry from Central Connecticut State University. Congratulations Ciara, and welcome to our 2023 interns, Emily, Chris, and Olivia!

Emily Markelon currently attends the University of Connecticut with a double major in environmental studies and journalism. She enjoys journaling, working out, and hiking in her free time.

Chris Reboul is a sophomore at Colorado College. He serves as a portfolio manager in the college's investment club, and he anticipates to graduate in 2025 with a degree in chemistry. Chris has been a resident of Avon, CT for 16 years. He is a certified EMT and volunteer firefighter in Canton, CT with a passion for woodworking.

Olivia is a rising junior at Quinnipiac University with a double major in Sustainability & Environmental Policy and Spanish. She serves as VP of Inclusion in the Kappa Delta Sorority at QU, and she is in the Students for Environmental Action club. Olivia recently worked with Portugal nonprofit *Oceans Alive*, and she will be studying in Spain next spring.



Emily (left) and Ciara (right) search for road-stream crossings in Sandisfield, MA



Chris (left) and Olivia (right) pull invasive water chestnut from Barber's Pond in Bloomfield, CT

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The Farmington River Watershed Association's Board and Staff

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FRWA is a 501(c)(3)
non-profit organization
dedicated to the
preservation and
protection of the
Farmington River and its
Watershed through
research, education, and
advocacy.

### **FRWA Partner Events- Summer 2023**

### The Farmington River Quilt will be Visiting the CT State Capital

View the quilt this September at:

CT State Capitol Legislative Office Building, 300 Capital Ave., Hartford

The Farmington River Quilt features 24 artist's interpretations of sections of the upper Wild & Scenic corridor from Goodwin Dam to Canton. Each unique piece is accompanied by a message from the artist describing what inspired them to create it.

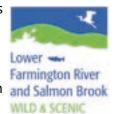




Presented by the Farmington River Coordinating Committee (FRCC).

# **Unearthing History: The Discovery of a 12,500 Year Old Paleo-Indian Site Along the Farmington River in Avon, Connecticut**

Experts in the field of early genetics, ice age animals, Paleo-Indian foodways and trade routes and ancient DNA will provide background and help in understanding the rich nature of the Brian D. Jones site. This webinar series was created by the Avon Historical Society, Avon Free Public Library, and Avon Senior Center, and funded by the Lower Farmington River and Salmon Brook Wild & Scenic Committee's (LFSWS) Grants Program.



## Thursday, September 21, 7 PM- Paleoindian Sites, Site Patterning and Travel Corridors along the Southern Arm of the Champlain Sea

Presented by Jess Robinson, Vermont State Archaeologist at the Vermont Archaeology Heritage Center in Barre, Vermont. He will compare and contrast Paleoindian sites in VT with the Brian D. Jones site in Avon, CT.

Register at <u>avonctlibrary.info</u>

### **Community Science- Help Us Monitor Aquatic Insects**

Friday, September 1, 6 PM-7 PM virtually via Zoom

AND Saturday, September 2, 10 AM- noon at Granbrook Park, East Granby, CT

Training consists of one Zoom webinar followed by one day in the field. Virtual training will provide an overview of the CT Department of Environmental Protection (CT DEEP) Riffle Bioassessment for Volunteers (RBV) program, demonstrate collection and identification techniques, and explain the use of aquatic organisms in water quality monitoring. For the in-stream sampling, participants wade into the water, collect organisms into a net, sort and identify and preserve a representative sample for verification.

This year's RBV in-stream training will be held in the wild & scenic West Branch of Salmon Brook. Sampling requires wading through rocky streambeds, and it is not recommended for small children or people with difficulty walking on rough, slippery substrate. Participants should wear appropriate clothing and footwear for wading.

If you would like to train to conduct RBV, send an email to hgeist@frwa.org

Space is limited, so don't wait!



### Watershed Warriors Needed! - FRWA Summer 2023 Volunteer Opportunities

### **Invasive Water Chestnut Pulls**

### August 17th and 31st, 9 AM- noon, Barber's Pond, Bloomfield, CT

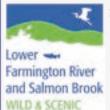
Volunteers needed! FRWA is partnering with the Connecticut River Conservancy to perform manual removal of invasive water chestnut on Barber's Pond in Bloomfield, CT. Our first two pulls were hugely successful, but the infestation is severe, and more help is needed!

Invasive water chestnut, an aquatic plant, is an issue in many areas throughout the Connecticut River Watershed. It reproduces proficiently via spiked seeds that can lie dormant for 12 years before germination. Each plant produces 20-30 seeds annually before dying off in the cold season, and each seed can produce 5-10 individual plants. Water Chestnut plants also float on the water's surface, which means that they can easily wash over the Barber Pond Dam if dislodged. Barber's Pond is located along Mill Brook, which flows into the Farmington River near its confluence with the Connecticut River in Windsor, CT. FRWA would like to remove some of these plants from Barber's Pond and Mill Brook in order to avoid their downstream movement into the Farmington and Connecticut Rivers.



Apprentices from Knox Hartford collect water chestnuts on Barber's Pond

Boats and floatation devices will be provided to volunteers free of cost. Visit frwa.org for registration information



Special thanks to our partners and sponsors for helping us complete this important work!







### Mark your Calendars for the 36th Annual Farmington River Cleanup!

Saturday, September 23, 9 AM-11 AM Meetup locations in Collinsville, Avon, and Windsor Cleanup sites throughout the Farmington River watershed in Connecticut

Come along and beautify the Farmington River while preventing litter from making its way into Long Island Sound. FRWA hosts this annual event as part of the Connecticut River Conservancy's Source to Sea Cleanup. Cleanup sites are available in Avon, Barkhamsted, Bloomfield, Burlington, Canton, East Granby, Farmington, Granby, New Hartford, Simsbury, and Windsor.



### Look for registration information on frwa.org in September!

If Saturday doesn't work for you, we're happy to assist with your cleanup on another date! To schedule your cleanup, or if you want to register a group larger than six volunteers, contact hgeist@frwa.org.

Follow us @frwa org to stay updated on FRWA outreach, stewardship, and volunteer opportunities.



Look for us this summer at farmers markets, concerts, fairs, and other events in your community!



### FRWA Research and Water Quality Monitoring – Summer 2023

### FRWA Investigates Cyanobacteria Blooms and Introduces Nitrate Monitoring Program

FRWA will once again monitor cyanobacteria in Rainbow Reservoir in Windsor, CT for the summer of 2023, in order to determine potential mitigation options. This work is funded by an Aquatic Invasive Species grant from CT Department of Energy and Environmental Protection (CT DEEP) with assistance from LFSWS. Cyanobacteria blooms (also known as Harmful Algal Blooms, or HABs) have been reported in the reservoir in 2019, 2020, and 2022. These blooms generally occur in late July and August, and they can produce toxins that are harmful to humans and pets. Decomposition from cyanobacteria blooms also depletes available oxygen from the water, causing fish kills and dead zones.

Research conducted by FRWA in 2021 suggested that the cyanobacteria in Rainbow Reservoir is caused by excessive nitrogen and phosphorus from upstream. These nutrients enter the river through stormwater runoff from the entire watershed. The nutrients nitrogen and phosphorus are essential for plant growth, but human activities such as fertilizer application, livestock operations, and sewer treatment plants produce more nutrients than natural systems can use. This year we are joining IWLA's Nitrate Watch, a brand new program designed to measure nitrate in surface waters. Nitrate is formed when nitrogen combines with oxygen in water. It can easily be carried by rainwater and melting snow until it reaches surface water or infiltrates into groundwater. Want to help be a part of the solution? Visit RiverSmartCT.org to learn more about how you can reduce stormwater pollution in your neighborhood.



Aimee instructs an intern on Rainbow Reservoir.

Be a part of the pollution solution scan to visit RiverSmartCT.org!



### Surveying Aquatic Habitats with Road-Stream Crossing Assessments

FRWA is continuing our work assessing road-stream crossings in Connecticut and Massachusetts with our partners at Farmington Valley Trout Unlimited (FVTU) in Connecticut and the Berkshire Clean, Cold, and Connected Restoration Partnership (BCCC) in Massachusetts. Work this summer will focus on Otis, MA and several cold water tributaries in the East Branch Farmington River and Salmon Brook watersheds. Data from our crossing assessments will be used to prioritize crossing replacements based on their ability for fish passage as well as for structural integrity and flood risk. We will be accompanying these assessments with temperature and conductivity monitoring to further inform our knowledge of habitat quality. This work is funded by BCCC in Massachusetts and by FRCC and LFSWS in Connecticut.

### Assessing Recreational Safety by Monitoring E. coli

This year FRWA will be monitoring *E. coli* bacteria at 59 sites throughout Connecticut and Massachusetts, including a new site on the Farmington River in Burlington, CT. Bacteria enters streams via stormwater runoff, and it can leach into groundwater from faulty septic systems. FRWA monitors *E. coli* bacteria during the recreation season from June through August. Our *E. coli* monitoring program in the upper Farmington River Wild & Scenic segment of CT, as well as in MA, is funded by FRCC. Our monitoring in the lower Farmington River Wild & Scenic segment is funded by LFSWS.

FRWA submits all *E.coli* data to CT DEEP to inform the public about recreational safety. We also upload our data to CRC's *Is It Clean?* website at <u>connecticutriver.us/it-clean</u>. Scan the code to the right to view 2023 *E.coli* data.

## Thank you, Simsbury!

FRWA extends our gratitude once again

to the Town of Simsbury Water Pollution Control Authority for allowing us access to their lab facilities in order to analyze our bacteria samples this summer.

Scan to view FRWA's E. coli data on CRC's Is It Clean? website.



### FRWA Research and Water Quality Monitoring – Summer 2023

### **Tracking Chloride Contamination with Summer Salt Watch**

FRWA will continue our summer salt watch program this year, monitoring 23 sites throughout the watershed to track chloride from road salt runoff. Chloride is harmful to stream ecosystems and corrosive to infrastructure, and it can infiltrate drinking water sources. In 2022 we found that chloride levels in small tributaries tend to increase during summer drought, which indicates persistent chloride contamination in groundwater. We plan to continue monitoring these levels, and to encourage municipalities and residents to use smart salting practices. Learn more at <a href="mailto:saltwatch.org">saltwatch.org</a>. Our chloride monitoring program is part of the Izaak Walton League of America (IWLA) Salt Watch Program and is funded by FRCC in the upper Farmington River and LFSWS in the lower Farmington River.

Ciara measures chloride levels in Nod Brook in Avon, CT.

Paige holds a conductivity logger in its cinder block housing before installation

### FRWA Installs New Temperature and Conductivity Loggers

We installed 21 temperature dataloggers this May, including 18 in Connecticut and 3 new loggers in Massachusetts. Data retrieved in September will be shared with CT DEEP to identify and track changes in high-quality habitats, since many aquatic species require cold water temperatures for their survival. We have also installed two conductivity loggers in Shales brook in Becket, MA. Conductivity is the ability for electricity to pass through a substance. It can indicate salinity in streams, which we can use to further inform our chloride monitoring. Our conductivity and temperature monitoring programs are funded by FRCC in the upper Farmington River, LFSWS in the lower Farmington River, and BCCC in Massachusetts.

### Creature Feature: Atlantic Salmon- Salmo salar

The Atlantic Salmon begins its life in tributaries from Quebec to Connecticut as *alevin*, smaller than an adult's pinky finger. They hatch in February, and by May the salmon, now called *fry*, resemble streamlined minnows. They grow for one to two years as *parr*, and migrate through larger rivers into the Atlantic Ocean as 6-9 inch *smolts*. They then spend one to four years at sea and grow to become up to 30 inches long before embarking on the long journey back to the stream where they hatched. They travel upstream between April and June, and they

spend the summer in deep pools resting before spawning in the fall. In 1967 state and federal fisheries initiated an effort to restore native salmon populations in Connecticut, which had been decimated by industrialization by the mid-nineteenth century. Today, young salmon are stocked into tributary streams throughout the Connecticut River watershed by the state and by non-profit organizations. The annual numbers of adult sea-run salmon that successfully return to the Connecticut River in recent years have ranged between 40 and 530 fish. This spring, The Hartland School invited FRWA staff to come along as they released salmon fry into Salmon Brook, which they do annually with the Connecticut River Salmon Association's (CRSA) Salmon-in-Schools Program.



Students from The Hartland School release salmon fry into Salmon Brook in Granby, CT

### How Bad Is It ... to water my lawn during a drought?

Last summer, homeowners throughout the northeast were challenged with severe and extreme summer drought that threatened lawns and landscapes. We were forced to use potable drinking water, a finite resource, to keep our grass and gardens alive. This extra water use created higher water bills for residents and stressed our already overburdened reservoirs. American residents use up to 30% of their potable water on landscapes and, unfortunately, much of the water we apply to our lawns and landscapes is lost through evaporation and runoff.

### Here are some tips for more efficient water use during the dry season:

- Group plants according to their water needs, and water with a soaker hose.
- Add organic matter and aerate soil to improve its ability to hold water.
- Water deeply and only when plants need water to promote strong root growth.
- Avoid misting sprinklers, and water your garden beds manually when possible.
- Use controls such as rain or soil moisture sensors for your irrigation system.
- Reduce turf areas. Grass requires the highest amount of water in your landscape, so it is efficient to confine turf to areas where they have practical function.
- Use mulch in garden beds and around trees and shrubs to reduce evaporation, inhibit weed growth, moderate soil temperature, and prevent erosion.
- Plant native. Native species are more adaptable and require less additional water once they are established.
- Maintain healthy soils to effectively cycle nutrients, minimize runoff, retain water, and absorb excess pollutants.
- Water wisely. Know your plant's water needs, and try to avoid watering during the heat of the day.
- Water your landscape with rainwater collected in cisterns or barrels, or divert your downspout into gardens.

### Wild & Scenic Spotlight: Stratton Brook State Park, Simsbury, Connecticut

Located on the eastbound side of Farms Village Road in Simsbury, Connecticut, Stratton Brook State Park is part of the northern segment of the 8-mile Farmington River Trail (featured in the FRWA spring 2023 newsletter). It is well known due to its proximity to the Hartford metropolitan area and its inclusive recreation activities. Stratton Brook State Park received its title in 1949, and it became the first completely wheelchair accessible park in Connecticut in 1996. The park offers bathrooms and picnic areas with grills, as well as a picnic pavilion. It boasts fishing areas that are stocked annually by CT DEEP, a swimming beach, hiking, biking, and cross-country skiing.

A covered bridge leads to the midpoint of the linear Stratton Brook State Park Trail, which heads northeast and southwest along the right-of-way of the former Connecticut Western Railroad. Across the linear trail are several hiking trails that intertwine throughout the forest. Those who prefer flat terrain can turn left and follow the trail northeast through a mile of dense forest interspersed with several footbridges over Stratton Brook. This segment of the trail exits the park and ends at the Bushy Hill Road/State Route 309 Farms Village Road intersection. Here, you can follow the Farmington River Trail as it continues another mile to Iron Horse Boulevard, where the 912-Simsbury Express provides bus service from the Simsbury Iron Horse Park and Ride to downtown Hartford.

If you want to take the road less traveled, you can turn right after the bridge and head southwest across Stratton Brook Road. This segment of the trail is paved, and it leads to Town Forest Park and Massacoe State Forest. The corridor was once used to demonstrate railway fire control techniques. Here the Stratton Brook State Park Trail ends, and the Farmington River Trail continues southward.

Visit portal.ct.gov/DEEP/State-Parks for more information

### Save Water & Be River Smart!

Scan to visit

RiverSmartCT.org for more tips on how to conserve drinking water and reduce stormwater pollution!



An angler casts a line at Stratton Brook State Park

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### **Celebrating a River Champion- David Sinish**

David Sinish has been a keystone figure in the FRWA since before he joined the Board of Directors on May 20, 1982. He served as both President and Chairman, and he was one of the main drivers of the Upper Farmington River Wild & Scenic designation. David and his wife, Carrie, volunteered for FRWA for twelve years as part of our water quality monitoring program, and they were involved in the long-running Riverfest and Riversplash events. David also served on the FRCC since 1994 and held the positions of treasurer, secretary, FRWA representative, and chair of the Education & Outreach Subcommittee. He gave several talks about the Wild & Scenic designation process and his decades of experience as a river advocate and protector. He also created several publications for FRWA and FRCC, including the popular "Quick Waters, Smooth Waters: A Paddlers' Map of the Farmington River" and A Short



Always the jokester, David pretends to sip Farmington River water from a sample bottle. Photo by Alisa Phillips-Griggs, former Watershed Science Director at FRWA.

History of the Farmington River and the quest for a Wild & Scenic designation.

David was an award-winning paddler, and he taught paddling techniques for canoe and kayak at all skill levels and in all types of water for many years. As a racer he won National and State championships in both canoe and kayak and at various difficulty levels, and organized scores of canoe and kayak races. For his 50<sup>th</sup> birthday, David even paddled 50 miles of the Farmington River! David was a pillar of the Farmington Valley community. He will be sorely missed and fondly remembered, and his legacy of contributions to the river will live on.

"It is so hard to envision a world without David driving by with his wooden kayak strapped to the roof of his Subaru, seeing him paddling the river, or hearing him at public meetings. He and Carrie have been fixtures in the Valley for decades. This is a huge loss." -Sarah Faulkner, neighbor and FRWA colleague

"Thank you, David. Your love and passion for paddle sports, rivers, and the Farmington River are passed to the rest of us to advance and share. I am so lucky for all that you have done to shape my life and my passions. Countless others may be less aware but are invaluably grateful for all you have done to enhance our lives." -Andy Kuhlberg, FRWA Board Member

### Our Members Make it Happen- thank you for your ongoing support

Your membership with FRWA helps us to provide the staff time to seek out supportive grants for all the programs mentioned in this newsletter, and it also provides the critical match for all our watershed initiatives. In fact, FRWA members are the baseline for all our programming needs. It's your support that keeps our programs stable and funded throughout the years. Thank you for helping us continue the legacy of conserving and protecting the Farmington River and its watershed through research, education, & advocacy.

Prefer to mail i	in your gift? Send this s	slip to FRWA at 749 Hopn	meadow Street, Simsbury, CT 06070	
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Address:		City:		
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### **The Farmington River Watershed Association** 749 Hopmeadow Street, Simsbury, CT 06070

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### **Protecting The Farmington River, For You, For All, Forever.**

### FRWA 2023 Summer Events

Thursday, August 17- Invasive Water Chestnut Removal, Barber's Pond, Bloomfield, CT

Thursday, August 31- Invasive Water Chestnut Removal, Barber's Pond, Bloomfield, CT

Saturday, September 2- FRWA RBV Training at Granbrook Park, East Granby, CT

**Thursday, September 21-** Paleoindian Sites, Site Patterning and Travel Corridors along the Southern Arm of the Champlain Sea webinar

Saturday, September 23- 36th Annual Farmington River Clean-up, multiple locations

Scan the QR code to visit frwa.org, where you can find more about our upcoming outreach events, partner events, volunteer opportunities, and river updates!



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