**Poultney Mettowee Natural Resources Conservation District**

PO Box 209
Poultney, VT 05764
802-287-6880
www.pmnrcd.org

# Fall 2023 Newsletter

## Staff

**Hilary Solomon**
*District Manager*
Hilary@pmnrcd.org

**Jennifer Alexander**
*Agronomy Specialist*
Jennifer@pmnrcd.org

**Sadie Brown**
*Nursery Manager*
Sadie@pmnrcd.org

**Averie Noble**
*Project Specialist*
Averie@pmnrcd.org

**Whitney Burgess**
*Agricultural Outreach Specialist*
Whitney@pmnrcd.org

## Agriculture News

*A note from Jennifer Alexander, PMNRCD agronomy specialist*

As fieldwork winds down for the year, it's a great time to make sure your cropping records are in order. A quality nutrient management plan (NMP) has quality records: ones that accurately represent what is occurring on the land.

Estimating values when you initially write your plan is an acceptable way to start, but you'll get the most value out of your NMP if it accurately reflects what's happening field by field. While "the soil test tells the story," unless soil samples are taken annually or bi-annually, accurately tracking nutrient applications and removal by crop yield is imperative.

Tools like goCrop can make record keeping easier. You can use the website or the app to add to your records. The app doesn't need cell service to work, so it can be useful when you're out in the field. Farmhands can help with record keeping too; they can make their own goCrop accounts, which can be granted (or denied) access to your plan, as needed.

Many districts (like us!) offer technical assistance, which includes loaned equipment (such as portable truck scales or soil probes) and direct help from our staff — whether that's another set of hands to help with equipment, or a guide to help you navigate goCrop. We're happy to help you hone your NMP!

We participated in a variety of local workshops in partnership with UVM Extension, Bennington County Conservation District, NRCS, and local farms this season!

Our September workshop covered in-field soil health assessments. In addition, this fall there were several "Harnessing the VT Ripsower" demonstrations and two workshops on bedded pack barns. On November 8th, Woodlawn Farm held a local grain growers workshop.

*Soil health workshop attendees in the field*

POULTNEY METTOWEE NATURAL RESOURCES CONSERVATION DISTRICT

# Making a Splash in Leaps and Bounds

**This summer marked two big milestones for us: our fifth year participating in Lake Wise, and the 20th year of LEAP!**

With support from
the Lake St. Catherine Association,
the Lake St. Catherine Conservation Fund,
the Lake Bomoseen Association,
and the local landowners we worked with,
our team achieved a lot this season.

### 11 LEAP projects:

- Invasive plant removal
- Rain garden installation
- Vegetative swale installation
- Infiltration steps installation
- Shoreline plantings

### 11 Lake Wise projects:

- Shoreline plantings
- Streambank planting
- Steep slope stabilization

### Lake Wise site assessments:

- A total of 32 assessments completed
- 20 properties around Lake St. Catherine
- 11 properties around Lake Bomoseen
- One property on Lake Hortonia

### What is Lake Wise?

This statewide program aims to "establish a new culture of lakeshore landscaping that is proven to protect the lake," according to its spearheader, the Vermont Department of Environmental Conservation. With funding from the Lake Champlain Basin Program (received by the LSCA) and an ANR Watershed Grant, PMNRCD partnered with local lake associations to inform homeowners about stormwater and lakeshore management – empowering them to improve water quality and shoreline health. Lakefront homeowners are eligible for free site assessments, which include follow-up reports with recommendations. In many cases, a Lake Wise assessment can lead to free installations of Best Management Practices (BMPs) like shoreline plantings, rain gardens, or infiltration steps. Anyone who owns property on the lakeshore can enroll in Lake Wise! When a property meets all assessment criteria, it receives an award sign denoting its status. If 15% or more residents are awarded, their Lake Associations receive a Gold Lake Wise Award.

### What is LEAP?

As its name suggests, the **Lake Education and Action Program** is equal parts education and action: LEAP provides employment and professional development opportunities to high school and college students while teaching them about watershed science and environmental stewardship. Team members execute restoration projects around Lake Bomoseen and Lake St. Catherine to apply what they've learned, connecting with landowners as they install BMPs like rain gardens and infiltration steps. Community outreach is another facet of the program. Team members compose letters, develop informational packets, and go door-to-door to spread awareness about local water quality issues and how we can help. LEAP is funded by the Lake Champlain Sea Grant. We're proud to share that since we launched LEAP back in 2004, it's expanded to several other watershed groups, conservation districts, and lake associations around the Lake Champlain basin!

POULTNEY METTOWEE NATURAL RESOURCES CONSERVATION DISTRICT
PO Box 209, Poultney, VT 05764

# Collaborating for Fish

*PMNRCD Manager, Hilary Solomon, shares an update about the Mettowee River Fish Passage Barrier Removal project*

After working since 2016 and completing five previous culvert and dam removal projects, PMNRCD and partners succeeded in removing the final barrier to fish passage in the headwaters of the Mettowee River. Fish can now swim from West Pawlet to the Green Mountain National Forest with its cool, spring-fed tributaries on the flanks of Dorset Peak. The Sugar House Lane bridge in Dorset, VT, which was built on top of an old dam with a two-foot drop that didn't allow fish passage, was the final barrier removed. The bridge was replaced with a longer version with a natural open bottom.

According to Julie Butler with the US Fish and Wildlife Service (USFWS), the six combined projects helped open approximately 50 miles of connected habitat on the Mettowee River and its headwater tributaries to fish, frogs, salamanders, turtles, and other water-loving species. Wildlife will use the river and the corridor along its banks to find expanded areas to feed, spawn, and overwinter, hopefully bolstering their vitality and increasing their local populations.

Funds for this project came from a variety of sources including: the US Fish and Wildlife Service (USFWS), the Lake Champlain Basin Program (LCBP), Vermont Department of Environmental Conservation (DEC), the South Lake Clean Water Service Provider (CWSP), US Forest Service (USFS), and Trout Unlimited (TU). Partners include these groups and the Town of Dorset. In addition to the partners listed, many more assisted with funding and technical assistance for the prior projects. In all, over 12 organizations provided technical assistance and seven provided funding. The permitting staff at Army Corps of Engineers (ACOE), Vermont's State Historic Preservation Office (SHPO), the Town of Dorset, and each of the involved DEC offices provided thorough and efficient assistance to help us move our projects to completion.

Not to be outdone on the design and construction front, the project had multiple engineers over the years, culminating in stamped plans completed by Stone Engineering, major structural components sourced through Redi-Rock and ADM Welding, and with Davenport Excavation as the installer. Including the landowners, over 40 people were involved in at least one aspect of the Mettowee River Fish Passage Barrier Removal project. As the saying goes, "it takes a community" — and, it would seem, it takes a community of agencies, organizations, and individuals to ensure that our wildlife has access to the habitat that it needs to thrive.

*Davenport Excavation installs the new bridge abutments as the newly-undammed river flows through the project site.*

*A brook trout: one of many native aquatic species this project benefits.*

*The completed bridge.*



# Water Chestnuts

This summer we assisted Vermont DEC'S Lakes and Ponds Program in Aquatic Nuisance Species Control. Our project focused on targeting *Trapa natans*: the European water chestnut, also known as the water caltrop for its fruits' barbed shells! It's been found in bodies of water all over Vermont. Our efforts were concentrated on Southern Lake Champlain, its tributaries, and Addison County. The crew spent almost 400 hours on this project, diligently hand-pulling plants from kayaks. We collected 11,865 pounds of plants with a total of 58,612 rosettes. Despite this impact, removal efforts will continue next year due to the plant's prolific nature: each plant has 10-15 rosettes that can each produce up to 20 fruits filled with seeds that can be viable for up to 12 years!

Water chestnut plants form thick mats that outcompete native aquatic plants for sunlight. Then when they decompose in the fall, the amount of dissolved oxygen in the water drops. This can cause fish die-offs. Water chestnuts don't offer fish or waterfowl much for habitat or nutrition, either. These invasive aquatic plants impact us humans too: their mats can hinder swimming, boating, or fishing, and no one wants to step on those spiky fruits!

Vermont Fish and Wildlife explains that water chestnuts are "usually spread unintentionally by people on fishing gear and boating equipment". With that in mind, let's continue to *Clean, Drain, Dry* to protect our beautiful lakes and ponds!

*Top left: A water chestnut rosette.*
*Top right: Plants are gathered in laundry baskets on kayaks.*
*Bottom left: Baskets are emptied into boats for proper removal.*
*Bottom right: The crew goes out in kayaks to pull plants by hand.*

# Welcome, Whitney!

***Introducing our new Agricultural Outreach Specialist***

"I have been involved in land management and agriculture for nearly seven years now with experience in nutrient management, soil health, crop production, water quality monitoring, habitat conservation, and more. I'm excited to be joining the team at PMNRCD and to collaborate with local farmers."

We're pleased to add Whitney Burgess to our staff!

She attended Saint Michael's College, where she received a BS in Biology and Environmental Studies with a concentration in Wildlife Conservation and Management.

Whitney's college career included work experiences on several local farms, which led to her post-graduation position on a local sheep farm.

We can't wait to see what she'll do next here at the district!

# Clayplain Restoration Project

This summer we partnered with **The Nature Conservancy** to plant trees at the Clayplain Restoration Project in West Haven.

We installed a 50' buffer (2,758 native trees and shrubs!) along three small tributaries to the Hubbardton River. The plant species were chosen by TNC for their value as clayplain species and their survival likelihood. In addition to our buffer, TNC made other site improvements – like installing Beaver Dam Analogs!

We're very grateful to **PUR Projet** and **NRCC/LCBP's Trees for Streams program** for their support and funding this project.

*Crew members transport trees and supplies to the buffer area at the West Haven TNC site.*

*TNC hired Bob Hyams to install fences around several of the newly planted tree copses.*