

Franklin County Conservation District

New: 50 S. Main St. Suite B-20 St. Albans, VT 05478

franklincountynrcd.org

franklincountynrcd@gmail.com 802-528-4176



Here's a question for you: How are the trees you purchased from our tree sale doing? Every year we distribute thousands of stems through our sale, but rarely do we hear of the lives these trees go on to live (or not live.)

There are two reasons we want to know how your trees from our Tree Sale are doing.

One is if they're not doing well, we want to help improve that for future years! We might be able to change things like which nurseries we buy from, how we handle them, or the care instructions we provide. We monitor our tree planting projects over the following years to see how they do. And across the state, groups that plant trees compare data and explore new approaches together. When the U.S. Partners for Fish and Wildlife Program checked up on 18 riparian buffer sites in Vermont that were planted in 2008, they found that unfortunately only 48% of planted trees had survived, on average. The good news is that those that didn't die are growing vigorously, averaging 11' 9" after ten years. Some of the most common reasons trees die in these projects are weed competition, drought, plantings getting swept away by a

Time to place your orders for trees, trout and mushrooms

It may surprise you that now is the time to plan for spring! The early-bird prices on the enclosed order form are valid through March 14th, after which most listings will rise by 10-20%.

We have two new native shrubs discounted, we've lowered our prices on berries, plus this year a partner is sponsoring two free trees for each of our first 100 customers.

Fill out our tree survivorship survey on pg 7 if you have purchased trees from us before!

If you'd like to plant 50 trees or more, we may be able to match you with a funder who will pay for the trees, in recognition of their benefit to our environment.

As always, feel free to stop by the office or give a call with any questions. We look forward to seeing you and your trees!

flood, deer and beaver browse, girdling by voles and mice, and improper planting. Since 2008 we think we take better precautions against these risks and have higher survivorship, so we and our partners are continuing to monitor new projects hoping for more encouraging results. And we'd like data to help your trees do

better. too!

The other reason is if enough of our trees are surviving and thriving, we might be able to bring in corporate sponsors who would make certain species of trees free to you.

You might ask, But Vermont is already 80% forested! Why would a corporation pay to plant more trees here? One answer is that the Intergovernmental Panel on Climate Change reports that, along with cutting new carbon emissions to zero, we need to plant 2.5 billion acres of trees to stabilize the climate. And a study published this year in the journal Science found that there is almost exactly that much acreage available for trees



Volunteer Carissa Stein bundles an order of trees. What happens after you take them home?

without displacing cropland. So, globally, every tree countswe have to plant them where we can. Locally, trees enhance wildlife habitat, cool homes and offices, and filter nutrients that would otherwise end up in our lakes and rivers.

Companies are recognizing their unintended impacts on the environment and society, and they're making an effort to counteract that by planting trees. But when a company claims, for example, "We planted 10,000 trees," what does that mean? We think at minimum it should mean that 10,000 trees were planted that wouldn't have been otherwise, and that those trees survived and flourished.

So, are your trees surviving and flourishing? With some being free, will you plant more than you do otherwise? Please tell us in our Tree Sale

Survivorship Survey on page 7. As thanks, we'll give you \$2 off this year's order! There's a lot more to think about in terms of partnering with businesses in this way and improving tree survivorship, and without your input we can't even begin. Thank you! -Jeannie Bartlett, District Manager



Leah Szafranski from the U.S. Partners for Fish & Wildlife Program stands next to a 10'2" maple five years it was planted. Credit: US Fish & Wildlife Service

Let's keep in touch!

Email franklincountynrcd@gmail.com or call 528-4176 to sign up for bi-monthly conservation opportunities, or for assistance with a conservation project.

Restoring Trout Habitat

The District is working with state and federal wildlife agencies to remove the Johnsons Mill Dam in Bakersfield, reconnecting habitat for native brook trout and improving water quality. The Johnsons Mill Dam, built on the Bogue Branch near Witchcat Road, was once a productive saw mill but now, after decades of disuse, is in a state of deterioration. Removing the dam will reconnect 22 stream miles and allow brook trout to move upstream and downstream of the dam, allowing them to access the cool, high-elevation streams they need during Vermont's hot summer months. Dam removals also improve water quality by allowing streams to naturally transport sediment and by helping mitigate excessive erosion in the case of a dam failure.

Steve Cooper, the property owner, requested assistance with removing the dam after we contacted him last year. Cooper said he decided to pursue removal because, "I believe in balancing preservation of history with restoration and the enjoyment of natural habitats."

To our great surprise, the dam's old spillway breached during the Halloween storm. Bakersfield got over six inches of rain, which mobilized a significant amount of sediment impounded behind the dam. This was an outcome we had hoped to prevent through the removal project. "When we started this project, we did it because we knew the dam was bound to fail. We just didn't think it would happen before we could take it

out" said Brodie Haenke,

manager of the project. In



Brodie Haenke stands upstream of the now-breached Johnsons Mill Dam in Bakersfield. The project will remove sufficient concrete to allow brook trout to pass through the old dam and will remove impounded sediment behind the dam.



A Vermont Fish and Wildlife Department Watershed Grant provided support for this project.

The Conservation District again provided one-on-one assistance to eight small, family farms participating in UVM Extension's Nutrient Management Planning class. The 2019 graduates, pictured here with UVM and District staff, completed Plans that conform to

of a river's path, it's a win for our water," said Haenke.

District Assists Farms with Nutrient Management Plans

November, the District received a grant for \$125,000 from the Lake Champlain Basin Program to remove the dam. We are already working with Stone Environmental to complete the conceptual designs, and plan to implement the removal and cleanup in the

fall of this year. "Our streams and rivers need space to flow naturally across

the landscape, so any time we can remove man-made structures like dams out



NRCS and State standards and will guide their applications of manure and other nutrients. The 2020 class is already underway, and the District and UVM are providing ongoing assistance to class alumni with record keeping and updates to plans. Contact Jeannie to inquire about the class for 2021. 528-4176 or <u>franklincountynrcd@gmail.com</u>.

The mission of the Franklin County Conservation District is to promote land use that supports human livelihoods and sustains ecosystems in Franklin County, VT. We empower and convene landowners and land-users to prioritize and address natural resource concerns through USDA and locally-developed programs. We recognize water quality and the continuance of our land-based economy as key concerns for Franklin County today.



Photo credit: USDA-NRCS

New Farm Bill Brings Changes to NRCS

The new Farm Bill passed in 2018 is just beginning to take effect. The Farm Bill supports programs administered through USDA, all the way from nutrition to support for beginning farmers and from crop insurance to conservation, and much more. Your USDA-NRCS team here in Vermont wants to let NRCS participants know about changes to the program processes. Applicants will no longer need to apply to "EQIP" or "CSP," but will instead apply for a Conservation Plan. Once the applicant and the NRCS Planner have understood the conservation needs, explored the possible options, and decided on a plan, NRCS will determine which financial assistance program is best suited to the application. NRCS hopes this change will focus resources more strongly on quality technical assistance and improve conservation plans, reducing the need to cancel or modify financial assistance contracts. Questions? Contact Wynea Buford at 528-4174.

Precision Agriculture Forum - Save the date

The 2020 Precision Agriculture Forum will showcase technology used to plant seeds, fertilize fields, apply manure, harvest crops, and feed animals with a high degree of accuracy while recording valuable data that can be used to manage impact on natural resources and maximize return on investment.

This year's forum will host speakers with regional and industry expertise followed by a catered lunch by Dairy Center. Hear discussion on traditional precision ag technology & metrics, modeling, and a broader look at precision agriculture's role into the future. Two breakout sessions will be offered in the afternoon.



One will be a Custom Applicator Certification training/test by the University of Vermont Extension. The second will host a round table discussion with various vendors. More details & full agenda to come!

The event will be at the American Legion in St. Albans on March 12, 2020 from 10am to 2:30pm.

Register at: https://www.eventbrite.com/e/2020-precisionagriculture-forum-tickets-87982290399



Regional Events

Interested in more workshops and events like these? Sign up for our bi-monthly events listing by emailing franklincountynrcd.org or calling 528-4176. Don't use email? We'll be sure to call you!

- Feb 13 Bird Diva Bridget Butler's Birding Essentials: Learning to Listen, 6:30pm, Barlow St. Community Center, St. Albans, \$35, 524-1500 x *268
- Feb 15-17 NOFA-VT Winter Conference (workshops on many subjects), Burlington, www.nofavt.org/conference 434-4122
- Feb 19 What's going on with hemp in the NEK? 12:30-3:30pm, Barton Municipal Hall. Contact Emily Irwin 624-7022
- Feb 20 Industrial Hemp Conference, Burlington, uvm.edu/extension/nwcrops/2020-industrial-hemp-conference, 524-6501
- Feb 26 No Till & Cover Crop Symposium, Burlington, uvm.edu/extension/agriculture/no_till_cover_crop_symposium, 524-6501
- Feb 28 Hops Conference, Burlington, uvm.edu/extension/nwcrops/2020-hop-conference, 524-6501
- Mar 11 Organic Dairy Producers Conference, Randolph, uvm.edu/extension/nwcrops/2020-organic-dairy-producers-conference
- Mar 12 Precision Agriculture Forum, 10a-2:30p, American Legion, St. Albans. Contact farmerswatershedalliancenw@gmail.com
- Mar 12 Bird Diva Bridget Butler's Birding Essentials: Interpreting Bird Behavior, 6:30pm, Barlow St. Community Center, St. Albans, \$35, 524-1500 x *268
- Mar 24 Grain Growers Conference, Essex, uvm.edu/extension/nwcrops/2020-grain-growers-conference, 524-6501
- Apr 8 "What's Your Water Mark?" film screening and panel, Montgomery Grange. contact 326-6728
- Apr 9 Bird Diva Bridget Butler's Birding Essentials: Using Apps & eBird, 6:30pm, Barlow St. Community Center, St. Albans, \$35, 524-1500 x *268
- Apr 11 Mushroom log inoculation workshop, 10a-12p, St. Albans, \$25 registration. See pg. 8.
- May 2 District Tree Sale Pick-up, see order form pages 9-10



Highgate Farmer Presents at Middlebury College

In January, farmers Matt Choiniere (Highgate) and Steve Schubart (Charlotte) gave a guest lecture to the Middlebury College class *Food*, *Farms, Future: Vermont.* Through the course, 36 students explored the history, present and possible futures of VT agriculture. "Listening to Matt and Steve talk about the ways that farming cows can actually be part of the solution to climate change was so different from the narrative that I have been exposed to for most of my life," reflected Kate Kenny, from New York City. "I, and many of my peers, have never really been exposed to farming [and didn't] really understand the differences that different practices can have on the environment." The farmers were glad to make the connection too. Choiniere reflected, "I had a lot of fun. They were an easy group to talk to and I was very happy with all of the questions they had!"

Business & Succession Planning Services Available

The Vermont Farm and Forest Viability Program offers business planning, business ownership succession planning, and technical assistance to enterprises that keep Vermont's working landscape in production. These include: farm businesses of all sizes and sectors; food businesses that process, store, market, or distribute local agricultural products; and forest products businesses such as maple producers, consulting forestry firms, loggers, sawmills, craftspeople and more.

In addition, the program provides forestland ownership succession planning assistance to families who own forestland in Vermont.

These services are offered at no cost to the client, except for a \$75 enrollment fee for the 2-year business planning assistance program. Contact Liz at 828-3370.

District works with Berkshire farmer to restore stream - by Brodie Haenke

In the Lake Champlain Basin, water defines our landscape. The erosive force of water carves out steep drainages along our mountain faces, adding definition to the Green Mountains' most iconic peaks. It forms the valleys we inhabit, where the water can spread out, slow down, and lazily meander from one side of a valley to the other. As water continuously shapes our earth,



Left, "Before:" A small tributary to the Pike River incised and undercut it's banks, resulting in a bank failure in April 2018. Right, "In-Progress:" District staff, ECOAmeriCorps members, and EcoSolutions work to install erosion control fabric on the slopes of the banks, which now lie at a more stable angle less prone to failure. We will share an "after" picture once the project has been revegetated next year!

it bends and winds and bows and twists and crooks and seeps. It's natural, messy, and doing exactly what it should be. Despite this fact, much work was done in the last century to change the way water moves across our landscape. Streams were buried, straightened, dredged, drained, rerouted, walled, dammed, culverted, and "cleaned up" of rock, gravel, wood, and beavers to accommodate downtowns, houses, roads, railroads, farm fields, and aesthetic preferences. In fact, it was the Conservation District and Soil Conservation Service that provided the funding, engineering, and machinery to do much of this work throughout the state. And although these alterations were made with our communities' best interest in mind, part of the legacy of this landscape change is unstable streams that erode more and provide less habitat. Today, the District is working with local landowners to restore some of these altered waterways back to a more natural state to improve water quality and create habitat. In the fall of 2019, the District worked with Peter Hutchins, a dairy farmer near the Canadian border in Berkshire, to restore nearly 500 ft. of a badly eroding tributary to the Pike River. The stream, straightened decades ago, suffered a massive bank failure in the spring of 2018 after years of undercutting had compromised the stability of the slope. With funding from the Vermont Dept. of Env. Conservation and Agency of Ag., the District hired Fitzgerald Environmental Associates and EcoSolutions to create miniature floodplains, grade slopes, and widen the stream bank to prevent further excess erosion. Thanks to Peter and Lorie Hutchins and our partners, this project will prevent 453 pounds of phosphorus from entering the Missisquoi Bay!

Payment for Ecosystem Services - by Eliza Letourneau

"Ecosystem services" is the term used to describe any positive benefits the natural world provides to humans. There are four general categories used to describe these services. Provisioning services are the material or energy outputs of ecosystems, including food, water, raw materials such as wood and oil, and more. Regulating services are provided through the regulation of natural systems, including flood control and water purification, pollination, and many more. Supporting services are the underlying natural processes that allow life to continue on earth, such as habitat and nutrient cycling. Lastly, cultural services are ways the natural world shapes our culture and society, including recreation, tourism, aesthetics, and spirituality. The health of our ecosystems, and the ways we take care of them, impacts how well they can maintain and provide these services to us.



Waterfalls such as this one in the Catskills supply clean drinking water for New York City—and New York pays to protect it. Photo credit: visitthecatskills.com

In Vermont, our ability to hunt, fish, hike, produce food through farming, and enjoy our land and water in many other ways is controlled by all these ecosystem services. Our tourism and agricultural industries, a large portion of our economy, rely heavily on our natural resources and support of their continued health. Investment in ecosystem services makes economic sense in a variety of ways, including water purification costs and protection from flood damages. New York City receives 90% of its drinking water from the Catskill region upstate, investing \$1.7 billion since the 1990s to protect the watersheds to meet strict water quality standards. While this seems expensive, if water quality declined, the city would have to spend \$10 billion to build a filtration plant and another \$100 million annually to operate and maintain it. Healthy and functioning floodplains and wetlands in Middlebury saved the town as much as \$1.8 million in reduced damages during Tropical Storm Irene and save up to \$450,000 in damages for the town each



Abe Collins, an advocate of contracting farmers to create measurable improvements in ecosystem services, demonstrates a measurement tool he calls "the Grazibrator" on Choiniere Family Farm in Hiighgate.

year. Investing some money to protect these watersheds and allowing them to function properly saves millions of dollars.

The Payment for Ecosystem Services (PES) Working Group, made up of farmers, agricultural organizations, and state and federal regulators, is searching for a way to improve the ecosystem services our land provides through payment to land managers. There are 1.2 million acres of agricultural land in Vermont, managed by farmers who are paid only for the direct food products they produce, and not for the ecosystem services their land management provides for everyone in the state. For these farmers, and particularly for the dairy industry, where low milk prices over the last few years have led to financial difficulty, the current system incentivizes them to work the land to produce as much as possible, leaving unhealthy soils. Many farmers voluntarily implement conservation practices, but to make improving ecosystem services viable for all land managers, a payment system is needed. The working group is tasked with providing guidance on creating a financial incentive system that will pay farmers for using practices that improve soil health, enhance crop resilience, increase carbon and stormwater storage, and reduce agricultural runoff. The group began met five times from September through January. They produced a report for the legislature January 15th outlining eight key recommendations with a request to be funded through December 2021. The group hopes to better gather information on the relationship between soil health and ecosystem services as well as existing and emerging monitoring and modeling tools for PES in order to develop a model for PES that will work for Vermont. You can find the final report, meeting summaries, and webinar summaries as well as learn more about the group at agriculture.vermont.gov/pes.



Welcome Eliza Letourneau

Eliza Letourneau is from Addison County, VT and joined our team as an ECO Ameri-Corps member in September. She studied environmental science at Duke University where she worked on a team researching impacts of gold mining on a river ecosystem and the surrounding communities. She is happy to be back addressing water quality and community environmental issues in her home state.



Scholarships

Are you a college student, or will you be this fall? The District awards \$500 scholarships for students from Franklin County in conservation-related fields.

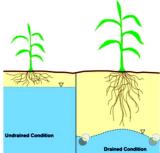
Please contact our office for an application! All applications due by September 1st.

Update on Tile Drain Monitoring by Eliza Letourneau

Here at the District, we collect data for a VT Agency of Agriculture, Food, and Markets' (VAAFM) study of tile drain sites across the state. Tile drains are installed under agricultural fields to drain off excess water in wet conditions to help crops grow more efficiently. Drains may be a single pipe or a system of pipes with water flowing out through one outlet below the field. The VAAFM study has been going for two years, collecting



data on when tile drains run, how much water is coming out of them, and



Corn roots are encouraged to grow deeper in well-drained soils than poorly drained soils..

what the nutrient levels are in that water. The goal of the study is to be able to create better policy and legislation to manage tile drains in the state. We are just wrapping up the first two-year cycle and recently received funding to continue to manage a portion of the study for the next two-year cycle! As the first cycle winds down, VAAFM will begin analyzing data to see what information they can learn about how tile drains operate.

LaRosa Water Quality Monitoring by Eliza Letourneau

For the past two years, the District has been a part of the VT Dept. of Environ-

mental Conservation's LaRosa Water Quality Partnership Program which engages local watershed groups and citizens in water quality monitoring. Through this program District members and local volunteers sample a variety of sites for nitrogen and phosphorus levels. Results from these studies help the state understand water quality conditions across our county and help us identify potentially high impact sites to improve. We have sampled in the Black Creek and Hungerford Brook watersheds as well as the Deer Brook in past years and are currently working to develop goals and a sampling plan for the 2020 season!



Join the Conservation District Team!

Interested in a position serving your own local working landscape? The Conservation Districts are frequently hiring. Watch vacd.org/jobs, or contact Jeannie if you'd like to be notified of openings: 802-528-4176.

Positions through the ECO*AmeriCorps program will also be available again this spring. AmeriCorps service members serve for from Sept-Aug with a Vermont conservation organization furthering water quality or waste reduction. They receive a living stipend and training. Contact Dustin at 462-5222.

Local Directory: USDA-NRCS & FSA, NW VT-527-1296 USDA Wetlands—855-794-3677 x239 VT DEC Wetlands-490-6758 U.S. Army Corps. Engineers-872-2893 Franklin County Forester—524-6501 UVM Ext. St. Albans-524-6501

Agency of Ag. Small Farm Certifiers: N. Lake Direct Watershed—272-9636 Missisquoi Bay Watershed—782-3388 VT Land Trust—223-5234 VT Farm Viability Program—828-3370 FarmFirst prof. support—877-493-6216 NOFA-VT-434-4122

NW Regional Planning Comm.—524-5958 Missisquoi River Basin Assoc.—393-0076 Farmers' Watershed Alliance-796-3292 Cold Hollow to Canada PO Box 406, Montgomery 05471 Friends of Northern Lake Champlain PO Box 58. Swanton 05488

USDA is an equal opportunity employer, provider and lender.

Tree Survivorship Survey – Get \$2 off your 2020 tree order as thanks for completing this survey!

Why do we want survivorship data? Your data will help us figure out how to help increase success with your trees, and it may provide the opportunity for outside organizations to sponsor trees (improving their carbon footprint and providing you with more free trees!)

Instructions: For each year you purchased trees from the Franklin Co. NRCD, fill in which species you bought. For each species in each year mark how many you purchased, size at purchase, how many are still surviving and how many of the surviving trees show weak, moderate, and vigorous growth. Finally, please use the space below to describe how you cared for your trees, causes of mortality when known, and any other comments. If you don't remember every tree, just fill in what you can! If you need additional space, feel free to photocopy this form and submit multiple sheets, or **fill it out online at <u>franklincountynrcd.org/tree-survey</u>**

2019		2018		2017		Prior (please note approx. year)	
Species:	ies:		Species:			Species:	
<u># Purchased</u>	Size at Purchase □Balled & burlapped Bare root: □<2ft, □>2 ft	<u># Purchased</u>	Size at Purchase □Balled & burlapped Bare root: □<2ft, □>2 ft	<u># Purchased</u>	Size at Purchase □Balled & burlapped Bare root: □<2ft, □>2 ft	<u># Purchased</u>	Size at Purchase □Balled & burlapped Bare root: □<2ft, □>2 ft
<u># Surviving</u>	Tree Growth (# each) weak moderate vigorous	<u># Surviving</u>	<u>Tree Growth (# each)</u> weak moderate vigorous	<u># Surviving</u>	Tree Growth (# each) weak moderate vigorous	<u># Surviving</u>	<u>Tree Growth (# each)</u> weak moderate vigorous
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<u>Please describe</u> tree care (did you use tree trunk protectors? How much did you mulch, weed, or water your trees after planting?), causes for tree death (if known, e.g. deer, drought, hit it with the mower, etc.) and any other notes you may have. Thank you!

Montgomery Pick-up Option for Tree Sale

The Montgomery Conservation Commission is again offering a satellite pick-up location for our spring tree sale. Simply write clearly "Montgomery pickup" on your order, and the Conservation Commission will bring it to the Public Safety building at 86 Mountain Rd., Montgomery Center for pickup between 11:30am-2:30pm on Saturday, May 2nd. All other orders will be at the Field Days on Airport Rd in Highgate, as usual.

Discounted and free trees available for conservation projects with 50+ trees

In addition to funding that is routinely available for tree projects from USDA, the Conservation District can now connect you with another program. PurProjet wants to support agroforestry, silvopasture, and ecological restoration in Vermont. Contact Jeannie for more information: 528-4176 or franklincountynrcd@gmail.com.

Spring Mushroom Spawn Sale

This year we are offering a hands-on inoculation workshop in addition to our sales of winecap and shiitake mushroom spawn. Since harvesting the logs and inoculating them ideally occurs about a month before our tree sale day, we are separating the mushrooms from the tree sale this year. Our workshop will be taught by Lynn Coale, who has been growing shiitake on logs in his backyard since 2014. He will lead participants through a hands-on workshop for inoculating logs and provide instructions for how to care for them and help them fruit. All materials are provided for one shiitake log for workshop participants (log, spawn, wax, use of tools.) You may buy additional spawn or buy spawn without attending the workshop. Pickup for spawn will be from 12-12:45pm on Saturday, April 11 at the NW Tech Center in St. Albans, or by other arrangement.

Name:	Phone:	Winecap sawdust spawn	\$22 x _	= \$
Email:		(5.5lb bag, for 50 sq ft of w	ood chips	
Address:		Shiitake plug spawn (50 plugs, for a 3-4ft log 3-1	•	= \$
Please make checks out to Frankli	e checks out to Franklin County NRCD and submit with your order to:	Shiitake plug wax (3 oz tub)	\$5 x	= \$
Franklin County NRCD, 50 S. Ma We have limited materials, so place	in St. Ste. B-20, St. Albans, VT 05478 ce your order soon! Thank you.	Shiitake inoculation worksho Includes all materials to inc		•
Comments:		Sat. April II, 10am-12pm,	St. Albans (exact location tbd)
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Grow Mushrooms Under Your Raspberries! - by Jeannie Bartlett

The last two springs I've inoculated different areas of my raspberry patch and under my fruit trees with winecap mushroom spawn, and the double-harvest sure has been fun. In early spring I spread clean hardwood wood chips through my raspberry bed and under my fruit trees, 2-3" thick. Then I scatter handfuls of winecap sawdust spawn over the wood chips, and lay on another inch of chips. Finally, I water the whole thing until it's moist throughout, and wait! The mushrooms thrive in the cool shade of the berries and trees. I've probably had four harvests now from the areas I inoculated in 2018. As with any new food, please try homegrown mushrooms in moderation initially. Contact us for full instructions.

Spring Trout Sale

We will be offering Rainbow and Brook Trout this spring for stocking ponds. 6-8" fish in lots of 25 can be picked up at the NRCS office. 10-12" fish require a minimum order of 50 and will be delivered to your pond, in which case please give detailed directions to it. **Pick up and delivery date: Tuesday May 12th, 1:00 pm**. Please fill out this form and deliver it with payment to 50 South Main St. no later than May 5th.

Name:	Phone:	<u>FISH</u>		
Email:		Rainbow 6-8"	ſ	\$
Address:		Brook 6-8" \int \$70 r	per lot of 25 fish	\$
		Rainbow 10-12"	\$	
Directions (orders of 10-12" fish only):		Brook 10-12"	additional fish	\$
		FISH FOOD		
		Whole bag (40 lbs)	\$45.00	\$
		Half bag (20 lbs)	\$30.00	\$
			TOTAL	\$

Franklin County Conservation District 2020 Tree Sale Order Form

Pick-up: Saturday May 2nd Franklin County Fair Grounds 294 Airport Road, Highgate

Bare-root: Habitat-quality deciduous

Other sizes & varieties may be available. Call to inquire.

Name Aronia (Black chokeberry) Ash, Green -NEW!- Birch, River -NEW!- <i>-SALE!-</i> Black Walnut <i>(get 1 FREE! see back page)</i> Buttonbush Cherry, Black <i>(get 1 FREE! see back page)</i>	Botanical name Aronia melanocarpa Fraxinus pennsylvanica Betula nigra Juglans nigra Cephalanthus occidentalis	2-3 ft 2-3 ft 2-3 ft 2-3 ft 2-3 ft 2-3 ft	Unit Price \$8.00 \$8.00 \$ALE! \$5.00 \$8.00		S \$ \$ \$ \$ \$
Ash, Green - NEW!- Birch, River - NEW!- - <i>SALE!-</i> Black Walnut (get 1 FREE! see back page) Buttonbush	Fraxinus pennsylvanica Betula nigra Juglans nigra Cephalanthus occidentalis	2-3 ft 2-3 ft 2-3 ft	\$8.00 SALE! \$5.00 \$8.00		\$ \$
Birch, River -NEW!SALE!- Black Walnut (get 1 FREE! see back page) Buttonbush	Betula nigra Juglans nigra Cephalanthus occidentalis	2-3 ft 2-3 ft	SALE! \$5.00 \$8.00		\$
Buttonbush	Juglans nigra Cephalanthus occidentalis				
	Cephalanthus occidentalis	2-3 ft	ć0.00		3
herry, Black (get 1 FREE! see back page)			\$8.00		\$
	Prunus serotina	2-3 ft	\$8.00		\$
Dogwood, Silky	Cornus amomum	5+ ft	\$10.00		\$
Iderberry, American	Sambucus canadensis	2 rhizomes 1-2 ft	\$8.00		\$
Im, American (disease tolerant) -NEW!-	Ulmus americanus	2-3 ft	\$8.00		\$
Maple, Red (get 1 FREE! see back page)	Acer rubrum	2-3 ft	\$8.00		\$
Dak, Bur -NEW!-	Quercus macrocarpa	2-3 ft	\$8.00		\$
Dak, Red	Quercus rubra	2-3 ft	\$8.00		\$
/iburnum (Arrowwood)	Viburnum dentatum	2-3 ft	\$8.00		\$
Witch Hazel -NEW!SALE!-	Hamamelis virginiana	15 in +	SALE! \$2.00		\$
root: Domesticated fruits. nuts (and flowers				•
		3-4 ft	\$25.00		\$
		3-4 ft	\$25.00		\$
Apple, Empire - NEW!-		1/2" diam	\$25.00		\$
Apple, Liberty	Malus domestica	1/2" diam	\$25.00		\$
	Malus domestica	1/2" diam	\$25.00		\$
Blueberries, Bluecrop & Collins	Vaccinium cyanococcus		\$20.00		\$
Cherry, Montmorency Sour	Prunus cerasus	1/4" diam, 3-4 ft	\$25.00		\$
Chestnut, American crosses -NEW!-	Castanea dentata X	bundle of 3, ea 2-3 ft	\$58.00		\$
Iderberry, cultivated (must buy >1)	Sambucus nigra	plug, 4-8 in	\$10.00		\$
Grapes, Somerset Seedless -NEW!-	Vitis labrusca	1 ft	\$5.00		\$
lazelnut, hybrid	Corylus	1-3 ft	\$18.00		\$
ilac	Syringa vulgaris	2-3 ft	\$8.00		\$
Pear, Seckel (self pollinating) - NEW!-	Pyrus spp.	3-4 ft	\$28.00		\$
Raspberries, Encore -new low price!-	Rubus idaeus	rooted cutting	\$6.00		\$
trawberries, Sparkle - new low price!-	Fragaria x ananassa	rooted cutting	\$1.00		\$
	Im, American (disease tolerant) -NEW!- Apple, Red (get 1 FREE! see back page) tak, Bur -NEW!- tak, Red iburnum (Arrowwood) Vitch Hazel -NEW!SALE!- TOOT: DOMESTICATED fruits, nuts of pple, Dayton -NEW!- pple, Westfield Seek No Further -NEW!- pple, Empire -NEW!- pple, Liberty pple, Macintosh lueberries, Bluecrop & Collins herry, Montmorency Sour hestnut, American crosses -NEW!- lderberry, cultivated (must buy >1) rapes, Somerset Seedless -NEW!- azelnut, hybrid ilac ear, Seckel (self pollinating) -NEW!- aspberries, Encore -new low price!-	Im, American (disease tolerant) -NEW!-Ulmus americanusMaple, Red (get 1 FREE! see back page)Acer rubrumMak, Bur -NEW!-Quercus macrocarpaMak, RedQuercus rubraBurnum (Arrowwood)Viburnum dentatumVitch Hazel -NEW!SALE!-Hamamelis virginianaPoot: Domesticated fruits, nuts and flowerspple, Dayton -NEW!-Malus domesticapple, Westfield Seek No Further -NEW!-Malus domesticapple, Empire -NEW!-Malus domesticapple, LibertyMalus domesticapple, MacintoshMalus domesticaherry, Montmorency SourPrunus cerasushestnut, American crosses -NEW!-Castanea dentata XIderberry, cultivated (must buy >1)Sambucus nigrarapes, Somerset Seedless -NEW!-Vitis labruscaazelnut, hybridCorylusilacSyringa vulgarisear, Seckel (self pollinating) -NEW!-Rubus idaeus	Im, American (disease tolerant) -NEW!-Ulmus americanus2-3 ftMaple, Red (get 1 FREE! see back page)Acer rubrum2-3 ftMak, Bur -NEW!-Quercus macrocarpa2-3 ftDak, Bur -NEW!-Quercus rubra2-3 ftWak, RedQuercus rubra2-3 ftBurnum (Arrowwood)Viburnum dentatum2-3 ftVitch Hazel -NEW!-SALE!-Hamamelis virginiana15 in +cont: Domesticated fruits, nuts and flowerspple, Dayton -NEW!-Malus domestica3-4 ftpple, Westfield Seek No Further -NEW!-Malus domestica1/2" diampple, Empire -NEW!-Malus domestica1/2" diampple, LibertyMalus domestica1/2" diampple, MacintoshMalus domestica1/2" diamlueberries, Bluecrop & CollinsVaccinium cyanococcuspair, 18-24 inherry, Montmorency SourPrunus cerasus1/4" diam, 3-4 fthestnut, American crosses -NEW!-Castanea dentata Xbundle of 3, ea 2-3 ftIderberry, cultivated (must buy >1)Sambucus nigraplug, 4-8 inrapes, Somerset Seedless -NEW!-Vitis labrusca1 ftilacSyringa vulgaris2-3 ftear, Seckel (self pollinating) -NEW!-Pyrus spp.3-4 ftaspberries, Encore -new low price!-Rubus idaeusrooted cutting	Im, American (disease tolerant) -NEW!-Ulmus americanus2-3 ft\$8.00Maple, Red (get 1 FREE! see back page)Acer rubrum2-3 ft\$8.00Mak, Bur -NEW!-Quercus macrocarpa2-3 ft\$8.00wak, RedQuercus rubra2-3 ft\$8.00wak, RedQuercus rubra2-3 ft\$8.00witch Hazel -NEW!-SALE!-Hamamelis virginiana15 in +SALE! \$2.00voot: Domesticated fruits, nuts and flowerspple, Dayton -NEW!-Malus domestica3-4 ft\$25.00pple, Dayton -NEW!-Malus domestica1/2" diam\$25.00pple, Empire -NEW!-Malus domestica1/2" diam\$25.00pple, Empire -NEW!-Malus domestica1/2" diam\$25.00pple, LibertyMalus domestica1/2" diam\$25.00pple, MacintoshMalus domestica1/2" diam\$25.00herry, Montmorency SourPrunus cerasus1/4" diam, 3-4 ft\$25.00hestnut, American crosses -NEW!-Castanea dentata Xbundle of 3, ea 2-3 ft\$58.00iderberry, cultivated (must buy >1)Sambucus nigraplug, 4-8 in\$10.00rapes, Somerset Seedless -NEW!-Vitis labrusca1 ft\$5.00idacSyringa vulgaris2-3 ft\$8.00azelnut, hybridCorylus1-3 ft\$18.00idacSyringa vulgaris2-3 ft\$8.00aspberries, Encore -new low price!-Rubus idaeusrooted cutting\$6.00	Im, American (disease tolerant) -NEW!-Ulmus americanus2-3 ft\$8.00Maple, Red (get 1 FREE! see back page)Acer rubrum2-3 ft\$8.00Mak, Bur -NEW!-Quercus macrocarpa2-3 ft\$8.00Mak, RedQuercus rubra2-3 ft\$8.00MakedQuercus rubra2-3 ft\$8.00MakedQuercus rubra2-3 ft\$8.00MakedQuercus rubra2-3 ft\$8.00MakedQuercus rubra2-3 ft\$8.00MakedQuercus rubra2-3 ft\$8.00MakedQuercus rubra2-3 ft\$8.00MakedMaked2-3 ft\$8.00MakedMaked3-4 ft\$25.00Pole, Dayton -NEW!-Malus domestica3-4 ftPole, Empire -NEW!-Malus domestica1/2" diamPole, KacintoshMalus domestica1/2" diamPole, MacintoshMalus domestica1/2" diamMakes domestica1/2" diam\$25.00Iueberries, Bluecrop & CollinsVaccinium cyanococcuspair, 18-24 inNontmorency SourPrunus cerasus1/4" diam, 3-4 ftHerry, Montmorency SourPrunus cerasus1/4" diam, 3-4 ftAcer volumeCastanea dentata Xbundle of a ea 2-3 ftMakedCorylus1-3

		1 11143 361 0543		7	Ŷ	
NY	Spruce, Colorado Blue	Picea pungens	1 ft	\$4.00	\$	
NY	Spruce, White	Picea glauca	1 ft	\$4.00	\$	
Bulk	Evergreen Seedlings:	1-ft evergreen seedlings are a	vailable in bundles of 2	10 for \$25, 25 for \$5	50, or 100 for \$	\$150
Tree v	ariety:		Size of bundle:	\$ per bundle: # b	undles Total	Price
exam	ole: Fraser Fir. (Note: Balsam Fir is	unavailable this year.)	100	\$ 150.00	2 \$	300.00
					\$	
					\$	
					\$	
	For a catalo	og with full descriptions of	of all the items we	offer,		

For a catalog with full descriptions of all the items we offer, visit us at 50 S. Main St, St. Albans or at franklincountynrcd.org. Thanks!

	O FREE TREES available to each of our f Black Cherry Black Walnut Re					
	Native Balled-and-Burlapped	Trees:				
Sour	e Name	Botanical name	Size	Unit Price	Number	Total Price
VT	Birch, White (Paper)	Betula papyrifera	6-8 ft	\$25.00		\$
VT	Cedar, Northern White (Arborvitae)	Thuja occidentalis	4-5 ft	\$22.00		\$
VT	Cedar, Northern White (Arborvitae)	Thuja occidentalis	6-8 ft	\$40.00		\$
VT	Fir, Balsam	Abies balsamea	4-5 ft	\$26.00		\$
VT	Fir, Balsam	Abies balsamea	6-8 ft	\$50.00		\$
VT	Maple, Red	Acer rubrum	6-8 ft	\$25.00		\$
VT	Maple, Red	Acer rubrum	2" diam	\$100.00		\$
VT	Maple, Sugar	Acer saccharum	6-8 ft	\$25.00		\$
VT	Maple, Sugar	Acer saccharum	2" diam	\$100.00		\$
VT	Spruce, White	Picea glauca	4-5 ft	\$26.00		\$
VT	Spruce, White	Picea glauca	6-8 ft	\$50.00		\$
VT	Tamarack (Larch)	Larix laricina	6-8 ft	\$40.00		\$

	Wildflower seed mixes (predomii	<u>nantiy native, some</u>	<u>naturalized):</u>			
PA	Butterfly & Hummingbird Garden		1oz bag for 300 sq ft	\$7.00		\$
PA	Riparian Buffer		1oz bag for 150 sq ft	\$6.00		\$
PA	Wetland		1oz bag for 150 sq ft	\$8.00		\$
					Subtotal:	\$
					Discount:	-\$
Name	:	Phone:	Phone:		Donation:	
				Total	Enclosed:	\$
Email:	·					
				Please mak	ce checks p	ayable to
Street, Town, Zip: Franklin County NRCD)
Prefe	rred method of contact: (circle o	ne) Phone / E	mail / Mail	Deliver che	ecks and or	der forms to
f "mail,	" please enclose a self-addressed, stamped enve	lope for us to mail your ord	er confirmation.	50 S. Main St. Albans.		-20

(Optional) Tell us about why or where you're planting trees!

These early-bird prices are available through March 14. Prices will increase on March 15. All orders are first-come first-served. Interested in volunteering for the tree sale? We could use extra hands, and we'll give you 20% off your order! Call 528-4176. Payment must be received with orders to reserve your trees. You may also order trees online at franklincountynrcd.org. There is no warranty on any tree, shrub, or vine. Check your order for quality and accuracy at pickup. Follow all care instructions.

Missing something you'd like? Call 528-4176 and we'd be happy to source additional native species or alternative sizes for you. Planting more than 50 trees? You may be able to get them free or discounted! Call 802-528-4176 for information.

All orders must be picked up between 8:30am and 1:00 pm on Saturday, May 2nd at Franklin County Fair Grounds, 294 Airport Rd, Highgate, VT, or they will be forfeited. Please find a friend or neighbor to pick up your order if you cannot make it on the 2nd.

Thanks! We look forward to seeing you and your trees!

* indicates species is native to Vermont

Free Trees to Capture Carbon!

This year we are partnering with American Meetings, Inc. to provide free trees to our tree sale customers! Black cherry, red maple, and black walnut are three of the fastest-growing hardwoods native to our area, so we have selected them for their faster carbon sequestration potential. Each tree sale customer this year may opt to receive up to two free trees out of these species. Read on to learn why else we love these trees!

Black Cherry - feed the birds!

The largest of the wild cherry trees, black cherry has beautifully shiny, striped bark when it is young. In maturity the bark becomes very dark and with a rough texture sometimes described memorably as burnt potato chips. The wood is highly valued for use in cabinetry and fine woodworking. From spring through summer, black cherry is host to over 200 species of butterflies and moths, second only to oaks in the diversity of caterpillars it hosts. These larvae in turn are fundamental food sources for songbirds – a nest of five chickadee chicks must be fed 6,000 to 9,000 caterpillars before they fledge! In winter, the cherries are eaten by some 70 bird species, including ruffed grouse, woodpeckers, cedar waxwings, thrushes, and grosbeaks. Bears and raccoons will climb the trees for the fruit, while foxes, chipmunks, rabbits, white-footed mice, and squirrels frequently feed on fallen fruits. Twigs and wilted leaves contain high levels of hydrocyanic acid and other toxins which are poisonous to cattle and humans. Black cherry is also fast-growing given



A song sparrow forages a caterpillar from a black cherry tree. Credit: Mary Anne Borge, the-natural-web.org

how dense its wood is - want to sequester carbon? Feed the birds? Grow high-value timber? Plant a black cherry!



Black Walnut - produce high-quality timber!

Walnuts have always been prized by humans. The dark brown wood of the black walnut is beautiful, durable, and relatively easy to work. And though the nut is an absolute ordeal to extract, it provided valuable food for native peoples and settlers alike. The walnuts most commonly eaten today are English walnuts; butternuts are the species native to Vermont, and black walnuts are native to the Midwest. It is thought they were brought north to Vermont by native peoples before European arrival. Black walnuts are still a popular delicacy, especially in the Midwest and southern U.S. The trees are also planted for their spreading

canopy, which, at maturity, shades houses, yards and grazing livestock. Black walnut is favored for "silvopasture" systems in the northeast, where animals are grazed and trees are

raised for timber on the same land. In the wild, these trees prefer rich, well-drained soils, and are often found near rivers or creeks. Chemicals exuded from their roots may inhibit the growth of other plants, so be sure to research what plants are compatible and which are affected.

Red Maple - striking foliage!

Red maple is one of the most common trees in northeast wetlands. It grows fast and reaches heights of 60-75 feet. It has bright red fall foliage, and its seed, sap and buds serve as food for wildlife.



Volunteer for Conservation and get 20% off!

Our tree sale, water quality monitoring and restoration projects rely on volunteers. Many of our partners in conservation and resilient local food systems also rely on volunteers to keep our environment and our communities healthy.

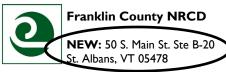
Sign up for our every-other-month email updates to learn about opportunities with the Franklin County Conservation District and our partners to:

- plant trees
- monitor water quality
- track wildlife
- monitor & report precipitation
- steward a restoration site
- glean produce from farms for food shelves
- help a farm bring in the harvest
- enhance water quality and habitat on your own land

Volunteers for the tree sale or other programs receive up to 20% off their tree order and the opportunity to purchase overstocks at cost. If the program grows we may be able to offer other discounts as well.

Contact Jeannie at franklincountynrcd@gmail.com or 528-4176 to learn more or sign up – access to email preferred but not required to be on the list. Thank you!





Phone: 802-528-4176 Email: franklincountynrcd@gmail.com Web: franklincountynrcd.org

Franklin County Natural Resources Conservation District

<u>Supervisors:</u> Richard Noel, *Treasurer* Philip Parent Eileen Trudell Doug Lantagne

<u>Staff:</u> Jeannie Bartlett, Manager Brodie Haenke, Conservation Specialist Eliza Letourneau, ECO AmeriCorps Conservation Technician

Help us conserve paper and save money by going paperless!

Please call 802-528-4176, or email franklincountynrcd@gmail.com, and tell us the physical address you would like removed and the email address you would like to add. Thank you!

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CCE CROSS CONSULTING ENGINEERS, PC. 802-524-2113



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<u>Thank you to our Bronze Sponsors:</u> Greenleaf Forestry Guy's Farm and Yard Peoples Trust Company

Tree Sale Information Inside!

Franklin County Conservation District



802-238-4904

Annual Newsletter 2019

with Tree and Trout Sale ordering information

Inside This Issue:

- * \$2 off your tree order for completing tree survivorship survey (pg. 7)
- * Farm Bill changes to NRCS programs (pg. 3)
- * Reflections on payment for ecosystem services (pg. 5)
- * District restores small stream in Berkshire (pg. 2)
- * District assists eight farmers in Nutrient Management Planning class (pg. 2)
- * Benefits of black cherry, black walnut and red maple for wildlife and the climate (pg. 11)
- * Events on mushroom growing, precision agriculture, bird watching and more (pg. 3)



Want to sponsor our newsletter? Write to franklincountynrcd@gmail.com or call 802-528-4176 to support the Conservation District's work.

Our 2,500 readers appreciate your generous support!