



# \*\*38th \*\* Annual Tree Sale



**Order Deadline: March 31, 2021** 

Pick-up Date: May 1, 2021
Pick-up Times: TBD\*
Pick-up Locations:

617 Comstock Road, Berlin VT

166 Boyer Circle, Williston, VT

\*See page 21 for details



# **ABOUT** the Tree Sale

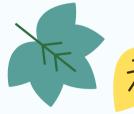


The Winooski Natural Resources Conservation District (NRCD) hosts the annual tree sale as a service to residents of the District and a fundraiser for our other programs. We offer a wide selection of native and locally sourced species for home, garden, and conservation projects. All proceeds from this fundraiser are used to develop and implement on-the-ground projects that protect our natural resources.

Thank you for your continued support!



# WHAT'S NEW at This Year's Sale?





- This year the Tree Sale theme is Food Security. We are highlighting native trees
  and shrubs that can help stock the pantries of your neighbors in need. See our
  feature of the Vermont Foodbank on page 8 to learn about the challenges this
  year has brought for Vermonters and consider what you can do to help. From
  berries and sap to tubers and tea leaves we hope you enjoy this selection of
  food-producing species.
- We've added raffle prizes! All customers will receive 1 raffle ticket for every \$20 spent. See **page 16** to read more about the prizes and learn how to buy extra tickets.
- We're excited to share inspirational planting plans designed by Holly Greenleaf on page 4.
- We lowered our average price to \$8.56/stem



Winooski NRCD promotes the wise use, sustainable development, and conservation of our District's natural resources. We serve all of Chittenden and Washington Counties as well as the towns of Orange, Washington, and Williamstown. We connect District residents and communities with education and technical assistance to implement on-the-ground projects for water quality, soil health, and wildlife habitat.

To find out more about the WNRCD and how you can get involved, please visit <a href="www.winooskinrcd.org">www.winooskinrcd.org</a> or email us at: <a href="mailto:info@winooskinrcd.org">info@winooskinrcd.org</a>



Some of our work from this year is highlighted in the next two pages



# **IPACT REPORT**

#### Agricultural Assistance



- Directly assisted 15 farms
- Developed 5 Nutrient Management Plans
- Hosted **2 workshops** about equine manure management



- Assessed 1,100 acres of farmland for water quality concerns
- Collected samples for a tile drain water quality impact study

#### **Forestland Enhancement**

 Assessed the health of 7,000 ash trees along 100 miles of road in Williamstown, Orange, & Marshfield to help 3 towns write Emerald Ash Borer Response plans.



• Sold 1,200 native saplings to residents in our annual Tree Sale to expand tree cover and wildlife habitat on private land.

#### **Urban Conservation**

Organized a covid-safe rain barrel kit pickup for 40 people





- Led 3 webinars to educate people about how they can help improve water quality by making small changes.
- Led an 8-week volunteer assessment program for 9 urban streams



#### Watershed Stewardship

• **Planted 1,055 trees** along 700 feet of the Jail Branch River to restore the riparian buffer

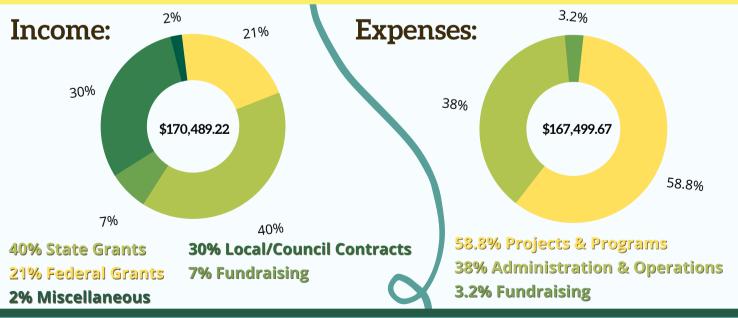


 Worked with engineers to design a removal plan for Hands Mill Dam in Washington



 Worked with community partners to plan water quality improvement projects at Shady Rill Picnic Area in Middlesex

#### FINANCES:





Winooski NRCD promotes the wise use, sustainable development and conservation of our District's natural resources.

Our New Strategic Plan Finalized in 2020:

http://winooskinrcd.org/wp-content/uploads/WRNCD-Strategic-Plan-Report-7.16.20-FINAL-1.pdf

## THANK YOU 2020 Volunteers and Partners

Even as COVID - 19 shifted the way we connect, the Winooski NRCD found ways to move conservation efforts forward, thanks to the flexibility of our volunteers and partners.

This year we expanded a basin-wide stormwater program, Storm Smart, to provide free assessments to residents across the Winooski watershed.



interns assisted us in soil sampling, tree inventories & more





volunteers collected photos & stories of urban streams





local groups received water quality project training



121 farm fields soil sampled





Support for our work comes from a variety of sources including state, federal and local grants, revenue from our annual Tree Sale and contributions from municipalities.

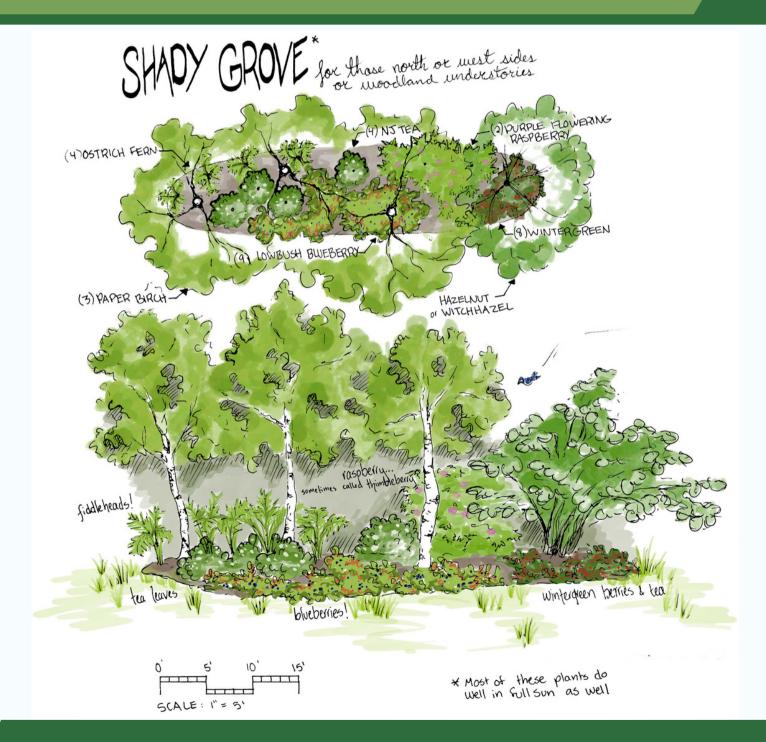




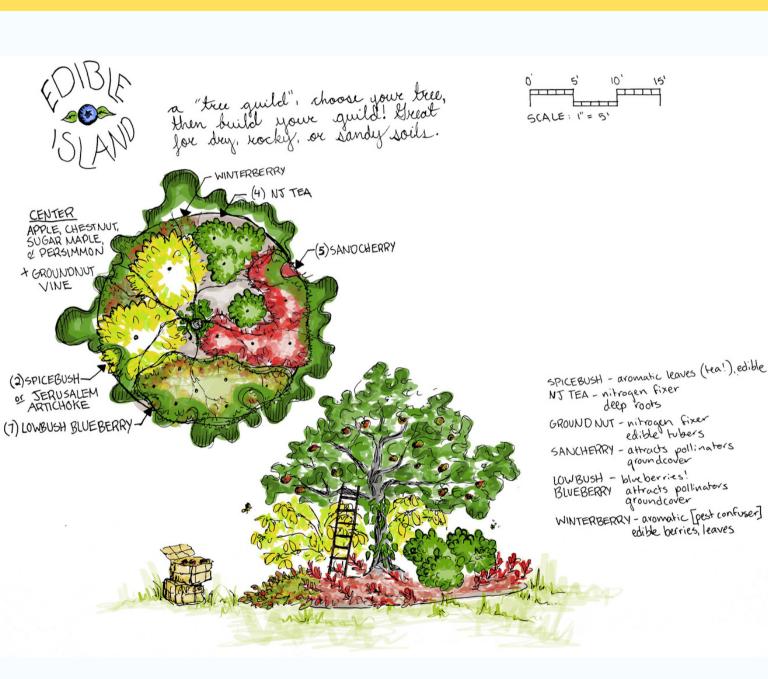


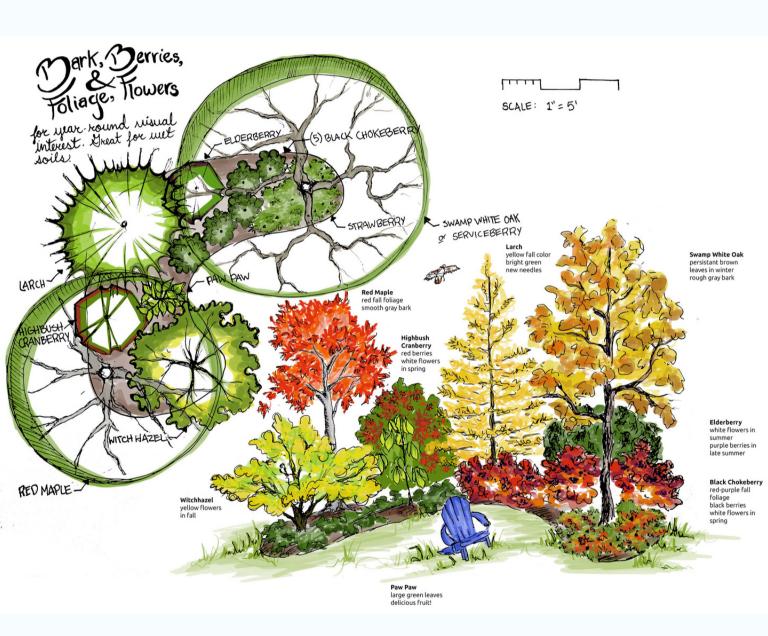
**Stay in Touch!** Do you have a resource question on your property or a great idea for a project or partnership? Tell us! We have worked with everyone from towns and schools to private homeowners and farmers. Follow us on Facebook or Instagram or join our e-newsletter to learn about upcoming events and new services.

Greenleaf Design LLC, based out of Burlington, VT, works to co-create functional and beautiful landscapes that benefit the health and wellbeing of people, plants, soils, water, and wildlife. Built on a foundation of experience as a designer, artist, gardener, horticulturist, researcher, and student, Holly Greenleaf started Greenleaf Design, LLC, to be involved in every part of the landscape design process. This year Greenleaf Design donated three planting plans highlighting the 2021 inventory.



Thanks to Holly for her creative inspirations that we hope will help residents add visual interest to their edible landscape creations!





Start planning your edible landscape by contacting Holly Greenleaf at **greenleafholly@gmail.com** or by visiting <a href="www.hollygreenleaf.com">www.hollygreenleaf.com</a>

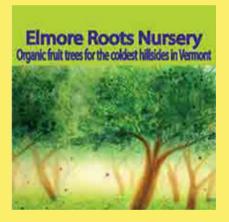
WNRCD emphasizes locally sourced species and cultivars while still balancing customer costs. This allows us to support local growers and offer a selection of species that will grow best in Vermont. This year we are proud to highlight the following local growers.

#### East Hill Tree Farm - Plainfield. VT

"East Hill Tree Farm provides the resources to empower and enable the communities in the Winooski Valley to reestablish the garden of Eden."







#### Elmore Roots Nursery - Wolcott, VT

"Elmore Roots' mission is to find and keep growing the best fruit and nut varieties that will thrive on the coldest hillsides in Vermont, using the simplest sustainable methods. To be an educational resource for our customer's continued success. And to be a nurturing place for the plants, the crew, our customers and the natural world."

elmoreroots.com

#### Sacred Circle Homestead & Nursery - Woodbury, VT

"The mission of Sacred Circle is to work to create an inspiring example and reestablish healthful human presence, to provide affordable access to plant-based abundance, and to pass on the mindful wisdom and skills that promote a reciprocal restoration of balanced living ecosystems."

sacredcirclehomestead.org





#### What is

#### **FOOD SECURITY?**

Food security describes a household's ability to provide enough food for every person to live an active, healthy life. Food *insecurity* is one way to measure and assess the risk of hunger. In the United States, 1 in 9 people struggle with hunger. In Vermont, that number is 1 in 4.

**How can you help?** This year as you design your garden and landscape, plan to plant a few extra edible varieties so you can share food with your friends and neighbors. Then, consider supporting the Vermont Foodbank as a donor or volunteer.





The Vermont Foodbank is the state's largest hunger relief organization, providing nutritious food through a network more than 300 community partners – food shelves, meal sites, senior centers, after-school programs, schools and hospitals. Food insecurity

has increased dramatically as a result of the pandemic and the Vermont Foodbank and its network have been on the front lines, working to ensure that everyone has the food they need to maintain their health.

"Vermonters Feeding Vermonters, our program to purchase locally produced fresh food to distribute to people facing hunger, continues to help address the economic fallout from the pandemic. Thanks to donors and CARES Act funding, we've increased our budget from \$200,000 to \$935,000. This will be spent on local food from more than 50 Vermont farms to meet the increase in need. Additional funding has also allowed us to expand our purchases beyond produce to include local meat, dairy and eggs."

The mission of the Vermont Foodbank is to gather and share quality food and nurture partnerships so that no one in Vermont will go hungry.



Visit **vtfoodbank.org** to donate, learn more about food security, and view volunteer opportunites.

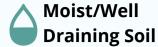
#### **AVAILABLE SPECIES**



















**Edible** Sap







WARNING: Please do your own research to confirm edible components and appropriate preparation of plants prior to consumption. Some species may be toxic at high doses, contain allergens, or be inappropriate for individuals with certain health conditions.



#### Ground Covers and Vines



#### Groundnut Apios americana



This plant was and continues to be a food staple for indigenous communities across North America. The tubers can be used in soups & stews or fried like potatoes. The cooked seeds can also be eaten.







#### Strawberry - Cavendish Fragaria spp



This variety, originating from Nova Scotia is a cross between two varieties known for their winter hardiness and attractive, large fruit. It produces high yields that ripen over a long growing season. Excellent flavor and overall quality. June-bearing.







#### Wintergreen Gaultheria procumbens



This shrub produces red berries that taste best after frost and can be eaten raw or cooked. The young leaves produce an aromatic tea.









#### Lowbush Blueberry Vaccinium angustifolium



This plant flowers in the spring with sweet, flavorful berries. We recommend purchasing 2 or more for improved pollination. 2021 cultivars include Michigan Lowbush, and two semidwarf cross breeds: North Country, and Northblue. You can request specific cultivars in April based on nursery availability.







#### Small Shrubs and Herbaceous Perennials



#### Black Chokeberry Aronia melanocarpa



This shrub blooms in late May and produces fruit that can be used in baking and jams. The shrub also provides an excellent source of food and shelter for wildlife.







#### New Jersey Tea Ceanothus americanus



This low, upright, deciduous shrub blooms in late spring. The dried leaves make an excellent tea used medicinally by Native Americans for centuries. The tea grew in popularity during the Revolutionary War.







#### Jersualem Artichoke Helianthus tuberosus



Fun fact: There is a colony of Jerusalem Artichoke in Cambridge, VT that is thought to have been cultivated by indigenous people 400-600 years ago! Today tubers are sold in produce markets & are delicious when boiled or roasted. Raw, they have a sweet, nut-like taste.







#### Ostrich Fern Matteuccia struthiopteris



New fern leaves, known as fiddleheads and are a popular spring delicacy pickled or fried. Growing your own helps to protect wild fern stands which are threatened by over-harvesting.







#### Eastern Sand Cherry Prunus pumila



This shrub blooms in the spring and fruits ripen in August with a rich and pleasant acid taste. Bitter fruits and pits should be avoided and may be high in cyanide. Horticultural setting only.







## Purple-flowering Raspberry Rubus odoratus



These tangy and seedy fruits that bloom in early summer will add a punch to jams and pies. Shrubs are thornless and a favorite of pollinators. Also known as thimbleberry.









#### Tall Shrubs and Understory Trees

#### Allegheny Serviceberry Amelanchier laevis



This small tree blooms in early spring and produces delicious, edible fruit in lune that tastes similar to blueberries. The fruit can be eaten fresh or cooked and is best harvested when it turns to a dark purpleblue.







#### Paw Paw Asimina triloba



These fleshy sweet fruits resemble bananas. Fruits are frequently eaten raw or used in ice creams or pies, although they can produce nausea in some people. We recommend purchasing 2 or more plants for better pollination. Horticultural setting only.



#### American Hazelnut Corylus americana



This rounded tree or multi-stemmed shrub produces sweet nuts, that can be eaten raw or used in cooking. It also provides food and shelter for wildlife. Horticultural setting only.







#### Witch Hazel Hamamelis virginiana



This shrub blooms and fruits in late fall, producing seeds that have a nutty flavor. There are some reports of teas made from the leaves. It is also an important food source for many moths and butterflies.







#### Spicebush Lindera benzoin



The young leaves, twigs and fruit of this shrub contain aromatic essential oil and make a very fragrant tea. The dried and powdered fruit is used as a substitute for the spice 'allspice'. The plant is not self-fertile, sex of available plants unknown.









#### Elderberry Sambucus canadensis



This shrub flowers in July, producing fruit which can be used to make jams, jellies, pie filings and elderberry wine. It is also an excellent source of food for backyard birds.







#### Nannyberry Viburnum lentago

#### Highbush Cranberry Viburnum trilobum



Nannyberries are sweet wild fruits that grow in clusters from prolific bushes. The fruits ripen in the late fall and can remain on the branches all winter. They are commonly used to make fruit butters and iams.









Highbush cranberry shrubs fruit in late summer and taste best after frost and when picked slightly underripe. The fruits can be used to make jams and jellies. Susceptible to defoliation by viburnum leaf beetle.







#### **Apples** Malus domestica



Great for eating fresh and baking. This year available cultivars include Cortland, Yellow Delicious, and Northern Spy. You can select your cultivar at time of order. For descriptions see meadowviewtreefarm.com/fruit









#### Acer saccharum



This iconic tree produces dark-green leaves that turn yellow, burnt orange or red in fall. This sap of this species has a high sugar content which is why it is most commonly tapped to make syrup.







#### Red Maple Acer rubrum



This maple tree produces clusters of small flowers winter to spring and can be tapped to make maple syrups. Sugar content in this species is lower than in the sugar maple, so it requires more boiling time.







#### Canoe/paper birch Betula papyrifera



Birch sap can be collected slightly later in the season than maple, extending your sugaring operations and adding a variety of flavor to pancake breakfasts.







#### American chestnut Castanea dentata



This tree is a prolific bearer of nuts which develop through late summer. The plants have been grown from seed collected on the farm at East Hill Tree Farm. Parent trees are American crosses. They show good hardiness and have a good chance for resistance to chestnut blight.







#### Hackberry Celtis occidentalis



This medium-sized tree produces unique berries that can be eaten raw. Fruits consists of a thin. sweet purple skin surrounding a crunchy shell with a tiny edible nut inside.







#### Persimmon Diospyros virginiana



This shrubby tree produces small sweet fruit in the fall. The plant is not self-fertile, sex of available plants unknown. We recommended purchasing two or more to increase pollination. Horticultural setting only.







#### American Larch Larix laricina



Tea can be made from the roots, branches and needles of this slendertrunked tree. Also known as Tamarack, this tree is one of the few conifers whose needle-like leaves turn yellow in the autumn and fall off by winter.







#### Red Mulberry Morus rubra



This medium-sized tree that produces berries in spring can be used in any recipe that calls for raspberries and blackberries. Horticultural setting only.



#### Thuja occidentalis 'Smaragd'



Foliage from this evergreen tree can make an aromatic tea. This species is a fullsized variety. Note: two different sizes of Cedar are available this year.





This dwarf evergreen tree blooms around April. The leaves and leaf oil can both be used as a medicine. Note: two different sizes of Cedar are available this year.



#### Swamp White Oak Quercus bicolora



Acorns from this tree can be processed to be used as a flour substitute in baking. As with all edible plants, do your 📙 research before eating. Acorns contain tannins which can be toxic and must be removed before consuming. This variety is one of the faster growing oaks and thrives in wet soil.











Let's see if you can find the answers...

- A. Resources
- B. Rubus odoratus
- C. 1100
- D. Emerald Ash Borer
- E. 1200
- F. Projects and
  - **Programs**

- G. Streams
- H. Vermont **Foodbank**
- I. New Jersey Tea
- J. Spring
- K. Nannyberry
- L. Spicebush
- M. Rain





3) Eastern Sand Cherry blooms in the \_\_\_\_\_ and its seeds ripen in August.

4) This plan has berries that have a warm spice and are commonly used in baking and pies.

5) The Winooski Natural \_\_\_\_\_ Conservation District.

6) The state's largest hunger relief organization, provides nutritious food through a network more than 300 community partners.



8) The Latin name for Purple-Flowering Raspberries.

9) A deciduous shrub that blooms in late spring and is named after a state.

10) In 2020, WNRCD assessed 7000 ash trees in Williamstown, Orange, & Marshfield for \_\_\_\_\_ infestation.

11) How many acres of farmland was assessed for water quality concerns in 2020?

12) 58.8% of expenses goes towards\_

13) In 2020, WNRCD organized a covid-safe \_\_\_\_\_\_ barrel kit pickup for 40 people.











# District Swag



Show your District pride on your next outdoor adventure! "Love The Land You Live On" t-shirts were designed by UVM CATs students. Designs are printed on Hanes EcoSmart 50/50 T-shirts which are a cotton/poly blend well suited to keep you cool and dry. They are made of 5% recycled plastic water bottles and sales support the Hanes' Green for Good Philanthropy program. T-shirts come in the following sizes: S, M, L, XL, and XXL. Sizes are unisex.

Boast your love for trees or celebrate your last tree planting volunteer day with a weatherproof "Put a Tree on It" Magnet. Magnets are 8" X 2"



#### A closer look







Raffle tickets are being sold thanks to donations provided by Arcana Gardens and Greenhouses.

Tickets are available online and through the order form. Tree sale customers will automatically earn 1 raffle ticket for every \$20 spent. You can purchase additional tickets for \$2 each.

#### **PRIZES**

Raffle prizes include a curated selection of potted (6 inch to 1-gallon size) native perennials. Winners will be selected in April 2021 after orders have closed and will be contacted to confirm their preferred species pending availability.

#### Species up for raffle:

- Asclepias incarnata 'Milkmaid'
- Asclepias incarnata 'Soulmate'
- Clematis virginiana
- Lobelia cardinalis
- Panicum virgatum
- Rudbeckia 'Goldsturm'
- Thalictrum dioicum
- Thalictrum pubescens
- Veronicastrum 'Album'



Arcana Gardens and Greenhouses, Jericho, VT arcanagardens.com Arcana is a certified organic facility located on 140 acres.

<sup>\*</sup>For pictures see next page\*

## Species up for Raffle



Asclepias incarnata 'Milkmaid' Milkweed



Asclepias incarnata 'Soulmate'
Milkweed



Clematis virginiana Virgin's Bower



Lobelia cardinalis Cardinal Flower



Panicum virgatum Switchgrass



Rudbeckia 'Goldsturm' Black Eyed Susan



Thalictrum dioicum Early Meadow Rue



Thalictrum pubescen
Tall Meadow Rue



Veronicastrum virginicum 'Album' Culver's Root



#### **OUR SPONSORS**









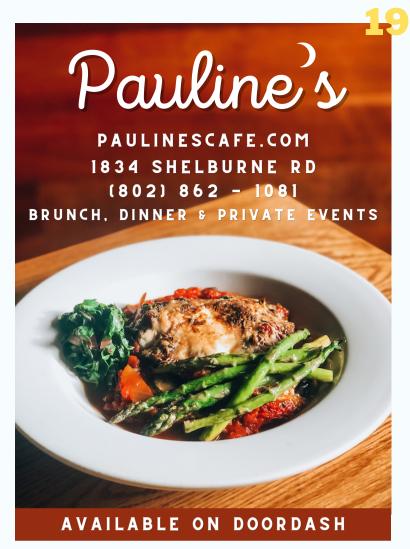
GREENLEAF DESIGN, LLC

ECOLOGICAL LANDSCAPE DESIGN ILLUSTRATION & GRAPHIC DESIGN

Thank you to our 2020 sponsors!









Florist, Greenhouse & Perennial Farm

#### **OPEN 7 DAYS A WEEK**

187 Main Street, Colchester, VT 05446 (802) 878-2361 www.claussens.com



Almost all trees and shrubs will arrive as bareroot stock. Bareroot means that the plants are dug up and stored without any soil around their roots. Bareroot trees can have up to 200% more roots than container trees depending on the soil and transplanting history at the nursery. Without extra labor and materials, bareroot trees cost both the seller and buyer less. A young tree without soil weighs less, so it's also easier to move and plant. Despite all these advantages,

those purchasing bareroot stems should consider the planting instructions provided below. Without soil, the roots can dry out and die if left exposed.

There is no warranty on any products. To minimize losses, please follow planting and care instructions.



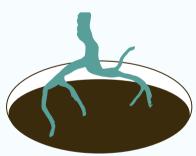
#### HOW TO PLANT: \*



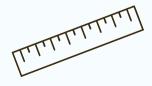


Before planting, keep the roots in a moist, cool and dark environment. Roots should be soaked before planting for a minimum of 4 to 6 hours to ensure proper hydration. Plants should be transplanted within 24 to 48 hours of receiving them. Do not soak longer than overnight since plant roots need oxygen too.

Dig a hole wide enough that roots are not crowded or bent when placed in the hole (usually twice as wide as deep). Break up any compaction on the sides of the hole with a spading fork or small trowel. Make a cone of soil in the center of the hole. Place the plant on the cone and spread out the roots evenly. Twisted or circling roots may eventually girdle or choke the plant. Position the plant so the line between the root and stem (called the crown line) is at ground level.



Back-fill the hole halfway, firm with your fingers and add water. If the plant sinks too low, pull it up gently, allowing the soil settles beneath it. This prevents air pockets. Continue back-filling until the hole is full and the crown line of the plat is at or just above the surrounding soil level.



**Spacing:** Large shade and fruit trees should be planted about 20' apart; semi-dwarf fruit trees about 15' apart; windbreaks about 5-10' apart; and hedges about 2-4' apart.

Find more planting tips and diagrams at: vtcommunityforestry.org/resources/tree-care/tree-planting Early bird pricing is available until January 31st, 2021. **ALL orders must be submitted by March 31st, 2021. Pick-up is scheduled for Saturday May 1st, 2021.** Orders can be submitted directly from our website, or downloaded, printed and mailed or emailed in. Orders are confirmed upon <u>receipt of payment</u>. Contact info@winooskinrcd.org for help with your order.

# Find forms and instructions here: winooskinrcd.org/treesale

Covid-19 brought new and unexpected challenges to our 2020 Tree Sale. We will need to contact customers in April to confirm a final pick-up time. Depending on conditions we may again pursue contact-less curb side pickup and process all other customer choices via email/phone in advance (i.e. fire sale of left over stock, raffle drawings, blueberry cultivar selections, etc.). PLEASE MAKE SURE YOUR CONTACT INFORMATION IS ACCURATE AND CHECKED REGULARLY

#### **Pick-Up Location**

Please indicate your pick-up location when you order (Berlin or Williston)

Failure to pick up trees at the scheduled time will result in forfeiture of your order. Please find a friend or neighbor to pick up your order if you are unavailable. Species and counts are limited and are sold on a first-come, first-served basis so order today! There is no warranty on any products. To minimize losses, please follow planting and care instructions.