



Please join us in extending our sincerest good wishes to Tim Nourse as we share the news of his retirement. Having devoted a lifetime to the berry plant industry and significantly influencing Nourse Farms' reputation as an industry leader, Tim now passes the torch to the company he founded. Together with our team, including many dedicated employees who have built Nourse Farms alongside him, Tim has poised the company for its exciting next chapter, and for that, we are grateful.

In this next chapter, we are expanding in Massachusetts and North Carolina while integrating cuttingedge technology to address the burgeoning demands of our industry. But what does this mean to you?

State-of-the-Art Facilities

In Massachusetts, we have broken ground on a new building across the street from our headquarters. This state-of-the-art establishment will feature a modern tissue culture lab and a seven-acre greenhouse dedicated to foundation material cultivation.

Increased Plant Production

Meanwhile, in North Carolina, a 15-acre greenhouse will bolster our plant production capabilities, producing a greater supply of our top-tier products to meet the needs of our customers.

The Plants You Love

You can continue to rely on us to provide you with the high-quality bare root plants that you know and love.

Unwavering Customer Service

Our dedicated team remains steadfast in offering ongoing support, from site selection and variety consultation to nutritional insights, pest management strategies, and marketing counsel.

Everything we do is crafted with your needs at the forefront. We offer our heartfelt gratitude for your enduring trust and support, eagerly anticipating the opportunity to grow alongside you.

John Place, CEO



This newsletter was produced by the collaborative effort of the Nourse Farms Sales and Customer Service Team.

ORDER ONLINE: NourseFarms.com PHONE ORDERS | CUSTOMER SERVICE: (413) 665-2658 QUESTIONS? E-MAIL US: John Place: jplace@noursefarms.com Anne Kowaleck: akowaleck@noursefarms.com

Strawberry Weed Management

Managing weeds in small fruit can be a challenge! With these perennial crops, certain weeds tend to become established in fields over time. Many problems can be avoided by good site selection. Raised beds might help but it's best to avoid poor sites or drain them. You should also avoid sites with established perennial weeds—pastureland is not a good place to plant strawberries! If you have established perennials, get rid of them before planting. Effective management also requires weed identification, knowledge of herbicide options, and appropriate timing of applications.

We have identified 10 common weeds that growers have challenges controlling, in particular:



Common Chickweed (Stellaria media) Annual Broadleaf

- Low-growing, mat-forming weed with small, white, starshaped flowers. The leaves are opposite, with a distinct fine line of hairs running down one side. Germinates in late summer or fall, overwinters as small plants under the mulch, then puts on more growth during the cool months of spring. Renovation does not affect these weeds as they generally produce seeds by July.
- An application of a pre-emergent like Devrinol in late August can provide some control. Follow up with a dormant application of Chateau, before laying straw mulch down.
 We do not recommend spring applications of Chateau due to the potential for plant damage. Dow Formula 40, Weedar, and Sinbar are not effective on Chickweed.



Field Bindweed (Convolvulus arvensis) Perennial Broadleaf

 A climbing weed with twining vines and trumpet-shaped white or pink flowers, Morning Glory (Ipomoea species) is similar. Known for its extensive root system and ability to regrow from both seeds and deep creeping roots. Challenging to control due to its perennial nature and its ability to twine other plants and structures.

- Seedlings are easy to control with cultivation, but only for about three or four weeks after germination. After that, perennial buds are formed, and successful control is more difficult.
- Dow Formula 40 or Weedar 64, both 2,4-D when applied at renovation and again in late fall, can provide control. At renovation, if there are many large weeds standing above the strawberry, apply before mowing. To achieve good control, apply in late October or early November while perennial weeds are green and growing. Do not tank mix with other herbicides.



Nutsedge (Cyperus species) Sedge

- Not grass or broadleaf in the traditional sense. Sedges are often referred to as "sedge weeds." Nutsedge is known for its grass-like appearance and characteristics, with Yellow Nutsedge (Cyperus esculentas) as the most common.
- Nutsedge is perennial, and reproduces through both underground tubers and seed. It can be very challenging to control due to its ability to regrow from these tubers, even after top growth is removed. As noted earlier, site selection is key for prevention.



Dandelion (Taraxacum officinale) Perennial Broadleaf

- Easily recognizable by its bright yellow flowers and distinctive puffball seed heads. Leaves form a basal rosette and are deeply lobed. Plant has a long, deep taproot which makes it challenging to completely remove.
- In some states Stinger is labeled for use in the planting year for post-emergent control. Begin application after July 1, once plants are established. Some cupping of the leaves may occur after use.

 Similar to field bindweed, Dow Formula 40 or Weedar 64, both 2,4-D when applied at renovation and again in late fall can provide control. At renovation, if there are many large weeds standing above the strawberry, apply before mowing. To achieve good control, apply in late October or early November while perennial weeds are green and growing. Do not tank mix with other herbicides.



Clover (Trifolium species) Perennial Broadleaf

- White Clover and Red Clover have trifoliate leaves and produce small, globe-shaped flower heads. Clover spreads rapidly, thanks to its ability to produce seeds and stolons (above-ground runners).
- Stinger is an effective herbicide for control of clover. Similar to the application timing of Formula 40, it may be applied in late October or early November when plants are in the early dormant stage. But perennial weeds are green and growing. In some states, Stinger is labeled for use in the planting year, with application after July 1 when plants are established. Some cupping of leaves may occur after use.



Oxalis (Oxalis species)

- Also known as wood sorrel or sour grass, refers to several species within the Oxalis genus and can be found in various forms and colors. Oxalis species can be annual, perennials or bulb forming plants. Perennial oxalis often regrows from bulbs or rhizomes year after year.
- Controlling oxalis may involve different strategies depending on its life cycle and growth habit. For annual species, herbicides that target broadleaf weeds can be effective. In most states, Spartan is labeled for use for wood sorrel control prior to planting. Spartan applied after crop emergence may cause severe injury. Preventing oxalis from spreading by mowing before it sets seeds can also help infestations. Dacthal also may suppress wood sorrel from seed.

• For perennial species, Spartan can be applied in the fall once plants have achieved dormancy and also at renovation. Chateau is another option as a late fall dormant application.



Common Purslane (Portulaca oleracea) Annual Broadleaf

- Known for its thick, fleshy, paddle-shaped leaves and small yellow flowers. It can grow flat to the ground or slightly upright, forming dense mats. It is well adapted to sunny, warm conditions and can tolerate drought.
- Spartan is an effective herbicide that is best for controlling Purslane. Many of our customers are reporting good control using Spartan. It can be applied once plants have achieved dormancy and is also popular to use at renovation.



Red Sorrel (Rumex acetosella) Perennial Broadleaf

- Red Sorrel, also known as sheep sorrel, is known for its distinct arrow-shaped leaves and reddish stems. The plant forms dense mats and can vary in height from a few inches to a foot, primarily reproducing by seed. Preventing the formation and dispersal of seeds by removing plants before they flower and produce seed is essential for long-term control.
- In some states, Stinger is labeled for use in the planting year for post-emergent control. Application can begin after July 1, once plants are established. Some cupping of the leaves may occur after use.
- Similar to field bindweed, Dow Formula 40, or Weedar 64, both 2,4-D when applied at renovation and again in late fall can provide control. At renovation, if there are many large weeds standing above the strawberry, apply before mowing. To achieve good control, apply in late October or early November while perennial weeds are green and growing. Do not tank mix with other herbicides.

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Blueberry Production Ins & Outs

Commercial growers are increasingly drawn to blueberry cultivation, driven by rising market demand and the berries' nutritional and culinary appeal.

Known for their antioxidant-rich profile, blueberries offer increased market opportunities, adaptability to diverse climates, and an extended harvest period, making them an attractive choice for crop diversification. With low-input requirements, decreased pest pressure and high productive lifespans, blueberries present growers with a compelling option for expanding their crop offerings.

Site Preparation

- Soil pH is one of the most important factors of a successful blueberry planting. Our recommendations are a pH in the 4.5–4.8 range.
- Even a pH of 5.0 is too high!
- We advise taking soil samples to get a read on your pH early in the year prior, to make changes well in advance of planting. It is important to test the soil's pH level, so you are able to amend it properly.
- Elemental sulfur is the best material to use to reduce soil pH. Amend soil with sulfur, not ammonium sulfate or aluminum sulfate.
- The amount of sulfur to be incorporated varies according to the soil type: sand (light), loam (medium), clay (heavy), as well as the present pH level of your soil.

	Present soil pH	Required Amount of 90%Sulfur in Pounds per 100 Square Feet to Lower Soil pH for Blueberries			
		SAND	LOAM	CLAY	
Optimum pH value for growing blueberry plants is 4.5	4.5	0.0	0.0	0.0	
	5.0	0.4	1.2	1.4	
	5.5	0.8	2.4	2.6	
	6.0	1.2	3.5	3.7	
	6.5	1.5	4.6	4.8	
	7.0	1.9	5.8	6.0	
	7.5	2.3	6.9	7.1	

Source: Midwest Small Fruit Pest Management Handbook, Bulletin 680

Caution: Excess sulfur, resulting in a pH that is too low, can be toxic! Do a soil test and apply the proper amount of sulfur. Do not guess.

- Planting on raised beds is highly recommended to improve soil drainage in the rooting zone, particularly on heavier soils.
- Selecting a site with a gentle slope (3–4%) and good air drainage will also promote faster drying of foliage, flowers, and fruit. This can reduce the duration and frequency of disease infection periods. Recommended plant spacing is 4–5 feet in the row and 10–12 feet between the rows.

Planting & Mulching

- We recommend planting early in the spring when soil temperatures are in the 45–50 degree range.
- Wood chips can be mixed into the soil prior to planting. Wood chips aerate the soil, increasing drainage and root penetration.
- Put a 2–3 inch deep layer of wood chips over your planting row and incorporate it thoroughly into the top 6–8 inches of soil.

Fertilization

- Do not fertilize at planting. To avoid burning the roots, wait four to six weeks after planting before fertilizing however, do not fertilize after the end of June.
- During the planting year apply 1 oz. ammonium sulfate in a circular band around each plant.
- Subsequent years, apply 2 oz. of ammonium sulfate at bloom time, and again one month later.

Do not use fertilizer which contains potassium chloride as blueberries can be adversely affected. We also do not recommend aluminum sulfate.



Irrigation

- Drip irrigation is an essential component to successful blueberry production.
- Blueberries have a shallow, fibrous root system and do not like wet soils. They perform best with frequent, short-duration watering cycles.
- Maintain moisture, and do not allow roots to dry out. Water one to three times per week, not every day. Drip irrigation placed beneath the mulch layer is the healthiest and most efficient method. We suggest having your local irrigation sales company review your field layout for the best recommendation.

Pruning

- Remove all flowers during the first two to three years. Do not allow berries to develop.
- No pruning is needed during the first three years, unless you discover broken, damaged or diseased branches.
- After the first three years, blueberries should be pruned annually during the dormant period.
- Prune to have approximately 12 canes per plant. Older, heavy branches in the center should be removed to improve air circulation and light penetration.
- Remove lower, weak and damaged branches and branches less than 6 inches long. These branches will never fruit and can serve as an entrance point for disease.

• New wood produces the largest fruit. Canes should be a mix of 1–3 year-old and any canes over 2 inches in diameter should be removed.

Pest Management

- Good weed control during the first year is essential. Maintain a 3"-4" layer of aged wood chips as mulch to support water retention.
- Avoid treated or colored wood chips or mulch. Do not use Cedar or Black Walnut chips. Also avoid using leaves, or an excessive amount of sawdust, as both can mat down and prevent moisture from reaching the plant's roots.
- Regular, manual weeding will be necessary.
- While relatively free of major pest concerns there are still some pests which need to be managed to maximize yields, fruit quality, and extend the life of your planting. Based on experience, growers should be concerned with:
 - Spotted Wing Drosophila (SWD)
 - Botrytis Fruit Rot (Grey Mold)
 - Blueberry maggot
 - Fruitworms
 - Mummy Berry
 - Leaf Blight
 - Mites



Venturing into blueberry production promises both a fruitful harvest and a resilient addition to your crop portfolio. Meticulous site preparation, emphasizing soil health, and strategic planting to effective pruning techniques and vigilant pest management will play a crucial role in ensuring the success of your blueberry cultivation.

We have an excellent supply of many of our blueberry varieties available in one-liter pots!

FIVE POINTS TO PREPARE Get Rendy for the Senson!

MULCHING RASPBERRY AND BLACKBERRY PLANTINGS

Effective weed control is essential for good establishment of raspberry and blackberry plantings. Young brambles are sensitive to most pre- and post-

emergence herbicides, making applications during the planting year risky. **Mulches can be an effective way to reduce weed pressure while also improving cane berry establishment.** Mulching during the planting year improves root establishment, increases vegetative growth during the planting year, and increases primocane

emergence the year following planting.

Inexpensive options like rye, oat, or wheat straws effectively suppress weeds and retain soil moisture without hindering new cane emergence, however it can cause issues with root and crown rot if left on after the planting year, especially in heavy soil. Plastic mulch, also cost-effective, provides excellent weed control and limits soil moisture depletion, but requires drip irrigation due to its water-excluding nature; also excluding new cane emergence. Landscape fabric and woven ground cover, while pricier, offer long-lasting weed suppression and support root establishment but exclude new cane emergence and most precipitation.

Mulches should be removed from the row at the end of the planting year to decrease pressure for root and crown rot. Heavier fabric options can be used in drier areas for blackberries and black raspberries but not red raspberry which spreads from its roots. Avoid bark mulch, wood chips, and stone products, which can hold excess moisture and impede cane growth, and mushroom compost which may pose a risk due to high soluble salt content.

Selecting the right mulch is paramount for successful establishment and growth of raspberry and blackberry plantings. Though mulches can offer effective weed control and support root establishment, careful consideration must be given to factors such as soil type, precipitation, and the specific requirements of each berry variety. By choosing the appropriate mulch, growers can foster a thriving bramble patch that yields bountiful harvests for seasons to come.

COMBATING FLOWER FEEDING INSECTS FOR FRUITFUL HARVESTS

In recent years, growers have faced escalating challenges from flower-feeding insects, particularly western flower thrips and tarnished plant bugs. These pests, with a broad host range including grasses and weeds, pose a significant threat to fruit crops. Damage often goes unnoticed until fruit formation, making early detection crucial. Populations can surge rapidly, especially during mass migrations into small fruit fields after the harvest of other host crops or

cultivating neighboring fields. To mitigate losses, a proactive program starting early is essential.

These pests, though distinct in their physical characteristics, life cycles, and preferred host plants, share a common threat to fruit crops through their feeding habits. **Western flower thrips**, with their miniscule, ¹/₁₆-inch long bodies and feathery wings, inflict

damage by piercing plant tissues with tiny mouthparts, causing misshapen blossoms and bronzing of fruit near the leaf cap. In contrast, **tarnished plant bugs** are ¼-inch long. Recognized by their brassy appearance and yellow and black dashes, they target unopened buds, flowers, and young fruit tips, leading to the development of misshapen "catfaced" berries.

Both pests require scouting starting from early bloom, by tapping flower clusters into a white cup or paper plate. Initiate control measures if the average thrips per fruit cluster exceeds ten. Tarnished plant bugs necessitate attention if the average nymphs per fruit cluster surpass one.

Growers facing these challenges must embrace proactive scouting and timely control strategies from early bloom onwards to ensure the resilience of their crops against the distinct yet equally damaging impacts of these flowerfeeding insects.

POINT-OF-SALE Enhancements

Nourse Farms has been selling small fruit through our roadside stand for over 30 years. During this time, we have offered a variety of materials for our berry customers. Try any or all of these to enhance your customers' experience.

RECIPES

Recipes are very popular with our customers, and increases their purchases. Our most popular recipe is our **Favorite Fresh Berry Pie**, originated by our late cofounder Mary Nourse.

Forvorite Fresh Berry Pie

Crust:

2 cups flour 1 cup butter or margarine 4 tablespoons powdered sugar

Filling:

Clean and hull one quart (around 6 cups) of strawberries (and/or red, or black raspberries). Reserve and mash one cup of the fruit.

Combine and cook until thickened over low heat 10 to 15 minutes:

- ¾ cup sugar
- 2 ½ tablespoons cornstarch
- ¼ teaspoon salt
- ½ cup water

Add mashed fruit for color (and food coloring if desired). Put whole berries in baked 9" pie crust, evenly distributed. Pour the syrup over the fruit to coat thoroughly. Chill the pie in the refrigerator for at least 4 hours. Serve garnished with whipped cream or vanilla ice cream.

*Other suggestions for crust – graham cracker, chocolate graham cracker, or shortcake.

HEALTH BENEFITS OF BERRIES

Highlighting the nutritional benefits of berries will increase sales! In our Fall 2023 Commercial Newsletter, we included a one-page handout, "The Health Benefits of Berries," designed so our plant buyers can print the page or take sections of it to share with fruit customers. You



Scan to get the handout

can find past issues of our Commercial Newsletter in the commercial grower's section of our website noursefarms.com.

CROP SCHEDULES

Growing other crops for U-Pick or to sell at the stand? A great way to increase repeat visits is a simple handout (or flyer) that includes a list of your crops and their ripening times. Don't forget to include your logo, phone number, and website. Note where customers can find you on social media so they can receive updates there, too!

STICKERS, COLORING BOOKS, AND OTHER TAKEAWAYS

Fun takeaways like stickers, coloring books, magnets, key chains, and bags are a great way to get your name out there! Growers have found that marketing investments pay off not only in customer goodwill but also in more repeat sales. Purchasing in advance for two to three seasons for quantity discounts will save you money!

Contact us at 413-665-2658 or

info@noursefarms.com if you have questions about sourcing point-of-sale materials.

FROST-PROOFING STRAWBERRIES

Strawberry plants are at high risk for frost and freeze damage in the spring due to their low stature and



early flower emergence. Temperatures in fields can often be colder than forecasted. Cold-related damage can cause injury to plants and significantly reduce yields. Given increased spring temperature fluctuations, growers must be prepared to protect their crop or risk losses. Strawberry crops are most susceptible to damage at open

blossom, although damage can occur at any stage of development.

There are several options for frost protection including over-head watering, floating row covers, wind machines, and stack heaters. Overhead irrigation is effective for frost protection when air temperatures are below 32°F and wind speeds are less than 10 MPH. A single layer of light-weight row cover, 1oz. typically will provide up to 3° to 4°F of cold protection. Row covers can be applied as a double layer to increase protection. Overhead irrigation can also be combined with row cover which can improve protection when temperatures are low and wind speeds are high.

Wet bulb temperature is a crucial element in determining the correct time to begin frost protection. This refers to the cooling effect of evaporation at a given humidity. At 100% humidity, ambient temperature and wet bulb temperature are the same but wet bulb decreases as humidity drops. Therefore, start temperatures for irrigation are high at low humidity and low at high humidity.

Ale To	ure -	(Air Temperature - Dewpoint) 3		Wet bulb temperature
Air Temperature				
2005		(36°F - 24°F)	-	
30°F		3	-	
26ºE		12	-	
30 F		3	-	
36°F	-	4	=	32°F

For frost protection irrigation should be started before wet bulb temperature reaches the critical temperature and continued until wet bulb temperature exceeds the critical temperature.

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Strawberry Plants: Plugs vs. Bareroot



What's best for your program?

For over 50 years, bare root strawberry plants have been the cornerstone of our business. In response to growing customer interest, we've added strawberry plugs to our offerings. How do you determine which option best suits your program?

Bare root plants are versatile, suitable for both matted row systems in early spring and plasticulture systems from mid-June to early July, depending on your location.

On the other hand, plugs are designed exclusively for planting in the standard, staggered, double row plasticulture system and should be set in the fall, roughly 30 days after bare root plants. While bare root plants necessitate hand planting into plastic, plugs offer the convenience of mechanical planting.

Due to their earlier planting time, bare root plants require more meticulous irrigation management. Plugs must still be carefully managed after planting, but with their later planting window, demand less time and management for a full crop the following June. Runner removal is critical for developing good branch crown growth in both bare root and plug plantings. Our catalog boasts approximately 30 varieties of bare root plants. For 2024, we are offering plugs of Galletta, Darselect, Cabot, Yambu, Flavorfest, Jewel, Albion, and Malwina.

When it comes to pricing, bare root plants come in at a base price of \$0.21 per plant, whereas plugs are priced at \$0.62 per plant. Bare root plants have no order minimum, while plugs require a minimum order of 7,500 plants. Shipping options vary for bare root depending on the order size and plug orders must be shipped via Freight Carrier. Freight costs tend to be higher for plugs due to case size.

In summary, bare root plants offer a more costeffective solution, especially for large-scale planting where budget considerations are paramount. And for those prioritizing variety availability, bare roots may be favored due to their broader selection.

However, if mechanical planting or efficiency is a priority, plugs may be the preferred choice despite their higher cost. Plugs, planted later, require less management and field time, making them appealing to growers seeking reduced crop management intensity or needing to work around other seasonal crop and farm demands.

For more information on ordering plugs, contact Amanda Emond at aemond@noursefarms.com or 413-665-2658 x221. Wet bulb temperature can roughly be calculated by subtracting 1/3 the difference between ambient temperature and dew point from ambient temperature. For example, if ambient temperature is 36° F and dewpoint is 24°F, the wet bulb temperature would be 32° F.

As strawberry growers navigate the challenges of unpredictable spring temperatures, adopting frost protection methods, including overhead irrigation and row covers, becomes essential, ensuring a safeguard against frost-induced damage and promoting robust yields for a thriving strawberry harvest.

MAXIMIZE BRAMBLE YIELDS WITH TRELLISING



A trellis system enhances air circulation and light penetration, improves disease control and picking efficacy, and notably reduces losses and damages caused by cane breakage from wind and crop weight.

A **T-trellis** is a single vertical post, with one or two 18"–24" horizontal cross-

arms at 3' and 4.5-5' above the ground. Wires run through holes near the ends of the cross arms, down the length of the row. Construct a simple T-trellis with a 4 x 4 post and one or two 2 x 4 cross arms.

V-trellises are similar to T-trellises but have two vertical posts. Posts can be set in the ground vertically on either edge of the row, spaced 18"-24" apart, or from the center of the row and angled outward toward the aisle. The top gap is 18"-24". Construct a simple V-trellis with two predrilled angle iron posts or U-posts. With the V-trellis growers can change wire heights or add additional levels of wires as needed without the need to add additional cross-arms. Increase stability by attaching the top of the end posts to one another with a cross arm.

What are the pros and cons of each? A T-trellis is typically made of wood and with only one vertical post, they are generally less expensive to install than a V-trellis. With only one vertical post and one cross arm, the T-trellis can also provide more access for pruning and weeding. With a V-trellis however, growers have increased availability for wire spacing and adding additional wires for better support and adaptability to individual varieties or situations. Also, since they are normally made with metal posts, V-trellises tend to have greater longevity than T-trellises. With either trellis, end posts should be anchored to limit shifting.



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White Campion (Silene latifolia) Perennial Broadleaf

- White Campion is a broadleaf weed with lance-shaped leaves and white or pink flowers. It's also known as "Cockle." White Campion is a short-lived perennial or a biennial, depending on environmental conditions. White Campion reproduces both by seed and vegetatively. It produces small, bladder-like capsules containing numerous seeds. These capsules are a distinctive feature of the plant and can help with its identification.
- In most states, Spartan is labeled for use on White Campion, as a pre-emergent herbicide before planting.
 Spartan applied after crop emergence may cause severe injury. For perennial species, Spartan can be applied in the fall once plants have achieved dormancy and is also popular at renovation.



Canada Thistle (Cirsium arvense) Perennial Broadleaf

- Canada thistle is a perennial thistle that spreads through an extensive root system. Thistles are known for their spiky, prickly leaves and distinctive, often brightly colored, flower heads. They produce primarily by seed, producing distinctive, fluffy seed heads that are carried by the wind. These seeds can remain viable in the soil for several years.
- In some states, Stinger is labeled for use in the planting year for post-emergent control. Application can begin after July 1, once plants are established. Some cupping of the leaves may occur after use.
- Similar to field bindweed, Dow Formula 40, or Weedar 64, both 2,4-D when applied at renovation and again in late fall can provide control. At renovation, if there are many large weeds standing above the strawberry, apply before mowing. To achieve good control, apply in late October or early November while perennial weeds are green and growing. Do not tank mix with other herbicides.

PLEASE NOTE – Not all of these herbicides are labeled in every state. Consult your state recommendations for labeling and the weeds controlled.

Hillside Cultivator for Strawberry Weed Control throughout the Year

Weed control is probably the most difficult obstacle to successful strawberry production. In a matted row system a combination of effective mechanical tools will greatly reduce hand labor. The Hillside Cultivator incorporates several tools for the different stages of growth. Timing is always critical.



- Rolling cultivator gangs are part of the cultivator in all seasons and are excellent for uprooting weeds while not cultivating too deeply.
- S-tines mounted in the front position are used to move runners into the row. (pictured above)
- Finger Weeder attachment can be used all season for disrupting small weed growth along the row and close to plants. (pictured left)
- Through the late summer and into the fall, the width of the strawberry row can be controlled with the **rolling cultivators** and weeds between the row removed. These cultivations can remain shallow so that new weed seeds are not brought to the surface. Cultivation can also be done as an herbicide loses its effectiveness and prior to another low rate application.



The Eco Weeder is a PTO driven machine with rotating vertical teeth that are manually moved between and around young plants. An attachment is available for straw removal in the spring.



 Following harvest and mowing the plants, the Hillside Cultivator is ideal for strawberry renovation. Disk gangs are mounted in the



front position which are used to narrow the row and cut through the straw. A **coil tine** follows and fractures the soil which has been packed by foot traffic during harvest. The rolling cultivator in the rear rolls soil back toward the strawberry plants. Cultivating speed is 3-4 mph with two passes normal for each row. This machine is more economical and less disruptive of soil structure than a rototiller.



- The cultivator can be used for vegetables such as Pumpkins, Squash, Potatoes, and Cole Crops.
- The cultivator can be used to straddle a plastic bed.

Hillside Cultivator Co. LLC 911 Disston View Dr. Lititz, PA 17543 Cell 717-669-3158 www.hillsidecultivator.com Email: sales@hillsidecultivator.com

Prices can be found in the catalog section of our website

Brookdale Farm Supplies

Toro Tempus Ag Controller, a revolution in automation

The toro tempus ag controller allows for full farm automation. Tempus Ag uses a LoRA radio signal to create a bubble which allows for system automation. 1 base station produces a LoRa bubble of 5,200 feet in diameter. Multiple base stations can be added to cover large areas over one network for the entire application. The base stations can be operated on Wi-fi or with a 4G wireless signal. It can run irrigation cycles as well as collect environmental data, allowing growers to adjust their irrigation schedules as needed. Tempus Ag can report on a variety of sensors; temperature, pressure, soil moisture, humidity and more. Tempus works in both an outdoor field setting and an indoor high tunnel or greenhouse environment, Tempus can send alerts via text or email at thresholds determined by the user. Perfect for frost alerts throughout the spring.





Toro's Blueline PC is a heavy wall drip tubing with pressure compensating integrated drippers that lasts 25 plus years. Designed for perennial crops such as blueberries, blackberries, and raspberries; Blueline PC has an emitter built inside the tube which is placed every 12", 18", 24" or 36". The flow path technology in the PC dripper uses a shark tooth design providing a turbulent flow path that is independent from the wall of the tubing. That flow path, along with the self-flushing diaphragm allows for a dripper system that is very resistant to clogging. This produces a uniformly watered field for a long duration of time.

ition of time.



Soil Moisture Sensors



When should you turn your irrigation on? Most importantly, when should you turn it off? By using soil moisture sensors, you can dial in your irrigation and know exactly what the plant has available for water. By keeping the soil moisture in the optimal range, you reduce plant stress, increasing the quality and yield of your fruit. Watermark Sensors are designed to be in the field for the season, and read as often as needed. They are not affected by freezing and are easy to use. They have a 0-200 centibar range and are internally compensated. One hand held reader can read any number of sensors. Sensors can also be read via a channel data logger or through the Toro Tempus-Ag system.

Brookdale Farm Supplies

38 Broad Street Hollis, NH 03049 603-465-2240 www.brookdalefruitfarm.com



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The Commonwealth of Massachusetts MASSACHUSETTS DEPARTMENT OF AGRICULTURAL RESOURCES Crop and Pest Services 251 Causeway Street Suite 500 Boston, MA 02114



Certificate of Nursery Inspection

License No. N-2023 155 Fee: \$300 Issued: 5/8/2023 THIS CERTIFIES THAT: in accordance with M.G.L., 128, section 17 as amended, the Nursery stock at: Nourse Farms, Inc. 41 River Rd. Whately, MA 01093

Has been inspected and found to be apparently free from all injurious insects and plant diseases which might be disseminated on such stock.

Expiration Date: 6/30/2024

Issued by: Howard Vinton

Let's Connect Online

SPRING 2024



Nourse's Sustainable Focus

Exciting developments are ahead as we embark on a transformative journey towards Environmental, Social, and Governance (ESG) awareness, and we're eager to share this journey with you through our bi-annual Newsletter!

Over the next few months, our strategy includes moving towards a circular ecosystem with reusable solutions, waste reduction, and incorporating more sustainable practices. We plan to work with experts to explore waste reduction and start recycling non-organic materials in shared spaces. Ensuring a safe and supportive workplace is crucial, so we'll roll out a multi-site safety program, including checklists and training. Moreover, we're committed to benefiting our community by offering internships (stay tuned!) and prioritizing local sourcing to lessen our environmental impact and bolster local economies.

Stay tuned as we establish our Key Performance Indicators (KPIs) and targets, ensuring that our ESG initiatives are not just aspirations but actionable strategies driving tangible results for our business and the communities we serve.

Thank you for joining us on this exciting journey towards a sustainable future.

Ashly Mellon, COO