

Vermont Vegetable and Berry News – June 1, 2023

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https://www.uvm.edu/extension/horticulture/commercial

REPORTS FROM THE FIELD

(Burlington) From chilly and slow to hot and dry: it must be spring on the farm. Despite a cold winter and not a lot of snow cover we had a lot of crimson clover overwinter, surprising me, and I am happy for the early blooming pollination resource. Other cover crops are finally putting on growth, though flowering is a week or more behind schedule, which will probably true up to norm this week. We are seeing more chickweed in the understory of our winter annual rye and vetch cover crops, which is concerning. I'm hoping we can identify the right timing to plant rye vetch that prevents the chickweed from getting a good foothold in the fall.

Field vegetables are looking good, albeit a bit slower than normal. We lost our first round of spinach to seedcorn maggots and are seeing some onion losses to maggots and/or their subsurface associates in beds that followed a clover sod. Leafminers are showing up and I've seen a few CPBs crawling around.

I'm mostly looking forward to starting our summer CSA next week. Demand is strong, but with the slower spring our selection for week one isn't quite what we'd like it to be, though reasonable with salad mix, kale, PYO cilantro, and hopefully head lettuce and tunnel cucumbers. Week one is half reunion and orientation, so selection seems to matter less than in successive weeks. Trying to up our game with more farming and ag info at our CSA distribution, we'll see if we can stick with it through the busy summer.

(Hinesburg) April farmstand sales were slow. May farmstand sales better. Some interesting temp data from 2 weeks ago: Outside temp was 26 degrees. Inside hoop house with no row cover was 28 degrees; pole beans damaged but now recovering. Inside hoop house, under 2 layers row cover was 44 degrees; no damage to cukes, pepper, tomatoes.

Cool season crops are growing and selling well. Over-wintered onions showing thrips damage. Seems like they find the onions earlier each year. Treated with nematodes; seems to have slowed the thrips down. Irrigating every day.

(E. Wallingford) Early and mid-season blueberries are in full bloom; late blueberries coming out of pink bud. Bees are working hard. Planted 100 peach and plum bareroot and dormant trees in late April; all but one tree have leafed out and pushing new growth. Could use some rain. Very little frost/freeze damage at this elevation, blueberries were not in major bloom yet. Land is ready to plant veggies and 120-day pumpkins.

(East Dorset) The 2023 freeze shows about a 25% blueberry crop blueberry loss for us at this point. More damage in the earlier varieties. It is also a preliminary look at the crop. We will see how it ends up after the summer.

(Grand Isle) The recent cold snap did not hit the Lake Champlain islands as severe as other areas. We had a bit of frost, there were patches here and there. The blueberries are entering petal fall stage and the pollination looks excellent. Monitored and kept track of pollinators this year, 98% bumble bees. Did a 10-minute scout every other day and counted 30-40 bees.

(Richmond) We had a hard frost of 21 degrees here on May 17. Our Bluecrop blueberries were in full bloom with lots of pollinators out and about. Looked like quite a few blossoms were brown the next day and we are starting to see those flowers/blueberries shrivel and fall off. The rest of our blueberries were in late bud stage, so we were unsure about the impact but now they are in full bloom, and it looks to be a strong crop. Lots of pollinator action which is always great to see with a variety of pollinators in the fields. Busy trying to stay on top of weed control and installing irrigation in our fields.

(Fairfax) May 17: low 20's in the strawberry fields. Started irrigating at 9 pm, and ice finally melted off the berries about 11 am. About 14 hours that night. From May 7 to 17 had over 40 hours of frost protection. Flowers look good, the plants not so much. Some winter injury and extreme temps this spring hasn't been great. 30 years of growing strawberries and 7 sleepless nights of frost protection. The most I can remember, but my memory isn't so good anymore. Last year was the best year for strawberries of the 30. This year won't be so good. Lessons learned. Success irrigating sweet corn transplants in the low 20's. Asparagus melted even with the irrigation.

(Westminster West) We were fortunate not to have lost anything from the killing freeze two weeks ago and were happy to be able to supply plants to some growers that lost theirs. Found CPB on our early tunnel potatoes yesterday. Other than that this trial looks good so should have new potatoes for 4th of July sales. Garlic crop looks the best in many years with virtually no losses over the winter and strong growth with scapes just starting to poke up.

Plant sales are very strong, and farmers' markets have set records each market day so far; nice weather certainly helps. We tripled our potato acreage this year, with 9 varieties, if I don't lose the map I may be able to find them all! Trying to get the squash acreage in this week. Have increased scale and added new varieties due to market demand. Tunnel celery and tomatoes are growing well. Water may become an issue. I'm hoping to get a new well before the season ends.

(Saratoga Springs NY) This spring has been hard on our nerves and our plants. Too dry, too windy, too cool, now too hot. We dodged a hard frost last week, fortunately. We just planted most of our summer-fruiting crops and hope to plant winter squash later in the week. Our main water source, a small creek, will likely dry up soon. We will need to move the pump to an abandoned beaver works 300' upstream. Hard to say how well our pump will do to deliver water to our fields once that happens. Maybe we will have a short season. On leased land, it doesn't make much sense to dig a well and bedrock close to the surface rules out digging points. We would like to move our farm, but the current options are limited.

(Stuyvesant NY) Overall production is great, farmers' market is strong, and we are grateful for a record Memorial Day Weekend. Tunnels are in the last stages of turning over to summer crops, ginger, turmeric, hot peppers, tomatoes and cukes. Snap peas in the tunnels are in full bloom and we started picking last week Sugar Snap our favorite. Strawberry production started mid-May and is going strong, Tried two new varieties this year in over-wintering, Jewel and Allstar, producing well, small plants, but big berries, Jewel not the best keeper for us. Covered with 2 layers of row cover to protect from the frost earlier.

Conditions are perfect for flea beetles this spring for some reason. Our greens have been assaulted regularly and we are trying our best to beat them, to no avail at times.

Put in tiling this spring over about 4 acres. Also will be trialing a "no-till" area in a 16x100 tunnel. Thrilled with our staff this year! Whenever we have that spare time we are ready to construct 2 more caterpillar tunnels.

(Saratoga NY) Had 27 degrees for almost 5 hours. Lots of damage to blueberry plants. Flowers all turned brown and dropped the next day. Every plant has leaf damage. Planted 200 new plants this spring, some in the least-protected areas lost nearly all their leaves, recovery uncertain. Remains to be seen what will happen with fruit. Peaches (personal use) have no fruit this year. Smaller asparagus keeled over. Strawberries survived without damage. reatest concern now is drought, have had zero rain for several weeks, everything is hurting for water.

(S. Cambridge NY) The temperature dropped to 27 degrees on May 18, perhaps lower in our berry patch. We covered asparagus and strawberries with Typar and they made it fine. The blueberries were hit but we don't have an estimate of the percent loss yet. Now we are trying to get our tender crops out in the heat (no cloudy days for transplanting) and irrigating constantly.

The garlic is huge and our earliest variety is scaping. So far no signs of Allium Leaf Miner. Our first attempt with a mustard cover crop is not producing much biomass. The plants are about 6" tall and ready to go to seed, probably because of the dry conditions.

Taking the NE Seed Production Course. The organizers are doing a great job and I would recommend to anyone interested in learning more about seed production. I'm not convinced that growing seed is a good economic choice for our farm at this point, but perhaps if we found the right seed crop(s) it could be.

(Etna NH) Hot. Cold. Dry. Heck of a start. Lost a bunch of peppers to frost, almost lost field tomatoes the next day to heat. Greens are maintaining but not thriving with irrigation. Fingers crossed for Friday thunderstorms. Planted a trap crop of potatoes 4/28; planted cash crop of potatoes 5/22. Trap crop started popping 5/24 and were immediately swarmed by CPB. Been hand crushing and literally swatting them out of the air in flight. If the deluge continues after torching the trap crop (we planted 3 successions 1 week apart), we may resort to sacrificing a bed of eggplant. Been irrigating/fertigating the drip tape block (alliums, solanaceae) every other day, more than we have in the past, and the results are positive. Saw our first cabbage moth today; we planted a sacrificial 100' of extra tender young cabbage to lure them in (to torch them if times get tough) - will let you know if it helps; all other brassicas are under row cover.

(Plainfield NH) Last week's freeze was devastating to many farmers, and stressful at the very least. We felt very fortunate to only sustain a 20% loss of small fruit. We burned up some early sweet corn, but due to the fact our H2A workers arrived 4 weeks late we had very little transplanted out in the field, saving us the heartbreak of sourcing and replanting.

Greenhouse sales remain moderately strong. Field activities at full tilt as we try to catch up before strawberry harvest. Noticeably apparent to me over the past 20 years is how much of a role drip irrigation and field mulch play in our standard vegetable production. Ray and I have even discussed large scale drip on 6 acres of potatoes, at some time in the future. The extreme temps and increasing occurrence of drought make supplemental moisture a must, and large volumes of overhead seem less desirable, though there is still a time and place for overhead.

The crops in the field look good now, and no pests have shown up. Without the mast in the woods, we will surely be tested by deer, and there have been sightings of bear, which can be a real nuisance.

(Salisbury NH) The frost burned tips of some raspberries, but they recovered nicely. Some plants a couple feet apart had wildly different responses. One died, the other looks fine. Even clover in the lawn got hit. Blueberry bushes look like they're okay but no peaches this year. I put lots of cabbage, broccoli and Brussels sprouts in before the freeze and covered just to keep the constant winds from whipping plants to death. A week later we had 26 degrees. A few days later when I took the row cover off the plants looked like they had been torched. Some are adding new leaves but mostly a total loss. If they had been watered more they may have survived. Hoping to use a pump to draw from a dug well. No power so maybe solar, or batteries, or a small generator to run pump. Always something.

Many direct seeded crops have barely come up, and not with vigorous growth. Voles have been terrible this year. Every morning a couple lettuces are missing, replaced by a round hole. Peas were spotty and I wonder if voles eat the seeds or seedlings before they emerge. Replanted and still spotty results. Seeds were from 2020; also used them in the hoop house and they did fine. Continuing with no till and will be trying oats between rows. Straw is expensive and brings in weeds.

Customers can really be so frustrating. They expect a supermarket with everything. They don't know what crops are in season. They also seem oblivious to the weather. Twenty-six degrees and a week later they're expecting a wide variety of vegetables.

REMINDER TO REPORT VERMONT SURFACE WATER WITHDRAWALS

Becky Maden, UVM Extension Vegetable Nutrient Management Specialist

If you irrigate from a river, stream, lake, or natural pond, you likely need to comply with Vermont's surface water bill (Act 135). You are required to report estimated use if your farm withdraws 10,000 gallons or more of surface water within a 24-hour period in the preceding calendar year, or 150,000 gallons or more of surface water over any 30-day period.

If your farm requested a meter, we expect to install them soon. In the meantime, estimate water use by recording acres irrigated, run time, and irrigation specs (sprinkler type or drip emitter spacing). For support with estimating usage, contact me at rebecca.maden@uvm.edu. If you have questions about the regulation or reporting, contact Ryan Patch at the VT Agency of agriculture, Ryan.Patch@vermont.gov.

UPCOMING ON-FARM EVENTS

Sunday, June 11 at 10 am. Strawberry Pollination Walk at Cabot Smith Farm. Spencer Hardy from the Vermont Center of Ecostudies and The Farm Upstream will lead a discussion and field walk focused on bees and other pollinators of commercial strawberries. Ideas for providing non-crop pollinator habitat will be presented. Check the Cabot Smith Farm Facebook page for more information and possible weather cancellations/postponements.

Thursday, June 22, 4-6 pm. VVBGA workshop at 4 Corners farm in Newbury. Topics: strawberry growing, innovative cover crops, high tunnel tomatoes.

Tuesday, July 18, 4-6 pm. VVBGA workshop at Burnt Rock Farm in Huntington. Topics: Small scale veg farm equipment, efficient fertilizing, root crops, irrigation.

BUILD SOIL HEALTH WITH SHORT TERM SUMMER COVER CROPS

Summary of an article in the excellent <u>UMass Veg Notes</u>, July 8, 2021

- Sorghum-Sudangrass. Produces a lot of biomass, adding OM to soil. Grows best with fertilization of 40-80 lbs. N per acre. Flail mow 1-2x during growth to promote tillering. Produces sterile seed and winter kills. Drill 35-40 lbs./A or broadcast 40-50 lbs./A.
- Japanese millet. Similar to sorghum-Sudangrass but produces slightly less biomass. Some varieties can produce viable seed. Drill 12-15 lbs./A or broadcast 15-20 lbs./A.
- Crimson clover. Beautiful blooms support pollinators, it should winter kill, tolerant of shade, heat, drought, and low fertility soils. Drill 10-20 lbs./A or broadcast at 12-24 lbs./A.
- Buckwheat. Produces modest amount of biomass quickly, easy to manage, winter kills; flowers support beneficials/ pollinators. Drill 50 lbs./A or broadcast 70 lbs./A.

POLLINATOR UPDATES

Laura Johnson, UVM Extension Pollinator Support Specialist

How do pollinators respond to flowers killed by frost? Pollen is likely still present on flowers, and even with tissue freeze damage, remaining pollen can still be nutritious, and may even viable. If stigmas or ovaries are damaged by the freeze, then flowers are not likely to produce fruit. A Michigan State University blueberry pollinator study over 15 years examined impacts of freezes on blueberry crops and wild bee populations. Specialist bees, like the Carolina miner bee, Andrena Carolina, and other miner bees (which are abundant on Vermont berry and tree fruit crops) showed population declines in subsequent seasons. Other, non-Andrena species of bees showed resilience and did not decline due to freeze. It is encouraging that species showing declines eventually partially rebounded. Pollinator declines resulting from a freeze event during bloom likely won't be seen until subsequent years.

UVM EXTENSION AGRICULTURAL ENGINEERING UPDATES

Andy Chamberlin and Chris Callahan

New Bog Posts and Podcast episode from UVM Extension Ag Engineering:

Farmer's Favorites: Shipping Containers and Their Use on Vegetable Farms. https://go.uvm.edu/ffshippingcontainers Farms have found that shipping containers are an inexpensive solution for tool storage, coolers or as a blank structural shell to be built out as a wash/pack or office space. This blog post shares several examples and lessons learned about using these as farm infrastructure.

Natural Light in the Packshed at High Meadows Farm. https://go.uvm.edu/highmeadows Howard Prussack of High Meadows wanted to improve his vegetable washing space. He imagined a bright and warm space instead of the dark and cool dairy barn they were working out of. With a goal of creating a fun and happy place to work, he set to work on making the investment needed to make these infrastructure upgrades a reality for the farm. This postharvest case study outlines the project and upgrades he made to his barn in a video interview, and photos of the space.

Expanding Infrastructure and Maximizing its Potential at Jericho Settlers Farm. https://go.uvm.edu/jerichosettlers Mark Fasching and Christa Alexander run Jericho Settlers Farm where they grow "good food year-round" in Jericho, Vermont. Like many, they started out with a garden and roadside stand and continually expanded to growing over 30 acres of vegetables with 18 greenhouses. As their business expanded over the years, so did their infrastructure needs. This post harvest case study highlights their expansion project(s) with photos, videos, and lessons learned along the way.

Kerry Taylor, Brookfield Farm: podcast EP7 - https://thefarmersshare.com/2023/05/22/kerry-taylor-brookfield-farm-ep7/ This episode comes to you from Amherst Massachusetts, where Kerry Taylor of Brookfield Farm (https://www.brookfieldfarm.org) shares how they run a 500 member CSA, and incorporate an intern weeding crew. She then talks about the challenges of being a new manager for a farm that's been in the community for over 35 years.