



Vermont Vegetable and Berry News – January 9, 2018
compiled by Vern Grubinger, University of Vermont Extension
(802) 257-7967 ext. 303, vernon.grubinger@uvm.edu
www.uvm.edu/vtvegandberry

PRE-REGISTER FOR VVBGA ANNUAL MEETING BY JANUARY 19

The fun and informative meeting will be on Monday, January 22 at Lake Morey Resort in Fairlee. The program features a dozen diverse presentations and the trade show will have over 2 dozen exhibitors. Come hang out with growers of all types from across the state! Pre-registration is \$40 per person which includes morning refreshments and buffet lunch. Walk-ins add \$10. For details see: <http://www.uvm.edu/vtvegandberry/meetings/AnnualMeeting2018.pdf>

RENEW YOUR VVBGA MEMBERSHIP BY JANUARY 31

Dues for 2018 are \$45 per farm, \$55 after January 31. Renew, register for the Annual Meeting, and/or donate to the vegetable and berry research and extension fund on-line at: <https://2018vvbga.eventbrite.com>

Or, print out and fill in the membership and meeting registration form then mail with your check to: VVBGA, PO Box 2091, South Burlington, VT 05407
<http://www.uvm.edu/vtvegandberry/VV&BGA/2018MembershipPlusMeeting.pdf>

REQUIRED AGRICULTURAL PRACTICES UPDATE

Starting this year Vermont's water quality regulations require all vegetable farms with more than 4 acres or \$2,000 in sales to 1) soil test regularly, 2) follow nutrient recommendations based on soil tests, and 3) keep records of all applications of amendments. For a summary of RAPS see: http://www.uvm.edu/vtvegandberry/factsheets/RAPs_Summary_Vegetable_Growers3-1-17.pdf

Farms with 50 acres or more in annual vegetable production are obliged to Certify as a Small Farm Operation (CSFO) with the Vermont Agency of Agriculture, Food, and Markets by completing this form no later than January 31, 2018:
<https://cloud.agriculture.vermont.gov/CSFORegistration/CertificationForm.aspx>

The good news is that it is beneficial to both for your business and your crops to follow a nutrient management plan. To help vegetable and berry farms of all sizes improve their nutrient management, we will offer 1-day workshops during February in Brattleboro, White River Junction, Burlington, and Rutland. Stay tuned for details. Questions? Please don't hesitate to contact Becky-- Rebecca.maden@uvm.edu or at 802.773.3349x277.

UPCOMING GROWER MEETINGS AND WORKSHOPS

See: <http://www.uvm.edu/vtvegandberry/?Page=meetlist.html>

YOU CAN STILL EVALUATE THE 2017 NEVFC

If you were not able to complete an evaluation at the 2017 New England Vegetable and Fruit Conference last month in Manchester NH, please complete the on-line form by Jan. 23. Your feedback is very important, as it will help us improve future conferences.

<https://www.surveymonkey.com/r/NEVFC2017>

LAST CHANCE TO HELP GUIDE WATER USE RESEARCH AND EDUCATION

If you have not yet filled out the UVM Extension/UMass Amherst Extension survey on Whole Farm Water Use this is the final request that you take 10 minutes to share your thoughts. Thank you in advance for helping us plan this new program. Survey link:

<https://survey.uvm.edu/index.php/972258?newtest=Y&lang=en>

HOW ARE YOU MANAGING FOR EXTREME WEATHER?

Vegetable and berry growers across New England are sharing their knowledge of promising and innovative strategies to manage for heavy precipitation and drought through a new regional project at UVM. Six farmer organizations are participating in the study to exchange knowledge across the region. Results from the survey will be shared at farmer conferences next year and distributed in a report. To have your experiences and concerns included use this link:

<https://www.uvm.edu/agroecology/adaptationsurvey/>

REPORTS FROM THE FIELD

(Craftsbury) Greenhouses: cold. Fields: cold and windy.

(Westminster West) Monday morning the temp was -21 F, the lowest in 37 years here. Nothing frozen, we were ready.

I started some early tomatoes last month to allow new staff a chance to practice grafting before the season kicked off. They grew really slowly in the short days and cool nights, even being on heated benches. First grafts were a bit rough due to cold temp in the healing chamber. Second batch coming up soon and I think will do much better.

Still analyzing last year's sales and expenses. Outside of energy costs, all other costs including labor are rising, fast. Some crops will be dropped and a few promising ones will be explored and expanded. What's clear is that learning new skills and information is more valuable than ever.

This is a changing marketing arena and while it might be the easiest time to get into farming, it's a very hard time to continue farming.

I love the collective brain trust of this newsletter and the listserv and thank all the people that actively participate! Here's to a successful year for all!

(Grand Isle) In 2017 we went all lettuce and all Salanova-type salad mix, planted on white plastic mulch. Seeded with the waterwheel with tractor creeper gear, the lettuce harvested super clean - hardly any soil came in the wash area. Plus, we were successful in using the same plastic TWICE - ripped out the first planting by hand after harvest, brushed off the detritus, and waterwheeled again! There was some head rot in the green leaf, but it was manageable if we got in there early enough to harvest before it got out of hand. Less bolting with the cool white plastic, less tarnished plant bug damage. We plan on repeating again for 2018. Also, we put our onions on white plastic mulch - excellent size and reduced damage from thrips.

Happy Rich continues to be our favorite Broccolini type, but we are going to do more frequent plantings of Apollo and Atlantis this season to take advantage of those first cut larger heads - one cut and done. Happy Rich works well over a long harvest season.

Still experimenting with our Polyplanter Jr. It worked very well this year for a few key crops that benefit from frequent (weekly) plantings: beets, cilantro, beans, late peas all did well on white or black plastic mulch. The beets on black plastic had no damage from voles, something we struggle with. We also use it for summer/zucchini/cucumbers. May try early sweet corn this season. We have made some custom seed plates for it out of solid plastic.

<http://www.ferrisfarm.net/polyplanterJr.html>

(Orwell) Since our harvest of spinach on Christmas day, we've hardly peeked at winter greens, just keeping fingers crossed that they survived the sustained cold. Our bigger concern was getting water to our small herd of beef cows and keeping them fed and cozy--and, perhaps more importantly, helping the farmer who grows our hay thaw out his frozen pipes so he could water his own cows, and find a tractor that would actually start to load hay. A reminder that it is good to stay one step ahead of our animal feed needs, and also a reminder that we have some fragile systems (like old dairy barns that depend on lots of cows in them to keep the pipes thawed--and, without enough cows, the old pipes just freeze up).

We also learned with our most recent electric bill that our efforts to keep things from freezing with space heaters and other cobbled together systems are very expensive, far exceeding the value of the products we are protecting, but we just don't have the heart to get rid of things (and we've made it this far, right?). A reminder to make more pragmatic decisions in the fall as we are putting things into storage. Looking forward to warmer weather, but sad to lose these perfect ski conditions.

(Westminster) This was for sure the toughest season I've ever gone through. Too much rain delayed spring planting and not enough time to mature the crops. At 62 not sure how much more I want to stay at it. Time will tell. Without my wife's help no way.

(Dummerston) A group of my CSA members did an amazing job taking care of things while I was away for 2 weeks in late December. The weather didn't make things easy with an ice storm and some extremely cold temperatures. But several people took turn feeding the goats and they had to remove ice from the high tunnel and the small greenhouse that I use for starting seedlings. They also had to cover the root cellar ventilation so it wouldn't get too cold, and adjust air flow to the room where I keep winter squash and sweet potatoes to keep things warmer in there.

All of this worked out amazingly well, especially considering that the doors of the high tunnel had thoroughly iced up and the person in charge of high tunnel snow/ice removal wasn't able to open them. She managed to get most of the ice off by poking with a broom from the outside.

The greens inside the high tunnel that had been left unattended for 2 weeks of cold weather are in pretty good shape. Corvair spinach remains in excellent condition with no row covers. Asian greens with hoops and covers and kale (Rainbow Lacinato and Winterbor) have also pulled through nicely but lost some outer, larger leaves. Mustard greens and baby kale are in pretty good shape as well. So I was all set to go back to the winter farmers' market on Saturday but then the market got cancelled due to the extreme cold.

(Plainfield NH) Same story here as every farmer knows: too damn cold. Thank goodness for the snow, or the berries would be taking a thrashing. I fell the snow is also helping insulate the propagation greenhouse. Both the main furnace and the back-up furnaces are struggling to keep the night air temps at 55 degrees, and the temp hasn't registered above 62 degrees in weeks. Soil temps on the bench are about 55 degrees, so rooting cuttings takes forever and plants don't want to grow with low temps and low light...even with supplemental night time lighting.

Deer mice have been invading warm spaces. So far they have left the cover crop seed alone in the seed storage area as I have been feeding them gobs of mouse bait. There seems to be no abatement in the steady consumption. In the propagation house they have been eating mouse bait and chewing on the green tissue of stock plants. I hope we don't have a similar spike in vole population this spring.

Main activities here are plowing the driveways from multiple small storms, then falling on the layer of ice deposited before Christmas. Seed orders being broken down, unloading orders, and trying to keep the fuel filters on diesel engines from jelling up. Main focus is on activities that don't require engines to run. Wholesaling wrapped up for the year and tax work and desk work commencing in earnest. Everybody hunkering down until the weather modifies and we can then run out and try to cut more firewood to get through the rest of the winter.

(Stephentown NY) Ten sub-zero mornings and 16 days since it was above freezing (but who's counting?) have brought winter production to a halt. For the first time in four years, we didn't have enough product to harvest for a market. It was the first time in the 8 years I've been doing winter production that we couldn't even uncover greens to harvest because it was too cold. We are thankful for the sunny days.

When we get at least 300 watts of solar insolation, we are pretty confident that we will get into the 60's inside the best-insulated tunnel, at least for a short period of time. This year is proving the value of installing ground insulation around the perimeter of the tunnels and of insulated overhead doors. There is a consistent 10-degree temperature differential during the day between tunnels with the insulation and those without. We are looking forward to moderating temperatures, sunshine, and seeing new growth on these amazingly resilient winter crops.

(Argyle NY) For the past 11 years I used only one 500-gallon tank of propane per winter to heat all my tunnels, but this year I have used an entire tank in just the past month! Avoiding damage from extremely cold temps was everything...lots of monitoring devices to let us know when all is well. They let us know when our cooler and root cellar were getting dangerously close to freezing. Our temps here quite a few nights were hovering between 15 and 20 below zero. We went to market one Saturday at 12 below. We were shooting to keep the temps under the rowcovers in the tunnels in the 20s. Our heaters did that barely because they are sized on the small side.

Markets are strong with lots of people coming out even in the extreme cold. The next few weeks will also be challenging as regrowth from previously cut areas is nonexistent and we will continue to find more damage. We are seeding in the greenhouse to replace salad mix that we know was the most vulnerable to damage to make sure there is a steady supply.

(Little Compton RI) These last two weeks have been a game changing experience for us. Twelve years of winter growing has never had so many challenges piling up at the same time. Here are some lessons we have learned in the last two weeks.

We are coastal, so it is not unusual for big snow events to start as an hour of rainy/ice, which sticks to greenhouse plastic and acts like sandpaper when you hope the following snow will just slide off. We also have tremendous winds and drifting snow. We thankfully bought 16-ft extendable roof shovels that allowed us to remove 12" drifts of heavy snow from nine of our houses. For three of us that is all we did at the peak of the storm, with 3" an hour of snow falling! These shovels are available from www.garant.com ~ at the website/Tools/roof rakes. Canadians know about moving snow. Our Instagram ([wishingstonefarm](https://www.instagram.com/wishingstonefarm)) has a video of us using them. The telescoping three shafts were indispensable. Without them I can't imagine what would be standing today.

Another life saver has been the use of propane unit heaters with a built-in thermostat that keeps the area at 32 degrees and higher. We use “Promat 10T” from Patron Propane Heaters, a Canadian Co.

On the greenhouse front: with prolonged cold and cloudy weather, we have had freezing soil temps creeping in from the perimeters of the greenhouses. Paul Arnold suggested giving up 16” of growing space for having a mulched area that is always insulated and covered. We are going to try using rollout bubble insulation from Home Depot to see if this helps. I like the idea of keeping the multiple row covers a bit away from the sidewalls.

Our east/west houses are doing the best but at least our north/south houses are summer tomato houses; so they have oil heat to keep them from going below 15 degrees and also have the option of heating them up on cloudy extra cold mornings when we need to pick for markets. The special Grainger thermostat which allows us to work with such a wide temperature range is their Dayton #2NNR-6, it heats from 0-110 degrees and has a 3’ temperature bulb. All our greenhouses now have these units.

Another realization was how well our used international freezer shipping containers worked for holding winter produce without supplemental heat. Just the produce itself and the circulation fans kept the temps at a steady 34 degrees despite an average of 5-10 degrees outside. These containers have over 4” insulation on all six sides. We got a 50’ one last time and built an insulated wall half way through it and now have a low velocity greens cooler on one end and a potato storage Coolbot on the other vs. our insulated barn which has consumed over 250 gallons of propane in the last two weeks! We got our container from Kelly Containers in Springfield, MA, \$4850. delivered in 2013.

Lastly, we learned the hard way about managing soil moisture before a cold snap. We felt some younger tunnel transplants needed water before the big freeze so we gave them a good drink. Apparently, they do better on the dry side to avoid overly turgid cell walls bursting, and secondly the row covers with the excess moisture were difficult to move back and forth as we tried to give the plants sunlight and warm the soil. Not to mention they wanted to freeze together as we tried to move them back later in the day from the side walls! Note to self: next year leave space in the middle of the greenhouse to store row cover layers. Never again up against the side walls!