

Michigan Small Farm Newsletter

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FIELD REPORTS

Williamston, MI - We have 25 beds (about 300' of row) on our lot at home and (11) 50' beds and a 2500 sf squash field that we share crop with the owners on Vanetter Rd. in Williamston. We sell at the Williamston farmers market (we plan to sell consignment at a second market this year), and also have some sales of transplants to individuals and donate some veggies to good causes. This year will be our 3rd season after graduating from the MSU Organic Farmer Training Program (at the Student Organic Farm). I retired from real estate appraising after a 35 year career, during which I did a lot of rural appraisals, some horse farm appraisals, and quite a bit of vacant ag land, usually 100 acres or less, and now work at micro-farming 3/4 time.

Last fall I had most of my home beds trenched to a depth of 30" and back-filled with a mixture of 80% soil and 20% compost to improve the drainage of our soil, which is mostly clay to a depth of 30". Below that is sand. We now have 25 raised beds on our home property.

Over the last couple of months, we've been starting veggie transplants in our basement grow room, which has (3) 315 watt ceramic metal halide bulbs plus another 8' of T-12s. Transplants started so far this year include onions, scallions, leeks, Swiss chard, red peppers, cabbage, cauliflower, and some Ayurvedic herbs, including Ashwagandha, Amla and others.

We also are learning to grow black turmeric and moringa. Last year we had 6 turmeric plants and gave away another 5 or 6 to farmer friends. We let last year's turmeric go dormant, and in December of 2017, harvested rhizomes that were placed in an incubator and are presently moving the sprouted ones to pots. It is hoped that someday we can grow the turmeric on a larger scale, once our expertise develops. Looking forward to a good season.

Western Bay County, MI - Planting in the greenhouse has begun with the emphasis on early crops. Replacement honey bees have been ordered and are due in April, so we'll have to get hives ready for them.

Posen, MI (Presque Isle Farm) - Sales and markets have picked up again. Overwintered spinach (surprisingly Flamingo has by far been our best producer this winter), overwintered scallions, microgreens, and the last of our storage potatoes are currently available to our restaurants, grocers, and farmers market. With the cold weather and snow, it has been difficult to find days to wash greens. We have plans to build a new wash/pack facility in the spring, but until then, our unheated barn makes it a challenge.

In the propagation house, we face the same weather challenges. Our current set-up is a sectioned-off space in one of our high tunnels. It is functional, but is not an efficient and pleasant work environment. If all goes well, we will have a propagation greenhouse built in the spring as well. As we have scaled up the last few years, the need for appropriate infrastructure has increased. In our prop house, we currently have several successions of lettuce started, along with beets, onions, spinach, scallions, kale, and tomatoes. In the tunnels, aside from our overwintered crops, we have carrots and radishes that have germinated, baby greens that are starting to germinate, and newly transplanted beets. The remaining tunnel space is waiting for lettuce successions that we will begin planting in the next week or two. We are also awaiting a shipment of all our custom soil amendments and fertilizer. We have had great success working with Midwestern Bio-Ag over the past few years and our soil tests are starting to show it. It is going to be a great season.

Chatham, MI (Rock River Farm) – Winter is out like a lion. After a brief warm up in early march we are back to single digit degrees at night and blowing snow. Fine. Just fine. Planning for 2018 is in full obsession mode. Our seeding lists are forever changing to fit the season, time, space, needs. It does, however, seem easier to prepare for the season this year. We have been building our farm for almost a decade now. Constructing greenhouses and hoop houses, installing irrigation and fencing, building wash pack facilities and chicken coops. Now it's all actually close to completion. Having all of these systems in place and working efficiently has given us more time and flexibility to design our season. Which looks to be as chaotic as ever. The 2018 tally has us planning for 150 varieties of vegetables and herbs, 240 varieties of cut flowers, and hundreds of overwintered perennials in 1 gallon pots to transplant to our new perennial space. We also have 25 weddings worth of flowers to plan for.

We are dialing down some things this year as well. We have 7 catering events this year, which is good. Catering is a fun way to use our produce but the time required to prep for an event means other parts of the farm are being neglected. We are also cutting back on our broiler chicken production from 1000 birds to 500. We are doing this because we have seen demand drop for our chickens in recent years. There are more small farms in our area producing pasture raised chicken. I see this as a good sign. It means our community has more options, and I'm ready to step back from that market a little bit.

So, what are we excited about for 2018? We are most likely finally going to stock our greenhouse water tanks with Tilapia! Down with the chicken, up with the fish! We are trying our hand at turmeric and ginger in the greenhouse as well as wasabi in the water tanks. We have strawberries in hanging baskets in our greenhouse. They look like they are on track to have berries by June. Pretty neat. We are trialing bunching onions and leeks this year but nothing to report yet. We are also trialing three different plastic mulches for cut flowers. Also, going heavy on the IPM this year. The bug pressure gets worse every year.

One huge improvement we have this year is a new well! Our flowers are planted so densely in the field they require a lot of water. We have had good production in the past however we now have unlimited water. Looking forward to increase in production and

quicker maturity. Flowers love water for tall stems, florists love tall stems, hoping to achieve a better quality product.

We are currently selling potted spring bulb gardens. These gardens include: Paperwhites, tulips, grape muscari, crocus, scilla, and daffodils. They have been selling really well at our local food co-op. We are also hosting our first class on our farm. A spring bulb garden class, we have 15 folks signed up so far with minimal marketing. This is our first year selling/growing bulb gardens and for our climate they provide a decent revenue for March.

Currently status of our greenhouse: 82 bulb crates planted to lilies, 21 crates planted to ranunculus, 20 trays of microgreens, slowly beginning to seed for spring transplants. We also have 50 hanging baskets of strawberries, 250 1g. Peonies sprouting, 60 containers planted to dahlias and ranunculus for Mother's Day sales.

Hoop Houses: 1. 100x17' hoop planted to mustard greens 2. 100x17' hoop planted to ranunculus and anemone.

Dafer, MI (Sweeten Farms) – We still have a good covering of snow in the fields and on the garden. However, I will be starting plants for the garden soon. I did an inventory of seeds, and only need a few items. I picked up some winter luxury pie pumpkin seeds I'm excited about. I also went together with a neighbor to order some blue potatoes - the kids want to have purple mashed potatoes. Onions are doing well in storage, but my potatoes will likely rot before we can plant. I've been working with several local groups to get a tool library started in the area. Had a lot of fun at a workshop at Waishkey Bay Farm (Brimley, MI), where the participants brought home small hoops & plastic to try - something I've been wanting to do for quite some time.

Livestock wise, things have been difficult with the new cattle waterer freezing up several times. Modifications have been made and it seems to be working well now. A surprise calf arrived 2/27, but is doing well. We bought 2 Berkshire sows and a boar in February. Lots of good manure for the compost pile and little pigs will arrive in May (as will the rest of the calves, we hope). The plan is to follow the cattle rotation with the pigs. Hens are laying again, with a few dozen extra per week to sell or gift. We are also making plans to buy broilers and possibly some turkeys. In the past I've used a traditional Salatin style chicken tractor for the broilers, but want to try something different, involving an overnight shelter and electric poultry netting.

Marquette, MI (Seeds and Spores Family Farm) – Not much snow melting here, indeed even the maple sap is slow to start dripping. We are tapping about 200 trees.

The sows farrowed this week with mixed results. The weather is not an issue as we have a heated farrowing area, but two of our three sows keep having more and more piglets with each farrowing. One had 17, the other 18. Too many. Our third sow is the champion, she had 14 and still has 14 a week later. They are all three very careful mothers.

Baby chicks (layers) are also here and chirping along nicely. We have scaled the flock

back to 100 over the past few years, down from 250.

The cows are happy chomping hay, and glad mud season hasn't started yet. Calving won't start until May.

On the vegetable side, we have lots of transplants up and running, mostly destined for early hoophouse crops. Peppers are a month old now as we try to start these earlier.

Over wintered spinach in the unheated hoop houses have been slow to start as well. Normally we would have been harvesting by now.

We are going to try Salanova this year. We have avoided this in the past due to taste concerns. The ease of use and hopefully improved varieties will work out this time. I'm curious to know others' thoughts on this.

Our new endeavor is the addition of a licensed kitchen at the farm. The kitchen will be rentable by others and is days from being finished. We will start with some lightly processed vegetable items and see where this takes us.

Chatham, MI (Mighty Soil Farm) - We're a new market garden this year, starting on a half acre of leased land at MSU's North Farm through the Apprentice Farmer Program farm incubator. Our winter planning mostly consisted of finalizing our crop plan and our budgets. Sometimes it all seems like guesswork, not having grown on this plot before or sold to these markets, but we feel fairly confident, with a few years of apprentice farming under our belts, as well as the help of our experienced farmer mentors and the program manager at the North Farm, that our plan will prove effective. We're excited to get busy in the field, but are enjoying the last bit of calm while the snow melts.

This past week we started our first transplants - scallions and onions. We're only growing fresh onions this year - Dakota Tears and Red Barron - no storage, because we're on such a small plot and want to maximize what we bring fresh to market this year. We're doing some of our starts in soil blocks and some in 128s to compare the two. We won't be able to do this with every crop, but we're doing it with onions and scallions, and we're starting our tomatoes and cucumbers exclusively in soil blocks.

Our plot was left bare for the winter, so as soon as the snow melts we're planning to disk the entire area, prep all of our beds, and seed oats in beds that will be empty for at least six weeks, which is most of them. We're planning to use old greenhouse plastic to solarize the first chunk of beds we'll plant in to, and we're considering purchasing either landscape fabric or silage tarps to help with our bed prep throughout the season.

Novi, MI (MSU Tollgate Farm and Education Center) – Our focus has been on transplant production for our three acre diversified vegetable production in SE Michigan so far. The greenhouse and some caterpillar tunnels being erected this year are our only protected growing space, so field production for our 70 member CSA is our primary focus. Despite a heater and circulation fans, extended cloudy weather caused significant seed rot in many of our onions- this was particularly true of those we started in 72 plug flats (particularly Redwing). Those grown in 128 plug flats did well - we suspect because the

greater plastic surface area/media volume ratio allowed for more water to be evaporated off, preventing the soggy conditions we saw in the 72s. We reseeded in 128s 3.5 weeks late, so we'll see what kind of production we get from those- germination was excellent the second time around. We're experimenting with grafting, putting about 100 scions of various varieties onto Estamino rootstock this week, eventually to be grown in the greenhouse in containers after most of our transplants are moved out in late May. We hope the Estamino will give some increased vigor and potentially slow down disease development, as we don't want rampant disease in the greenhouse. We hope to take some yield data to determine if the grafting improves our production.

We've received a small grant to study the economic viability of tomatoes grown using soil blocks. We'll be looking at 6 varieties of organic tomatoes grown in the field and in caterpillar tunnels, measuring yields and the extra time invested in soil blocking to see if there is an economic difference. We look forward to reporting back on our findings, this is a technique that many small growers are using but there is almost no published data on their use. To learn more about what we're doing or just to talk production, contact Will Jaquinde at jaquinde@msu.edu.

Grand Blanc, MI (Women in Agriculture Farm Development Center) - Our small farm is located just south of Flint. This will be our third season. We have mixed veggie and fruit production. We grow in a 30'x96' high tunnel and utilize some outdoor space. This week, high tunnel beds got prepped, and a water line was buried below the frost line and turned on. We will begin planting a variety of cool season crops this weekend. Incubator farmers plan to sell to the Flint Fresh Veggie Box program and possibly work with partner organizations on a CSA Pilot Program. Next week we will be reinforcing fencing, as we had heavy rabbit traffic last fall.

Muskegon, MI (Tortoise & Hare Farm) – The main projects this week are to finish building our 12' x 24' gable style greenhouse that we will use to start seeds in. Currently, we have about 50 flats of seeds started indoors under fluorescent lights (mostly onions, and leeks, kohlrabi, broccoli, kale, lettuce, Swiss chard, parsley, cabbage and cauliflower). Still very cold here at nights - each morning the ground is frosted over and hard but it thaws relatively quickly. Hopefully by next week the nighttime temps will stabilize enough to put some of these seedlings in the unheated greenhouse (with heat mats, if necessary).

We pick up our chicks next week (25 Plymouth Barred Rock and 25 Rhode Island Red). Next week we will also start prepping a few beds (for direct-seeded peas) and begin constructing our 20' x 48' hoop house.

Ann Arbor, MI (The Land Loom) - It's been great hoop house working weather this March and our earliest spring plantings of salad greens, peas, cilantro, and head lettuces are loving it. Each week we are ripping out more beds of our overwintered spinach and seeding all the salad greens we need for our Spring Salad Club membership (CSA), but it's sad to see it go as, it's really loving the spring sun and putting on more growth than it

had all winter. While The Land Loom has largely been a hand-managed operation in its first three years, we are investing in some mechanical cultivation in the way of a small cultivating tractor, as well as mechanical transplanting with a paper pot transplanter, which we hope will do well for us to keep our field full of veggies instead of weeds. Along with these developments we are doing more to standardize our bed lengths and crop successions. We have analyzed what we grew well and sold well last season and have chosen to focus on a slightly smaller variety of vegetables this season based on our findings, and more successions. We are also adding a larger variety of late season cut flowers to be sold primarily through the Michigan flower-growers cooperative this season. Last season we hired our first part-time employee to help mostly with harvest and this year we are going to have three part-time workers: a general manager, a harvest and wash/pack manager, and a propagation manager.

Boyne City, MI (Spirit of Walloon Market Garden - We are in full-time greenhouse seeding and hoophouse planting mode here. In the greenhouse, all of our alliums transplants are five weeks old. "Yankee" onion and "Chinook" leeks are this year's stand-outs in terms of transplant vigor. Other transplants up and growing include the first succession of tomatoes, all sweet and hot peppers, snapdragons, Icelandic poppies, ammi, and bells of Ireland. Despite having two farm cats, voles in the greenhouse (especially in the germination chamber) were an issue in February, but have been successfully managed with a couple weeks of setting snap traps.

In the hoophouses, we have seeded 3 successions of salad mix, radishes, and arugula, and two successions of spinach thus far. All successions, ranging in seeding date of 2/19 to 3/15, are up and growing. We are trialing "Red Kingdom," a red mizuna-type salad brassica variety from Johnny's, in our spring mix. It seems to be a vigorous grower in cold conditions, has a nice mild flavor, and is on the same growth rate as regular mizuna. Hoophouse carrots "Napoli" and "Yaya," seeded 2/19 have also germinated after about 19 days. Overwintered hoophouse strawberries and ranunculus are putting on good spring growth, but one strawberry house sustained severe vole damage over the winter. Fresh hoophouse ranunculus and anemone, and hoophouse potatoes, will be planted at the end of this week. Walloon Lake is still frozen over, and our nights are still very chilly in the teens, but day temperatures in the low 30s and plenty of sunshine have been very pleasant.

Tulips, muscari, and daffodils are beginning to emerge in the flower field, but much of the farm is still frozen and/or snow-covered. We are hoping to start working in the field by the first week of April. Some beds we prepped and tarped in the fall of last year, so they are ready to plant with peas as soon as we get some more melting and warmth!

Bath, MI (Ten Hens Farm) - The first day of spring has brought more warm and sunny weather. The nights have been cold and the mornings cool, but the temps in the day have been in the 40s and low 50s. The weather and sunshine has really made the 'Emperor' spinach grow. This is the first year we have tried this cultivar and couldn't be happier. It grew and yielded well in the fall hoophouses from transplant, had no cold

damage or mildew issues over the winter, and has yet to bolt. We will be planting more of it in the next week and are looking forward to seeing how it does for spring plantings. We are harvesting the last of the overwintered Salanova head lettuces that were too small to harvest in the fall/winter, which we are happy about getting harvested since we are just starting to see the first aphids on them. The red buttercrunch did not do as well as the others but overall we were happy with the yields and production through the end of December. We were also able to harvest it late in the year and hold the heads in a 33F cooler for 6 weeks with no signs of degradation. We are going to plan for this for next year too and see how much we can stockpile in the cooler in mid-December. Since we didn't cut the cores out until we packed it there were no signs of browning at the base of the cut leaves. Doing this also allowed us to have lettuce mix available when we wanted it as opposed to watching the weather to figure out what day of the week it was going to be sunny/warm enough in the hoopouses to harvest.

Transplants are getting started and we are just waiting for the ground to thaw out to build a used (heated) greenhouse we bought last year so that we can grow all of our own transplants instead of contracting some of them (early tomatoes, peppers, and hoopouse cucumbers) out. We are looking forward to planting onions, leeks, and shallots in early to mid April that we are buying in for the first time from out-of-state. We are a little nervous that they may bolt, especially the leeks, but it's something that we want to try that could ultimately payoff if we can get them in early and not have to turn the greenhouse heat on to get the alliums going.

We are part of a new multi-farm CSA this year and are starting to sign up our first shareholders. The four farms involved are excited to work together to offer the shareholders a diverse mix of products that none of us could do on our own in the volumes we are projecting. Food hub markets continue to be strong options/outlets for us and we could sell more if we had more product. Based on this demand more fall carrots and beets are planned for 2018-19.

We just hired on two new crewmembers that will be starting in mid-April and are looking forward to having a solid crew working more hours than we have had employees work in the past. The plan, like every spring, is to really stay on top of planting, weeding, and mowing so that we feel less of the crunch on those activities when the summer season really hits its stride. Lastly, we are looking forward to trying out two new sets of finger weeders that we added to our cultivation set up this year. We will try these on garlic first and with the way the garlic is starting to grow we are hoping to give them the first run in two to three weeks. We expect a learning curve, but also see the potential for reducing the amount of time we spend hand weeding. The amount we spent on them was the same amount that we spent on labor for two hand weedings of only the fall carrots last year.

Stockbridge, MI (Lake Divide Farm) - This is the start of our second year farming this land, with four years running a farm business on leased land prior. We have about 7 acres in active vegetable production. Last year we attended 5 farmers' markets. This coming year, we are adding one more. A change for us will be the addition of staff. We had part-time and variable staff last season and I was off-farm at markets 3 days per

week. With three full time people, in addition to my husband and myself this year, I will be able to remain on the farm 6 out of 7 days. I am extremely excited about that.

This winter we have been attending 2 farmers markets and offering a small CSA pick-up in town. Our winter storage crops are waning. We just sold out of cabbage and watermelon radishes last week. Carrots went down a few weeks before that. What we are left with are lots of potatoes (fingerlings- Austrian Crescent, regular- German butter, Elfe, Defender), kohlrabi- Kossak, and minimal green meat daikon, Joan rutabaga, Gilfeather turnabaga- all looking great. We planted our hoop houses late last fall and are just now starting to see some returns. The spinach is coming in -Giant Winter- and some kale is looking like it will offer up some leaves in a couple weeks.

To round out the March and April market table, we started growing microgreens and have been pretty satisfied with the results. They are easy to grow, and easy-ish to sell. We are also adding pea and sunflower shoots to the mix but have not had a round yet so can't tell you much about it. We seeded some radishes and turnips in the beginning of the month that are coming along. We also seeded some carrots in late February that are just now sprouting. We are worried that they will not be ready (even as baby carrots) before we have to use the space to plant summer crops.

Wintertime shortages have encouraged us to pursue more extensive storage crop production for this coming year by increasing size of storage crop plantings.

We have been making plans to better utilize our cultivation tractor (Farmall 140 hi-clear). We are building a belly-mounted toolbar that will allow us to switch between 2-row, 3-row, and 4-row set-ups without fear of messing up the spacings. It is a confabulation of cultivation pieces from other equipment.

We are also making mountings to attach an old tine weeder to the rear lift arms of the Farmall. Hopefully this will allow us to get a little bit of in row weeding action for our sturdier crops.

The greenhouse is really jamming now. We seeded our second round of eggplant, peppers, and tomatoes within the last week. Our onions are up and looking good. We also have a boatload of celery, celery root, a couple rounds of lettuce, and others. In years past, we regularly had exactly the number of transplants needed for the field or worse, didn't have enough. To combat this problem we have increased buffer numbers and are trying to immediately restart or bolster greenhouse seedings that didn't have good germination.

Like many, we aim for early spring plantings but know that in reality, the timing will get pushed because of the weather. This conflict of hope vs. reality just before all the moving parts start whirring always has me a little on edge. The peepers are peeping. The red maple buds are fat. The redwing blackbirds have *been* back. If all goes well, we will get into an uphill field this coming Monday. If all doesn't go well? It will all still be okay.

Hope, MI (Good Stead Farm) - I own and operate Good Stead Farm, in Hope - located in Midland County. We are a small scale, intensive organic vegetable and livestock farm. Our products are sold through an on-farm CSA, farmers markets and local restaurants.

The winter planning season didn't really start for us until January. We continued to sell winter storage crops, eggs and greens from the high tunnel after our farmers markets ended in October through on-farm CSA, an on-farm weekly market and weekly deliveries. We could have continued to sell, however we ran out of product and I needed to begin the transition to planning, ordering and paperwork.

I continue to struggle finding enough labor. I currently have one full time apprentice and a part time staffer along with three older family members that offer great assistance in the greenhouse and wash and pack station. Finding a second, full time person would go a long way to helping me (sanely) stay on top of all the necessary accounting and paperwork for the season. I may end up hiring another part time person to fill in the gaps, instead.

This season, I'm not adding any new crops or animals. I am solely focused on efficiency, better crop management, timing and maintenance. I'm not opening any new ground either, but I am adding two additional tunnels to the field. We're expanding our micro green program. I trialed it last year to great results - so it's now a staple crop. I just have to work out the kinks of weekly seeding and harvesting for reliable yields. We had major crop failure last year due to flooding and the microgreens really helped to close the loss gap, sales wise.

I am behind in getting the high tunnel turned over - but I think we can still have a strong start to the spring. I overwintered onions and they look great - I'm excited to see what the harvest is like but I'm considering doing more of those again next year.

The greenhouse is filling up! We have a new germination chamber this year that has been a great success. However, I'm thinking about investing in a new, way more efficient heater for next season. Our current heater does the job, but with what we lose in propane, I think a new heater would pay for itself in 4-5 years.

Rapid River, MI - Hello! We are very excited to dive in and join this farm community! We are a small, off grid farm/nursery, working towards self sustainability. Our homestead is located in Rapid River MI. My partner and I are based out of the Midwest, but we have been out West for a bit. For the past year, we have been experiencing community life on a small farm in CA. There, we mainly focused on small goat/dairy husbandry, fruit trees and market gardens. We had a good year growing and food processing as well. That includes different methods of dehydrating, canning, fermentation, along with being able to cold store some squash, potatoes, onions and garlic. Some of my favorites food preserves were the fruit leathers and the lemon lavender pears. Oh my goodness, SO GOOD...pickles, and the sauces were great as well! I am happy to report our canned goods are lasting us well into this year. I am also quite pleased with our seed savings, it is always gratifying planting seeds from our own collection.

This year is a fresh start up for us. Everything is relatively new; we have many plans and things to do. We are very excited for this year's growing season, and for all our new plants. We have many fruit trees and shrubs, along with a few nut trees we are trying out. We are big fruit eaters; so we are especially excited for our "super fruit" plants, along with the paw paw, hardy kiwi, blueberries, raspberries, tree collards, figs, apples, pears,

plums, the list goes on! Excited to keep adding to our collection! We have been working quite a bit with cloning and grafting. We have found that one can propagate most any plant with just a cutting or so. It is a big, time and resource saver to be able to clone most of the plants we already have. Besides that, we are planning out our new garden plots, including our herb garden - I am quite excited to get that established. We are also getting plans built for our greenhouse. Therefore we can hold a better propagation station and is essential for housing our more "delicate" plants, which will be absolutely necessary for this coming winter and every other after.

One of the first things we have done this year is getting reliant, off grid energy. Right now we get all our electricity off of solar. We also plan on getting a nice vertical wind turbine. Plus, since we are right on the very rapid river, we intend to build a water wheel once the river thaws and it starts to warm up. A water wheel could be our best source of energy; if we can do it right, we can have an energy source more constant than wind or solar. Plus we are always working on our ambient energy devices... Have to make that flying machine one of these days. ;)

Come this spring we will get our fowl situation figured out. We plan on getting a mix of chickens, ducks and geese. We have heard geese are wonderful guard animals, especially for the rest of the poultry. We have our meat bunnies, which are great. We are looking forward to fresh eggs, "good" meat, down pillows and rabbit fur moccasins. Eventually we would like to look more into getting sheep, mainly for their wool, and supposedly their milk yields the highest amount of butter. All in all the animals will be quite a project, we have yet to build all their housing and such...nonetheless, we are looking forward to it all.

All in all this year already seems like it has been a long one. I suppose we are just busy bees. We have a lot of good, hard work, and beautiful days ahead. We are happy to be part of this farming community. We look forward to collaborating with other farmers and folks to make this world a better, healthier, happier and more sustainable place for us, our children, animals, and all of nature to live in.

Chatham, MI (MSU North Farm) - Quick summary of 2017 – it was a tough year in the central UP. We had a cold, wet spring, followed by a cool summer and an early frost (Aug 27). We also saw less sun over the winter months, which made hoophouse production particularly challenging compared to recent seasons. By the end of the year, we were approximately 415 Growing Degree Days below the five-year average (excluding some missing data from 2015) (<https://enviroweather.msu.edu/>). Our snowfall so far is a little below average at 117". Not all went poorly, however - our storage crops certainly did well. We sold the last of the carrots this month with less loss than in previous years (Bolero, Purple Haze, Yellowbunch). Onions (Pontiac, Redwing) held well in the root cellar, and the few remaining potatoes (Goldrush Russet) look great.

There are a few changes coming in 2018. We are shrinking vegetable acreage after deciding to discontinue our collective CSA program, which will hopefully allow us to focus on other important aspects of the farm. We are taking on new seed production contracts with two seed companies, focusing on tomatoes, eggplants, lettuce, peppers,

and green beans. We also have several grant applications submitted that will hopefully allow us to look at organic tillage systems, plastic mulch systems, organic grain, and do a series of variety trials, all focusing on applications in extreme northern climates.

The greenhouse is running and steadily filling with flats of alliums, lettuces, tomatoes peppers, celeriac, microgreens, and herbs. We have welcomed two new participants into our farm incubator (Mighty Soil Farm), which is very exciting for everyone on the farm. They arrived to the UP in the middle of a snowstorm, which seems to be an appropriate Yooper welcome. The hoophouse has been cleared of finished winter crops to make way for spring seeding of roots, greens, and herbs. Overwintered and winter-harvested greens saw a lot of loss this winter due to extended periods without sun and cold temperatures. Even our spinach sustained frost damage, most notably on Woodpecker. Corvair was our standout spinach, due to its minimal damage, beautiful color and flavor, and upright habit. Woodpecker won't have a place next year, though it was slow to mature, which was nice when baby spinach was preferred. Carmel was the only variety that got hit by Cladosporium. An improved circulation fan setup made a tremendous difference in humidity levels in the hoophouse over the winter and was money well spent. For those unfamiliar, a general recommendation is to supply 2 cubic feet per minute (CFM) for each square foot of tunnel space. For example, a 30'x 50' hoophouse would need 3000 CFM of fan power ($30 \times 50 = 1500$; $2 \times 1500 = 3000$ CFM). Divide this by the number of fans you will use and you'll have an idea of the individual fan capacity. These should be arranged to create a circulating air mass, as shown [here](#).

ARTICLES

[Are you compliance with the FSMA produce safety rule?](#) - Though the compliance deadlines for 'small' and 'very small' businesses are not until 2019 and 2020 respectively, growers should be aware of what regulations apply to their businesses and start taking the appropriate steps to prepare. Follow the link to this article, in which MSU Extension Educator, Michelle Walk, provides a brief overview of the FSMA deadlines and exemptions.

[Compost Recordkeeping: What do I really need to have?](#) - If you are making animal-based compost on-farm, there are specific records that you need to keep in order to be compliant with the Food Safety Modernization Act, and the National Organic Program. In this article, MSU Extension Educator, Phil Tocco, provides an overview of the production and use of manure-based composts.

[Are Paperpots Organic? NOP Says No.](#) – A recent ruling regarding a component used in paperpots concluded that the product cannot be used on certified organic farms. While work is being done to reverse the rule and to develop new organic-friendly formulations, the current ruling is concerning to many small scale producers. For more detailed information, follow the link to an article by Collin Thompson, MSU Extension Educator.

EVENTS

Mar 28 – [Beginning Farmer Webinar Series – Pest Management Systems Compared with Fred Springborn](#)

Mar 31 - [Upper Peninsula Beekeeping Conference](#)

Apr 4 – [Beginning Farmer Webinar Series – U-Pick Farm Business with Jim Isleib](#)

Apr 11 – [Beginning Farmer Webinar Series – Farm Business Basics #1: Simple Essentials of Farm Accounting with Frank Wardynski](#)

Apr 18 – [Beginning Farmer Webinar Series – Farm Business Basics #2: Develop a Balance Sheet with Frank Wardynski](#)

Apr 25 – [Beginning Farmer Webinar Series – Farm Business Basics #3: Calculate Farm Profitability with Frank Wardynski](#)

Apr 11 - May 18 – [Safe Use of Animal-Based Soil Amendments: FSMA Requirements and Best Practices](#) (hosted in Detroit, Mt. Pleasant, Grand Junction, Traverse City, and Chatham)

[MSU Extension Events Calendar](#)

[Crosshatch Events Calendar](#)

[MIFFS Event Calendar](#)

[MSU Student Organic Farm Farmer Field School Calendar](#)

[MIFMA Events](#)