

## Michigan Small Farm Newsletter

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### FIELD REPORTS

Ann Arbor, MI (The Land Loom) - It's hard to imagine bringing anything tender into this world of wind and freezing rain. In years past I would have agonized over trying to get into the field as early as possible, seeding successions of early transplants meant to be planted in early April, only to watch them mature, stunted in their tiny plastic cells, remaining unplanted and ultimately cast aside and composted, making way for younger healthier transplants ready to go into the ground at the end of April. What a waste of time, seed, and plant life. This year I planned for the earliest field plantings to take place around May 1<sup>st</sup>, a much more sure fire start to spring. The relief of not trying to fight the volatile elements of April has been considerable. We may all faintly remember that there have been a few sunny dry spells in the last month, but I am grateful that I did not take the opportunity to till and plant baby seedlings then, only to submit them to two weeks of brutal cold and wet. These plants never seem to mature before those planted in May, and they are often weary at the end of their lives. The greens, herbs, and peas maturing in the hoops are coming along slowly but surely. While they have had fairly comfortable growing conditions, the persisting low night temperatures have certainly slowed growth. Ever the optimistic farmer I have faith that next week will kick off the real start to spring, with warm, dry planting days and soft rains to wake up the soil and bring on the green.

Western Bay County, MI - The greenhouse is beginning to look good with seedlings coming right along but still too cold and wet to work ground.

Package bees are arriving but many days have been too cold and windy to install them. They should be OK in the packages for 6 or 7 days but need to get into the hives at the first opportunity.

Here in the Saginaw Valley we have had one good day for the bees to collect pollen, way behind normal conditions. We can only hope things improve quickly and spring comes with a rush.

Bath, MI (Ten Hens Farm) - This has been the first month for one of us full-time farming without an off-farm job or consulting work for additional income. So far, we have gotten a lot done with that extra time, but are also feeling the income swings of farming with higher expenses than sales for the past month. Even though it has been colder than usual there are shelling peas, arugula, radishes, baby kale, mizuna, spinach and hakurei turnips that have emerged in the past week in the field. Around 10,000 onions, 3000 scallions, 3,000 shallots, and 2,000 leeks are in the field as well and should perk up with some warmer weather and rain. In our hoopouses, we have Salanova, parsley, baby pac choi, and shelling peas, all coming along. The baby choi and Salanova will be the first

harvests in a few weeks. We are a little late on those also with the colder weather and wrapping up off-farm job responsibilities. The last of the fall 2017 planted spinach is winding down but we have one more big harvest of that before cleaning it out to make room for cucumbers. We are working on getting final CSA sign-ups for a multi-farm CSA we are partnering with this year and our first outdoor farmers market is starting next month.

Tomatoes were scheduled to get planted this week into the hoopouses but with a few more low 30F nights predicted we are holding off until next week. Poblanos, 'Carmen', 'Escamillo', and 'Sprinter' peppers will all go into the hoopouses next week too. This will be the first year we are growing vegetative peppers ('Sprinter') so we are excited to see how those perform.

We started cultivating with the Tilmor finger weeder in our garlic this week and are really happy with it so far. We need to make some adjustments and dial it in better as we use to learn this tool but so far so good. We have also been working on the office end of the business with meetings about a logo update, payroll services, and bookkeeping to get our farm finances cleaned up and in better order in Quickbooks, plus options for signage for an on-farm stand.

Lastly, we've been working to find some space to have discussions around our farm's mission and vision. Those larger blocks of time with focused brainspace seem harder to come by but we are committed to finding that space over the next few months to have more and better direction about what it is we do and why we do it. Looking forward to summer crops going in soon and longer days with more sunshine.

Chatham, MI (Mighty Soil Farm) - The snow has really hung on, but it seems like spring finally arrived. We were hoping to put out our first transplants and seed our first beds of carrots and beets this week, but that's not happening. Hopefully we'll only have to wait a couple more weeks. Our kale, kohlrabi, and chard transplants are pretty stressed, so we planted a couple of backup trays in case they don't make it. We did a couple trays of each in soil blocks originally, and the rest in 72s. It seems like the soil block transplants are in a sort of holding pattern, whereas the ones in 72s have roots that are getting longer and longer. It looks like starting next week it will stay above freezing at night, so we're going to set up some pallets outside of the prop house and put the over-large plants out there to hopefully slow their growth a bit while they get an extra long hardening off period.

We've had a lot of extra time since we're not spending all day prepping beds or planting, which allowed us to take the time to dig up our 12' x 50' low tunnel and remove as many quack grass rhizomes as we could get our hands on. It took us a few days, but we removed piles and piles of them. In doing so we loosened up the soil quite a bit, and were able to shape our beds in there without tilling. We transplanted beets and cilantro that should be ready for our first market, and the rest of it will be planted with baby lettuce, mesclun mix, and radishes this week and next week. The beds that were prepped and then left for the last couple of weeks sprouted a thick coat of weeds that we went in and quickly hoed, so hopefully our spring crops won't have too much weed

pressure. When we turn the tunnel over to tomatoes, peppers, and cucumbers in June we're going to lay down landscape fabric, and so next year we should see a dramatic reduction in weed pressure in the spring.

Our goal is to be no-till - which we define only as not using a tiller or other soil inversion tool. So once we get our beds prepped this spring, our main tool for loosening soil between plantings will be a broad fork. We'll be removing old crop residue, broad forking, and raking between plantings. This is mostly for soil health, but it's also our main weed management strategy (not bringing new weed seeds to the surface every time we put in a new crop), and from what we know of other no/low till farms it will actually reduce work both in the short and long term. The main issue with no-till in a cold climate seems to be warming the soil enough in the spring, which we're hoping to accomplish with black tarps and old greenhouse plastic that we'll cover beds with for as long as we can before our first plantings. This spring we may need to till depending on what our plot looks like, but we're hoping to just disk it and shape our beds. We're not experimenting with any crops this year, we're sticking to what we know and what we've learned from other farms, but this bed prep strategy is our big experiment. We'll be sure to give updates on how it works out throughout the season.

We hadn't planned on selling plant starts at market this year, but having so much time on our hands we figured we may as well, so we're getting some extra things going. We've also had lots of time to plan out our market setup, get everything all set to go for irrigation, and work on various home projects. Hopefully the next time we sit down to write for the newsletter we won't be able to say anything about how much time we have for things! We're ready to be busy.

Holt, MI (MSU Student Organic Farm) - Spring has finally arrived at the SOF. The daffodils are in bloom! We feel lucky that the snow has melted and has not returned, unlike our counterparts in Northern MI and UP (we feel for you!) We were able to get into our early fields to prep in early April ahead of our April 15 plant dates (not rubbing it in, promise). Every field got a nice dusting of compost/amendments and our beets, carrots, spinach, and a couple of other direct seeded salad crops got into the ground on time. Our alliums and early brassicas are slowly making their way in after the deluge of freezing rain we got the week before last - we had to wait for things to dry out a bit before getting into the field, portions of which are still flooded, including about a quarter of the aforementioned beets.

We held off on most of our summer fruit plantings in the hoopouses until this week because of the low nighttime temps we had last week. Last week indoor beans were seeded, tomatoes and flowers were planted, and the remainder of our indoor summer fruits will go in this week, including cucumbers and peppers. Our strawberries are staring to leaf out - we've planted ever-bearing varieties to be treated as annuals in one of our shoulder season hoopouses (it's on the smaller side and offers less protection from the cold). We will be doing an enterprise budget on this house to see if this type of system is profitable. Stay tuned!

We shift from our Spring CSA to Summer on May 3, perhaps the thinnest time of year for

us. This can be a scary time for new members to start! In addition to our usual farm pick-up we are offering an on-campus option where members can pick up at our weekly Farm Stand. They'll be getting lots of greens (spinach held over from winter, radishes, salad turnips, kale) and the last of our storage crops, which tend to be in short supply this time of year (onions, carrots, and garlic are still plentiful and we have about one or two distributions-worth of butternut squash left in the cooler). We had a major issue with our potatoes that may have been a result of inadequate soil curing or a nutrient issue (or perhaps a combination?) The potatoes we have in storage have discolored spots that make them unsalable (grateful for forgiving/tolerant CSA members!). We're making some adjustments this year with our fertility and have every intention of staying on top of pest control in our potatoes (leaf hoppers were pretty bad last year). We have very heavy clay soils so we always delay our potato planting until late May. If we plant when it's too wet and cold our potato seeds often rot in the ground, especially those that have been cut. There's also an added benefit we see to this delayed planting – we almost entirely miss the part of the Colorado Potato Beetle's life cycle during which they find a potato crop and develop a population that can become a problem.

Our Organic Farmer Training Program students just finished their 6<sup>th</sup> week with us. We completed the unit on soils this Monday and engaged them in learning how to set up irrigation systems and internal covers in the hoopouses. Next week we will be hosting Atina Diffley for a Farmer Field School workshop about Designing your Packing Shed. We have a great lineup of workshops for the season. More information about those is available on our website: <http://www.msuorganicfarm.org/farmer-field-school.html>

Chesaning, MI (Black Dog Farm) - We grow using 3 unheated hoopouses (total sq. ft. 5748) and field for a total of about ½ acre of intense succession vegetable/strawberry production, cut flowers and we specialize in heirloom variety tomatoes. We have a small CSA, sell at 1 farmers market, farm to school, and farm to childcare connection and, on-farm strawberry sales.

Seeded leeks and onions for transplants in Feb./March in the hoops under glass cold frames. They will probably be transplanted by mid May. Our first transplant seeded broccoli, cabbage, kale, lettuce heads have been transplanted into one hoop 4/18. Succession plantings of the same will be transplanted in the next week or two.

Direct seeding (leaf lettuce, carrots, beets, Swiss chard, spinach, kale mix, greens mix, radish, salad turnips) in the hoops has been taking place since about the first of March, direct seeded first yellow and green beans yesterday (4/23) in the hoops. Has been a slow growing season so far (picking up speed now with the warmer temps) about 2-3 weeks different than last year in the early season with the then warmer temperatures.

Open field crops (potatoes) look to go in probably next week and onion transplants not long after. Squashed the first cabbage looper moth yesterday. At this time last year the bug pressure was much advanced. Hoping with the colder weather we may miss a couple of cycles of some of the pesky buggers. We do low tunnel cover in the field to avoid as much insect pressure as we can.

Stockbridge, MI (Lake Divide Farm) - April was long and cold. I don't want to complain about the cold, gray weather in Stockbridge, since I know folks in more Northern locations have experienced more of it. I will say that the long gray April exacerbated some condensation issues we have in the greenhouse, which in turn gave some of our transplants a hard time. We noticed yellow leaves and stunted growth. Our extension agent came out and tested our water and potting mix to rule out pH and nutrient issues. We also noticed lots of "drips" where our inflated plastic pushed against metal purlins. To improve the conditions we adjusted our inflation fan so it pulls air from the outside creating a more gradual temperature change from outside to inside and so decreasing the condensation. We also started venting the greenhouse out in the morning. Our exhaust fan can replace all the air in our house in six minutes. Doing this decreases the relative humidity and allows the air to absorb more moisture. Not helpful, our heat mats were tripping the GFI outlet. The secret to fix it, grounded greenhouse, grounded screen, take out the GFI outlet. We also noticed irregular moisture throughout our trays. We have decided this is because our greenhouse benches are pallets. The cells that rest on the pallet slats do not dry out as quickly as the ones with nothing under them. It makes it impossible to water the correct amount. Come winter, we will be building mesh benches.

We got an early greens and brassica roots direct seeding in towards the end of March. The only reason this worked out was because I prepped too much ground for our garlic in the fall and we had some beds ready. This may be something I do on purpose this coming fall (prep beds and winterkil cover crop?) It wasn't until this week that we finally got some plants in the field (cabbage, kale, broccoli, kohlrabi, fennel, parsley, and direct seeded carrots, beets, lettuces, brassica greens, cilantro, dill, radish, turnip), 2 weeks later than planned. We are now at about an acre planted and hope to get our onions in by the end of the week. We could have planted on time but it would have been at the sacrifice of good field preparation (not letting rhizomes and roots die a little). We have jumped the gun before and have vowed that this year we will be more pragmatic, especially when direct seeding (carrots come to mind).

We have cucumbers and squash in one hoop house and tomatoes interplanted with head lettuce in another. We got them out last week and they are looking good. Those February seeded carrots seem like they are going to give up the goods so we are working around them.

In our second year here we have learned a lot about the land. Last fall we tried to get a cover crop in on the land to be planted this year. Due to a poorly timed equipment failure (fuel line sucking air) and (aren't they all?), lack of rain, and then an abrupt hard freeze, we didn't pull it off. I was miserable all winter looking at the bare fields and worrying about losing our soil, grateful when it was covered with snow. But this spring, thanks to the bald landscape, we have been able to see all the bumps and dips and figure out where the spring fields are and where the summer fields are. It has allowed us to make a more accurate and functional field map and I was able to work the land selectively.

The season's fire has been lit. Hustle mania.

Posen, MI (Presque Isle Farm) - Our high tunnels are packed to the brim. All of our overwintered spinach was harvested a few weeks ago, and we are selling the last of it now. Hoophouse one is filled with Salanova and one-cut varieties for salad mix with all of our tomatoes interplanted into the same beds. We also have some radishes and Hakurei turnips, direct-seeded into those beds as well. Hoophouse two is filled with interplanted kale and beets, romaine and radishes, then more Salanova, new spinach, scallions, and direct-seeded baby lettuce. Hoophouse three is filled with interplanted beets and radishes, Hakurei turnips, carrots, and mini-lettuce head varieties.

We are really trying to pack the tunnels as full as possible because of our late start outside. In the propagation house we have onions waiting for the field to clear of snow, cucumbers, more beets, herbs, transplants for sale, micros, lettuce successions, and a number of other transplants that are ready to go outside.

In the cooler we have over 500 lbs of organic seed potatoes from Wood Prairie Farm that we are excited to get in the ground, as well as about 40 new fruit trees that are joining the farm. With over a foot of snow still on our main field, we are getting a bit impatient, but the forecast looks better, so we should be out there soon. The biggest change for us this spring (and one positive aspect of the late snowfall) has been our adoption of a very heavily interplanted system. Our houses have never been so full of so many different things all densely growing and healthy. By being forced to interplant most all of our beds and really make the most of our space, we should have a highly diverse availability list for our customers very soon. Until then, we are able to offer our markets winter spinach, scallions, radishes, microgreens, sun shoots, and pea shoots.

Chatham, MI (MSU North Farm) – April has brought a lot more snow to the Upper Peninsula (26 inches), continuing the trend of what seems like a prolonged joke that Mother Nature is playing.

Despite the substantial snowfall we received over the past weekend, our four caterpillar tunnels remained upright, even with substantial drifting around the edges. We typically remove plastic on these lighter duty structures due to our heavy snowfall (avg. 190 inches), but decided to skin them ahead of the snow to try to speed up the melt inside. The extended forecast is far more spring-like; with days above 45 and nights hovering around freezing. We're very excited to see some bare ground soon.

The hoophouse and transplant greenhouse have been in full swing the past several weeks. We updated our overhead irrigation system in the hoophouse, creating a zoned kit running inverted mini wobblers. So far, it has worked well with our limited water pressure. Currently the hoop is home to some direct seeded baby arugula, baby kales, braising mix, carrots, turnips, radishes and transplanted head lettuce, cilantro, and one-cut lettuces. The hoophouse also saw an update to the actual bed layout, with new 48" beds, reducing the number of total beds from 8 to 5. This means we'll be doing two rows of summer fruits in each bed, compared to previous years on the 30" beds that held one row apiece. We did this to increase the width of our walking paths, without reducing our production space. The first 40 feet of the hoophouse are currently sown with a cover

crop mixture of daikon radish, oats, and peas to improve some compaction issues (it previously served as our propagation space).

We are moving forward with a vegetable variety trial, looking at 8-12 varieties of six crops, including field tomatoes, field cucumbers, spinach, butternut squash, carrots, and spinach. The goal of these trials is to determine what performs well in our short, cool production season.

With snow still on the ground, we're in slight disbelief that in three weeks we'll be setting out our summer fruits in an unheated hoophouse, but we're hoping the warmer weather and sun will dry out the fields and help us truly transition into spring.

## ARTICLES

[Extension partners to develop statewide CSA survey](#) – The Michigan CSA Working Group has put together a CSA survey to better understand the state of community supported agriculture programs across the state of Michigan. Collected data will help farms and organizations support the CSA mission by better understanding what consumers want, what farmers can provide, and what other types of support are necessary to help ensure CSAs continue to be offered by Michigan farmers. This article by MSU Extension Educators Abby Harper and Garret Ziegler provides more information and a link to the survey.

[Farmers growing produce commonly eaten raw will be contacting water testing labs about new rule](#) – Curious about what the requirements are regarding water according to the Food Safety Modernization Act? Want to know how this could affect your production systems? In this article, MSU Extension Educator, Ben Phillips, provides an overview of water testing requirements for producers growing crops that are regulated by FSMA.

[Common Diseases in Organic Hoophouse Greens](#) – Powdery mildew? Downy mildew? Root rot? Winter and spring production of greens can be a farm saver in terms of cash flow, but the high humidity, low light, and cool temperatures found in hoophouses can create breeding grounds for disease. This article by MSU Extension Educator, Collin Thompson, provides an overview of common diseases affecting winter and spring greens.

[New Organic Garlic Production Bulletin](#) – Garlic is emerging from its winter slumber and now is the time to revisit topics like supplemental fertility, weed control, and harvest/curing techniques. This bulletin by MSU Extension Educator, Collin Thompson, provides an overview of garlic production from seed to seed.

## EVENTS

May 5 – [Crosshatch Spring Field School](#). Bear Lake, MI

May 9 – [Pollinator Health Meetings](#). West Olive, MI

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](#)