



Prairie Garden Farm

Starbuck, Minnesota

1. History+

2. Farm Operational & SWOT Analysis
3. Increase Revenue & Profit



What we look like now

How we got here

- Where we started

- How we grew

- Decisions we've made

How we manage our farm and household financially

How we manage employees

Some more on current operations – a little about how we grow stuff, and how we plan

- ❑ 2019 will be our 10th year selling flowers
- ❑ We sell almost exclusively to florists and studio designers
- ❑ In 2018 we had 27 florists on our routes once or twice per week
- ❑ We also delivered periodically to 24 studio designers
- ❑ 50% of our sales were with 8 florists
- ❑ We grow on about 4 acres, including cover crops and structures (one 30X96 greenhouse, seven 20X96 high tunnels)
- ❑ We're about 2.5 hours from the twin cities, and deliver there three days per week in our refrigerated van
- ❑ In addition, we deliver to outstate florists one day per week
- ❑ Our sales run (approximately) from May 1 to Nov 1
- ❑ We hire seasonal, part-time employees who work anywhere from 10% time to 75+%
- ❑ Our work days are Monday thru Thursday, plus half days Friday and Saturday

- ❑ Our major harvest days are Saturday (for Monday deliveries), Monday (for Tuesday deliveries) and Wednesday (for Thursday deliveries)
- ❑ We grow almost everything in landscape fabric, as we have tremendous weed pressure
- ❑ We grow mostly annuals, but also grow a lot of perennials and woody perennials
- ❑ When we started, most of our customers had very little experience with local flowers
- ❑ We used to compete almost only against the wholesalers, but in the last few years around 30 new flower farms have sprouted in the twin cities area
- ❑ While some years are better than others, our business has grown every year
- ❑ Our top-sellers are usually lisianthus, lilies, snapdragons, sunflowers, zinnias, amaranthus, delphinium, celosia and succulents
- ❑ We also sell a lot of thornless raspberry and ninebark foliage, and all foliages combined make up 10% of sales
- ❑ Just 7 items made up 50% of our sales



2010 - Year 1

At the beginning of the year we were struck with a tremendous urge to grow cut flowers. We had read Lynn Byczynski's book years earlier, but had decided to try vegetables and livestock for a while.

We knew we had a lot to learn, and figured we'd try to learn a few new things each year, not everything at once. We started small, maybe 1/8th of an acre.

We joined the ASCFG, and spent a lot of time reading anything and everything on the bulletin board.

We approached a local grocery store to see if they'd be interested in our flowers. They were, but on consignment. They suggested \$10 and \$15 bouquets. We later added a \$25 bouquet. In a good week we'd make almost \$100!

We harvested Friday mornings, wrapping bouquets in cellophane and delivering to the grocer. We didn't have a cooler, so everything that was ready other days of the week just went to waste. We tried floral preservative, and it seemed to work really well.

2010 - Year 1

We grew the same stuff that all new growers try: zinnias, basil, bachelors buttons, sunflowers, celosia, amaranthus, etc., direct seeding some and starting others on shelves in our basement.

We used $\frac{3}{4}$ " and 2" soil blocks with FAFARD fine germinating mix, in open 10/20 trays (w/o holes) with plastic domes.

We completed construction of our first high tunnel.

We sold just a little to local florists, but for some reason it seemed promising, if we could grow the right stuff and at the quality expected.

We used a free version of QuickBooks.

2010 - Year 1

We realized we'd need a lot more space for germinating seeds.

We learned that a cooler was necessary – we could sell a much larger quantity of flowers without growing more.

We decided that making bouquets was for the birds – we'd rather sell straight bunches to florists.

We realized that we'd need a refrigerated delivery vehicle.

Our total sales were just over \$1,000.

2011 - Year 2

We built a 12'X32' germination room in a pole shed, filling it with shelves, fluorescent lights and timers. I was surprised not to get a visit from the sheriff.

We built an 8'X12' cooler, with 4" of foam insulation all around and a CoolBot.

We built a 12'X32' processing room with grading tables, thinking that we would be grading our flowers if selling to florists. It's mostly used for storage now.

We purchased a used Sprinter van, built an insulated box inside of it, and used a CoolBot, A/C and big power inverter to cool it.

We grew Oriental lilies in crates for the first time, in our newly-completed high tunnel (without shade). We lost a lot due to scalding, but we sold some too, and felt like real growers.

We built high tunnel #2 during the summer! We put down 3' wide landscape fabric at either end, losing a little growing space but making it easier to move around and weed.

2011 - Year 2

We were still using the $\frac{3}{4}$ " soil blocks, but sometimes bumped them up into 72 inserts (in the 10/20 trays) just to save space (we could only fit 44 2" soil blocks in a tray).

We were still transplanting with a couple yardsticks, making sure we weren't an inch off in our spacing!

Our sales didn't begin until the end of June, and were over mid-September.

We did all of our harvesting in the evening.

We had about \$2,400 in sales. We realized that the rural florists in our area were not likely to purchase enough flowers – we absolutely had to start driving to the twin cities.

We exchanged a bunch of emails with Joe Schmitt before and after the ASCFG conference that year. I wanted to know, and he was willing to share, some data about FairField Flowers that I could extrapolate for my farm: how many \$s worth of flowers could fit in their van, how many customers did they visit, what was the average sale.

2012 - Year 3

We spent the winter developing a list of florists in the twin cities that might be good customers.

We built high tunnel #3 in the Spring, and also started using landscape fabric in many beds.

We were sowing enough to make soil blocks hateful, and switched entirely to 288s (and 72 inserts).

We were losing a lot of seedlings in the germination room, and realized that a large part of the reason was our lackadaisical watering. We had been adding water to the trays while they were on the shelves, but the shelves weren't perfectly even, and so some plants would be under- or over-watered. We shifted to watering trays in a stock tank, making sure they were thoroughly soaked, but never left standing in water.

2012 - Year 3

We also started purchasing open trays with holes, instead of without holes, and I drilled holes in a lot of the older trays. We could then carry those trays (with inserts) outside and top-water them.

We made our first big purchase of woody perennials from Spring Meadow Nursery. We filled $\frac{3}{4}$ of HT3 with Hydrangea (*H. arborescens* and *H. paniculata*, we can't grow the others in our zone). We also planted some bare root Astilbe in HT3.

We grew oriental lilies in crates in a high tunnel again, without shade. They were a complete disaster, burning up in an unusually hot early summer.

Robin started driving to the cities one day per week. It was like night and day compared to our rural florists. Revenue went from ~\$2,400 to ~\$8,700. We drove to our local florists just once per week, instead of twice.

2012 - Year 3

Two transformative events occurred in 2012:

1 – I spent all day Saturday, on a very hot summer day, weeding campanula in a high tunnel. All day Sunday was spent weeding sweet williams in another high tunnel. It was almost unbearably hot – I had to stop every hour to drink a couple glasses of water.

Back at my day job on Monday, it struck me that I'd rather be weeding in a hot high tunnel. It was at that moment that I realized what I wanted to do when I grew up.

2 – The day we were leaving for the ASCFG conference in Tacoma that fall, I was informed that I would be losing my job as part of a lay-off. Luckily, I was able to re-apply for it and never actually lost a day of work. It did, though, make me think seriously about growing flowers full time, and what it would take to transition. For sure, I would want to quit in the spring, just before the flower revenue started coming in. I also realized there's no such thing as job security, except that which you can provide yourself.

2013 - Year 4

Robin began delivering to the twin cities two days per week. As expected, our sales for the year doubled to ~\$17K.

We ordered our greenhouse! Unlike the high tunnels, we wanted the side posts to be set in concrete, but the contractors were booked until Labor Day. We built as much as possible that fall, which was especially cold and rainy. We got the frame and twin-wall polycarbonate up, but not the plastic sheets or mechanicals.

By the way, the kit cost about \$27K from Stuppy. We also had to run electric from a transformer and put in a 2d meter, plus we had a second well dug and hydrant placed in the GH (and one outside). Total cost was about \$40K. Since we didn't know how best to use it, it took 2.5 years (!) for it to pay for itself. It gives us flowers to sell in May, June and October, effectively doubling the length of our season.

We hired our first part-time employee for a while, but I didn't have the time to supervise her, and she wasn't very productive.

2013 - Year 4

We started providing bouquets to members of a large CSA in the area. Uptake was less than predicted, around 23 members. Still, every week we'd worry that we had enough available, because we never in the past worried about having a good mix of bouquet ingredients. We'd make bouquets after the Wednesday evening harvest, and deliver them to his house that night.

We invested in some Aluminet shade cloth (50%), enough to cover HT3 (with the Hydrangea). We grew our Oriental lily crates in that HT, including our first Roselilies. They turned out exceptionally well, and really helped build our reputation as serious growers.

2013 - Year 4

We also decided to reach out to studio designers (event/wedding designers). We discovered that selling to studio designers was very different from selling to brick-and-mortar florists. Of course, there's a continuum, but sometimes they can be complete opposites regarding what they care about.

We were so busy with the flower farm that my day job was clearly going to get in the way.



📍  genevievemariexx

Florists

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Designers

- ❑ Vase life is critical because flowers are purchased 'on speculation'
- ❑ Extra flowers are always appreciated
- ❑ Price is important – florist shops are a low-margin business
- ❑ A big sale might be a bunch or two of a lot of different things
- ❑ Cares more about price and quality than the fact your flowers are local
- ❑ Might not be active on social media

- ❑ Vase life is unimportant – the flowers just need to last a few days
- ❑ Extra flowers don't help – the designer is paid per a contract, and has already accounted for shrink
- ❑ Designers are much less price-sensitive, and will sometimes pay ridiculous prices
- ❑ A big sale is generally a lot of a few things
- ❑ Big sales happen after you earn their trust – they can't risk a disappointed bride
- ❑ Will promote your flowers on social media, giving you credibility with other designers – which implies you ought to be on social media too.

2014 - Year 5

I quit my job in late April. There was no way I could continue to grow the business while working another job – we had taken it as far as we could. Sales were not yet what we needed, so we knew we'd be pulling money out of savings or even retirement plans for the next couple of years or so.

Robin's job unexpectedly went from 50% to 75%, but she was still able to drive twice per week. I started driving to the cities one day per week, plus drove the local route.

We got a layer of plastic over the GH in early spring, so we were able to use it as a high tunnel initially. Later that summer we were able to complete it, and ran heat in it for a month or so in the fall. We don't heat it from early November to late February or early March – it's just too expensive, plus, we need enough quantity to make a trip to the cities worth it.

We found another part-time employee who could harvest with us in the evenings. It was a big help!

2014 - Year 5

We continued making bouquets for the CSA, and numbers stayed the same. It was becoming a big distraction, though, so we stopped at the end of the year.

Our sales for the year jumped to \$44K – an increase of \$27K! About 10K of the increase was due to an extra day in the cities (and therefore more customers); the rest was just incremental increases by existing customers. We were gradually changing their buying habits by showing up at the same time of the day, and same day of the week, week after week and month after month.

2015 - Year 6

In early spring Rebecca and Kris started emailing me, bugging me to hire them. I knew I would need more help that year, but I didn't know exactly when that would start, or how much help I needed. They became our 2d and 3d employees later that spring. They pretty much run the place now.

We switched from evening to morning harvest. We figured that, as we needed to add employees, we wouldn't be able to ask them to work evenings and miss their supper. We were intrigued at the idea of having a normal supper time ourselves!

We added HTs #4 & 5! After building the GH, HTs seemed like a weekend project. Because of our winds, we couldn't get the plastic over them until the end of the summer, so they weren't especially productive.

Our van started to give us problems, with minor issues causing us to miss a few delivery days during the summer.

Sales continued to climb, increasing to \$57K. Since we didn't have more delivery days to add, we expected from this point that sales increases would not be as large as in the past.

2016 - Year 7

This was the first year we took a break from adding infrastructure.

We added a discount program. We'd had a request from one of our larger customers, and we came up with something that we figured would reward loyalty but also encourage larger purchases. More on this topic in the 3d session.

At the beginning of the year Robin's job went to 100% time. She was able to work Tuesday – Saturday, and then still drive her Monday route. I picked up her Thursday route to the cities, along with Tuesdays plus the half-day local route on Wednesdays.

Rebecca and Kris helped out all year, and we occasionally had a little help from others.

Sales climbed to \$70K, though the discount program added one more expense to subtract from that.

2016 - Year 7

It wasn't a great year. Expenses were pretty high, and while we didn't compost a lot of flowers, it often seemed that we didn't have enough of the good stuff.

One bright spot – we set up a 3D deer fence. It worked very well. The deer had been nibbling some of the woody perennials to the extent that they weren't growing, plus the deer would occasionally pull out other plantings.

For sure we didn't have enough help on the farm – not enough to produce the amount of flowers needed. Plus it didn't help that I was off the farm three days per week making deliveries.

And making it worse, at the beginning of the season the van broke down (the transmission had to be replaced). It basically delayed our start by three weeks. We threw away enormous quantities of lilies that couldn't be delivered. The van became nerve-wracking to drive, waiting for the next thing to break.

2016 - Year 7

It was time to think seriously about our van...

We were lucky that it broke down early in the season. If it had been in the middle, we would have lost three weeks of much greater sales. It could put us out of business. And it had some ongoing issues – we knew it was just a matter of time before the next extensive repair.

A new, larger Ford Transit van, with Thermo-King refrigeration, would have payments about \$250 higher than the Sprinter (that we were just finished paying for). It would hold more flowers, maintain temperature better, and since it could be plugged in, we would be able to load it in the evening instead of early morning – a huge quality of life improvement.

Since we sell flowers 6 months out of the year, we'd have to sell \$500 more each month to cover the payment increase, or \$125 per week, or about \$30 per delivery day.

2017 - Year 8



2017 - Year 8

We purchased a new delivery van in the winter, along with a refrigeration unit.

We purchased and built two more high tunnels (6 & 7). We actually completed them in time to use them!

We ordered our second big batch of woody perennials from Spring Meadow Nursery, including a lot of speculative foliages.

We started using a compost-based potting mix. The quality of our seedlings jumped way up. We were never good about applying liquid fertilizer, especially after the trays were taken out of the germination room, and changing our potting mix completely solved that problem.

And still, the investments continued. In the spring, our lawn tractor broke down. It had done so briefly the previous year, and it was really inconvenient – we use it to pull a wagon, and that's how we transport freshly cut flower to the cooler, or pick up equipment from the barn. Not having the tractor available was a big deal.

2017 - Year 8



2017 - Year 8

We purchased a Kubota RTV. It has the same size bed as our old wagon, plus it dumps. Of course it's much speedier than the lawn tractor, and saves us a lot of time. Payments are about \$250 a month, so the math is similar to the additional cost of the van payments. The crew loves it, and it might actually be paying for itself!

We added a couple new crew members who were amazing. Our production jumped significantly – probably 40% or so. We grew on roughly 4 acres (with about an acre in cover crops).

Kris took over driving the local route, which was becoming almost a full day. I couldn't have had her do that with the old van.

Sales jumped up 29% to \$91K. We composted a lot, though, because production was so high.

Looking at the amount we produced, and the amount composted, we realized we didn't need to grow any more. We just needed to make better choices about what we grow, so that we sell more and be more profitable.

2018 - Year 9

After the previous year we needed a break from infrastructure investments!

We did decide to start selling succulents, after doing some investigation over the winter.

We had a good crew again, though we were just a little short-handed, meaning the owners did not get much time off.

We had to replace plastic on one of the high tunnels, plus the greenhouse. Luckily, the greenhouse plastic only started to go at the end of our heating season.

For the first year ever we started getting requests from customers to pay by credit card, so we started a business PayPal account. We do charge a convenience fee since PayPal charges us.

2018 - Year 9

We were ahead of plan most of the season, and then things came to an abrupt end three weeks early. Stormy weather damaged the old plastic remaining on the greenhouse (just before we were to replace it) along with some of the plants within. Then, a week after the first hard frost killed the field flowers, a windy, cold night killed almost everything in the high tunnels.

Still, we managed to hit \$100K in sales, though it could have been a good bit better, perhaps \$10K more. We did grow a little less than the previous year (about a quarter acre less), so we definitely made better choices about what to grow. That also translates into lower labor costs, thus better profitability.

2018 - Year 9

For the 2d year in a row, our Hydrangea sold poorly, not justifying the high tunnel space.



So in the fall, we ripped them out, leaving just 5 *H. paniculata* 'Limelight'.

2019 - Year 10

The succulents did well, and so we will add some small houseplants that we can grow from seed.

A couple of our top florists/designers conned me into trying bearded iris. I planted 600 corms in the early fall. They weren't cheap. I imagine they will take a couple years to pay for themselves, but it's good to have fancy flowers in order to set ourselves apart.

Along those same lines we're trying some butterfly ranunculus. I'm not optimistic about how well they'll do, but it's a smaller investment, and if they grow well, I'll be one designer's "personal hero."

We're using our cooler as a rooting room for crates of tulips this winter. If this works well, in the spring of 2020 I'll be the King of Tulips.

2019 - Year 10

We also placed another order of woodies. We cut a little from some of the new ones planted in 2017, and they seemed very promising.



Dude – check your watch



Financial Management Household and Farm

How much does your farm need to contribute to your household?

How much can you invest in your farm each year?

Are next year's expenses going to be lower, higher, or the same?

How much is your farm going to earn next year?

How much does your farm need to contribute to your household?

Write down your monthly, quarterly, semi-annual and annual bills. Figure out what they average each month.

Look at three different months of your bank accounts, and see how much you spend on items other than these bills. Things like food, fuel, gifts, vacations, etc. See what that averages each month.

Combine these amounts and subtract any off-farm income. You now know what your farm needs to contribute. Don't plan on living too frugally for an extended period of time.

Since the farm isn't making money year 'round, it will need to contribute to savings during the season to make up for the winter months.

We all know that

$$\text{Revenue} - \text{Expenses} = \text{Profit}$$

You can also move expenses forward (purchase in advance) to reduce your profit

Part of your profit becomes your income – the farm's contribution to your household

Use the remainder to purchase assets

During the season, based on how profits are looking, I'll start spending on assets. I can't really wait until the season is over because some things need to be purchased or ordered earlier. We take what we need from the farm for our household, but everything past that gets pumped back into the farm.

It's like buying a car – if you spend more on a bigger engine, you get a car capable of faster speeds.

If you invest more in your farm's infrastructure, you get a farm capable of producing more flowers (you still have to sell 'em!). You'll need a farm productive enough to give you the income that you need.

I use a rolling three-year cash flow forecast to project my farm's revenue and expenses. But that's not how I started. I didn't know enough to create that much detail. I had heard a couple estimates from others, though...

An acre of flowers, well-marketed, can provide about \$30K of sales, with income being about half of that

One person, doing all of the growing and sales, can manage about one acre

That ought to say one owner – don't expect or ask your employees to work as hard as you do

I made a spreadsheet to estimate revenue and major expenses based on growing area. Most expenses are relative to growing area (costs of production), although some are not (cost of sales).

For example, I'll likely need twice as many seeds to grow on two acres as I do on one. Fuel costs to drive the van are relative to the number of delivery days, and that may or may not increase with each incremental increase in growing area.

Acres	1	1.5	2	2.5	3
Potential	30000	45000	60000	75000	90000
Seeds	600	900	1200	1500	1800
Plugs	300	450	600	750	900
Bulbs	240	360	480	600	720
Deliveries/Week	1.5	2.5	2.5	3.5	3.5
Fuel/Week	105	175	175	245	245
Total Fuel	2100	3500	3500	4900	4900
Labor					6600
ASCFG Confer	2000	2000	2000	2000	2000
Income	\$24,760	\$37,790	\$52,220	\$65,250	\$79,680

This wasn't super-accurate, especially for larger acreage, but it was a start

As the years went by my estimates got better. In particular, I learned how my revenue is distributed by week (smaller amounts at the beginning and end of the season due to lower production), and I pulled detailed expense data out of QuickBooks.

This page gives me farm spending by month. It's referenced by the next (Forecast) page.

	Aug	Sep	Oct	Nov	Dec
Seeds	\$ -	\$ -	\$ 2,300.00	\$ -	\$ -
Woody Perennials	\$ -	\$ -	\$ -	\$ -	\$ -
Tools	\$ -	\$ -	\$ -	\$ -	\$ -
Gladiolus	\$ -	\$ -	\$ -	\$ -	\$ -
Growing for Market	\$ -	\$ -	\$ -	\$ -	\$ -
Irrigation	\$ -	\$ -	\$ -	\$ -	\$ -
Beneficial Insects	\$ 110.00	\$ -	\$ -	\$ -	\$ -
Soil Tests	\$ -	\$ -	\$ -	\$ -	\$ -
Cover Crop Seeds	\$ 400.00	\$ -	\$ -	\$ -	\$ -
Office Supplies	\$ 40.00	\$ -	\$ 40.00	\$ -	\$ -
ASCFG	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00
Wangness Accounting	\$ 60.00	\$ 60.00	\$ 60.00	\$ 60.00	\$ 60.00
Xcel Energy	\$ 60.00	\$ 60.00	\$ 60.00	\$ 60.00	\$ 60.00
Floral Preservative	\$ -	\$ -	\$ -	\$ -	\$ -
Dahlias	\$ -	\$ -	\$ -	\$ -	\$ -
Iris	\$ -	\$ -	\$ -	\$ -	\$ -
Tulips	\$ -	\$ 1,000.00	\$ -	\$ -	\$ -
Succulents	\$ -	\$ -	\$ -	\$ -	\$ -
Ranunculus	\$ -	\$ 590.00	\$ -	\$ -	\$ -
Plugs	\$ -	\$ -	\$ -	\$ -	\$ -
LP	\$ 1,400.00	\$ -	\$ -	\$ -	\$ 30.00
Zabo Plant/Lilies	\$ 375.00	\$ -	\$ -	\$ -	\$ -
Fuel	\$ 900.00	\$ 900.00	\$ 500.00	\$ 75.00	\$ 75.00
Van Maintenance	\$ 500.00	\$ -	\$ -	\$ -	\$ -
Van Insurance	\$ -	\$ 539.00	\$ -	\$ -	\$ -
Walters Gardens	\$ -	\$ -	\$ -	\$ -	\$ -
Equip Repair	\$ -	\$ -	\$ -	\$ -	\$ -
High Tunnel	\$ -	\$ 700.00	\$ -	\$ -	\$ -
Pioneer Gardens	\$ -	\$ -	\$ -	\$ -	\$ -
Hay	\$ -	\$ -	\$ -	\$ -	\$ -
Ground Cover	\$ -	\$ -	\$ -	\$ -	\$ -
Succulent Garden Supplies	\$ -	\$ -	\$ -	\$ -	\$ -
Succulent Trays & Media	\$ -	\$ -	\$ -	\$ -	\$ -
Trays & Inserts	\$ -	\$ -	\$ -	\$ 760.00	\$ -
Soil Mix & Fertilizer	\$ -	\$ -	\$ 1,800.00	\$ -	\$ -
TOTAL	\$ 3,914.34	\$ 3,919.25	\$ 4,826.45	\$ 1,012.03	\$ 279.32

- Important Notice -

Since we are building a cash flow projection, we're not differentiating between money spent on expenses and money spent on assets.

It's an important distinction, though, and you need to be aware if you're selling assets (i.e. decreasing the value of your farm) in order to make your cash flow look better.

Our goal in general is to make the cash flow 'in' (i.e. income) the minimum needed in order to purchase more assets (in order to increase production and increase the value of our farm).

The forecast page is in three sections.

The first section includes all of our sources of income. 'UMN' is Robin's job.

		UMN	Flowers	Sheep	Pottery	Other	Total Revenue
2017Dec							
2018Jan							
2018Feb							
2018Mar							
2018Apr							
2018May							
2018Jun							

'Other' could be tax refunds or sales of assets

		Total Spend	Farm Purchases	Employees	Household Expenses	Parent Loans	Estimated Taxes	Van Loan	RTV Loan
2017Dec									
2018Jan									
2018Feb									
2018Mar									
2018Apr									
2018May									
2018Jun									

The third section includes all of our spending. The 'Farm Purchases' column pulls totals from the previous page. We generally break out an item into a separate column if it's something that is going to be added or paid off.

Note that both sections have columns for monthly totals.

The middle section compares how you expect to do with how you're actually doing.

	Net	Projected Running Net	Actual Running Net	Accounts	AR and undeposited funds	AP incl uncashed checks	Credit Cards
2017Dec							
2018Jan							
2018Feb							
2018Mar							
2018Apr							
2018May							
2018Jun							

- ❑ The 'Net' totals the 'Total Revenue' and 'Total Spend' columns. You can expect to have both positive and negative months.
- ❑ 'Projected Running Net' for each month is the previous month's Projected Running Net plus the current month's Net (which could be a negative number). Over time this amount should be increasing (compared to the same month the previous year).

These two columns are completed in advance for three years – they're your projection of your cash flow.

- ❑ 'Actual Running Net' is basically the total of the remaining columns – how much money you have in the bank plus what you're owed, minus what you owe. Enter these values at the end of each month.

Every month...

...I update the Farm Spend page, in case I've incurred unforeseen expenses, or change the timing of them.

...I enter all the actuals and calculate the Actual Running Net.

Then I compare the Actual and Projected Running Net columns to see if I'm ahead or behind where I thought I'd be. Did I sell more or less than I thought I would? Were employee costs higher or lower? I don't always update the revenue columns (except for 'Other'), or the 'Employee' column, but I will investigate to see if they were different than projected.

It's not unusual that my cash flow will be less than expected because I purchased something unplanned that will result in greater revenue later in the season. As long as I'm meeting short-term obligations I see that as a good thing.

Technically, a Cash Flow Forecast should look at dollars as they enter or leave your accounts. In mine, I sometimes track when expenses or revenue are incurred, not when actually paid.

For example, the revenue projected for June won't all arrive in June, because we have a few customers that pay weekly or monthly. I can capture that in the 'A/R and Un-deposited Funds' column. I don't always worry about that early in the season, but I do later in the season.

Again, that might be a reason that my Actual Running Net is less than projected – because I forecast that I'd receive all of my June revenue during June.

Inaccuracies and informalities aside, this spreadsheet give me a very good picture of how my farm is doing. It tells me if I need to delay some asset purchases and expenses, or if I can bring some expenses forward, or even purchase additional assets.

Any questions before we move to the next topic?





Employees

We're very happy and proud that we have created jobs for some of our neighbors, even if the jobs are only seasonal and part-time.

We could not do what we do without them.

We all get along – we're just a bunch of friends who work together.

My biggest concern, when hiring someone new, is whether or not they'll fit in with the team.

Hiring and Firing

I'm always encouraging (nagging) the crew to recruit their friends.

Half the people that approach us say that working on a flower farm is their dream job. Then, when I show them around, they realize that, yes, it is a lot like work.

My two criteria when hiring:

- Is the candidate going to get along with the existing crew?
- Is the candidate able to do the hard physical work?

I do ask for input from the crew before and after the hire. Often, the candidate is an acquaintance of an employee, so I don't have to worry about either criteria.

So, in general, I'm easy. If you convince me that you can do the physical labor, and if I think you'll play nice with the rest of the crew, you're hired. How can it work to be so easy?

Because I have no problem letting someone go. If you don't get along, or can't keep up (after a couple weeks), or don't have any initiative, then you're out the door.

Cold-hearted? Just the opposite – I care enough about the existing crew that I'm not going to let anyone screw up the dynamic, or not pull their weight.

Employees get an additional \$1/hr every year they return.

They also get a lot of flowers when we clear out the cooler at the end of the week. They're not allowed to sell them.

Working hours are simple – they work when they want. This works because they rapidly become part of the team. They understand when help is needed the most (Saturday, Monday & Wednesday mornings). We print a monthly calendar so they can note when they'll be here (or not be here) so that they can avoid leaving us short-handed. They have complete freedom to take time off, whether for an errand or a vacation. We have a bi-weekly timesheet, so everyone is paid for hours worked.

They mostly learn by watching. For example, for their first harvests they'll mostly just carry flowers from someone cutting to someone processing. Then they'll graduate to processing, and from there they'll learn how to cut specific things. I'll work with them some so they see how fast things should be done.

They tend to develop favorites that they're in charge of – I don't dare harvest Rebecca's Trachelium unless she's off that day! Mine are lilies, sweet peas, celosia and amaranthus. Other than that, we don't assign jobs.

Sometimes we team-pick and sometimes it's an individual effort – it just depends on the quantity.

We all wash buckets together at the start of a harvest day.

The main requirement for supervision is around quality – they don't discard enough substandard stuff. It's like Charlie Brown's Christmas tree – surely someone will love this pitiful little stem and take it home! And every couple of months I have to remind them that there are flowers inside those buckets that they're slinging around, and that they need a little primping when placed in the cooler (especially to make sure the snaps are standing straight!).

We have a couple stock tanks for soap and bleach water, and space to rinse them in-between.

These 6' banquet tables are often on sale for \$30, and it seems like we're always buying more. We have them scattered around for processing wherever we're cutting.

We use Floralife holding solution for lilies and sunflowers (to keep them from opening) and Floralife Special Blend for Hard Water for everything else.



Everyone gets a brand new pair of ARS cutters every year. They can have the old ones if they want.

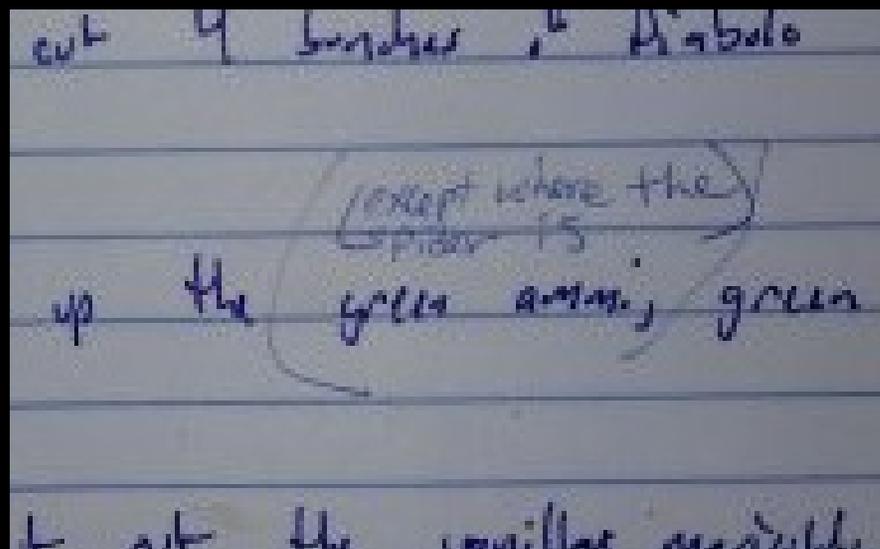
We provide mosquito repellent and sunscreen.

Since I'm off the farm doing deliveries a couple days a week, I just leave a list of things to do. The crew always tries to exceed my expectations of what they can get accomplished.

On a day-to-day basis, other than harvesting, I'm not always working side-by-side with them – I'm getting the next thing ready, such as tilling beds. They can do the rest of the bed preparation – raking, fertilizing, laying drip tape and landscape fabric. They sow the larger seeds, such as sunflowers and zinnias, and I do the rest.

I thank them every day.

Any questions about employees?



Scheduling Spreadsheet

How many I want to transplant

S = Sow, SF = Sow Fridge, OF = Out of the fridge, B = Bump (ordered plugs only)

Gen	Variety and color	# Plants	Plantings		Week	Germination Notes
Campanula	medium Champion Blue	400	1/2	S	2	cover lightly, temps 65-68, short days, ger 14-21 days
Campanula	medium Champion Lavender	400	1/2	S	2	cover lightly, temps 65-68, short days, ger 14-21 days
Campanula	medium Champion Pink	400	1/2	S	2	cover lightly, temps 65-68, short days, ger 14-21 days
Campanula	medium Champion White	400	1/2	S	2	cover lightly, temps 65-68, short days, ger 14-21 days
Moluccella	Laevis: Bells of Ireland	133	1/2	SF	2	surface sow 2 wks @ 39°F (don't freeze), germ. @ 68°F in light , 10-20d
Bupleurum	Green Gold	200	1/2	S	3	2 seeds/plug, sow @ 70°F day/60 night , 7-14d
Ammi	Queen of Africa	100	1/2	SF	4	chill seed < 45° 1-2 weeks. Cover lightly, alternate D/N 86°/68° Germ 7-14 days

How many successions

Labels, so everyone knows what it is

RB = Ready to bump up,
RH = Ready to harden off,
H = Hardened off,
RT = Ready to transplant,
etc.

Actual # to transplant

Outside Label	Inside Label	# Sow	Seeds/Cell	Tray	# Trays	To	Status	Between Row	In Row	Qty	Length	Week Transplanted
B	Camp	432	1	288	1.5			6	6			
L	Camp	432	1	288	1.5			6	6			
P	Camp	576	1	288	2			6	6			
W	Camp	576	1	288	2			6	6			
Moluc		512	1	128	4			12	9			
Bupl		512	2	128	2			12	12			
Queen	Ammi	256	1	128	2			12	12			

Trays X Tray Size X Seeds per cell = # Sow

Length of bed the Qty will give me

This spreadsheet is used to schedule sowing and also manage transplanting.

Sowing instructions come from the breeder or from <https://tomclothier.hort.net/>.

We have rules for label location on trays; generally, middle of the short side.

While we use this spreadsheet to track when something is ready to be bumped up, hardened off or transplanted, we do not attempt to schedule those activities in advance – they occur when the plant is ready. The exception is that we schedule bumping up of plugs that we've purchased, just to get them onto this spreadsheet.

The final quantity available to transplant tells me how many linear feet of bed it will take up, which helps me combine things that are in smaller quantities than planned.

I'll record the week transplanted, and also make notes for next year about the timing, sowing quantities, tray size, etc. – anything that I want to change.

Now let's look at a few operational/cultural procedures that might be useful to you.

This is the Vibro Hand Seeder from GroMor. It's great for most seeds – it vibrates the V-shaped blade, reducing friction that the seeds slide off as the seeder is tilted.

Pelleted seed wants to roll off, so those I push off with a toothpick without having the seeder vibrate.

Some seeds, such as unrubbed Scabiosa, get tangled together and don't work well either.

And large seeds such as sunflowers or zinnias are easiest to do by hand.





We bottom-water our smaller-celled trays (288s & 128s). We just set up a couple small stock tanks and keep enough water in each so that the trays float.

We fill jugs of water from a hydrant outside of this room.

When it's above freezing we'll top-water larger trays (72s & 50s) outside. We will occasionally have to bottom-water them on very cold days, which works ok but takes a while.



We start most of our own lisianthus plugs, but we still buy in the first batch.

It's important to unbox and water them (whether or not they appear to need it) as soon as possible.

Bump them up to 72s (or transplant) as soon as you can, too.

The growing medium used for plugs you brought in is probably a high-porosity mix that dries rapidly, possible faster than whatever you currently use. So purchased plugs might need water (and fertility) sooner than you think, especially since the plants are at the maximum size for their cell.





We transplant lisianthus two plants per cell. We don't use landscape fabric because they're so close together.

The drip tape is aligned under every other string of netting, and has 4" emitter spacing which leaves a wet strip in our soil.

You can see the bare strip in between rows of lissies. That area doesn't get watered, keeping the weeds down.

We will raise the support netting and add side posts as needed.

Some growers don't plant quite as densely, saying that stems are too weak. That might be because of the availability of calcium in their soil.

What color to grow? They're all good. We do grow extra White and the various Champagne/Apricot varieties.

Any lisianthus questions?







Roselilies have become a specialty . As soon as the season begins we'll have florists asking when they'll be available. We will grow over 6,000 lilies this year, and 80% will be Roselilies.

However you grow them, lilies are going to bloom within a few days, so you need to have a big enough market for 300 – 400 (that's how many come in a crate).

Well, technically there could be only 200 per crate. Lilies bulbs are sold by size, and the larger the bulb, the more blooms (it's different with each variety), but also fewer bulbs fit in a crate.

Larger bulbs are said to be more prone to cultural problems, such as scalding and bud abortion.



The photo on the right shows a stem at the right stage to be picked. Roselilies can be a little more open, though, since their petals are sturdy and they open slowly. If they lose a petal, it's not a disaster like it is for other lilies.



I aim for 3 blooms per stem – my florists don't like to have too many, it makes them harder to use in arrangements. If you're selling direct, you might prefer larger bulbs.

Larger bulbs cost more, so you need to be able to price appropriately.



4 rows of 5 bulbs per crate (assuming the crates will be about 4" apart) in a couple inches of Fafard 3B. Cover with media, soak, fertilize, then fill with media and soak again. It's important to have media up to the handles – the roots that feed the lily grow out of the stem. Try to keep them at 55 deg F for a couple weeks while they set anchor roots, then 65 deg+.





Once you see buds forming on the lilies, they'll need a lot of water. We soak ours every 2 or 3 days, depending on temperatures.

Remember, if you're going to plan 20 per crate as we do, you'll need to leave a few inches between crates so that there's plenty of room for the canopy. If you want the crates touching, best to plant only 12 bulbs per crate.

The same rules apply for Asiatics and LA hybrids.

Any Lily questions?



I occasionally hear from new growers how they can't sell Amaranthus to save their lives.

That's because they're growing hanging Amaranthus, which some designers **love**, but can only **buy** if they have a wedding that weekend that needs it.

Brick-and-mortar florists buy spike Amaranthus every day. Wedding designers will buy a fair bit too. Not including 'Green Thumb' we grow about 5 times as much spike as hanging.





We grow 'Green Thumb' in a high tunnel. We'll sow a 128 tray every week for 15 weeks.



And finally, Sweet Peas!

A favorite of mine. I get Spencer series seeds from Roger Parson Sweet Peas (rpsweetpeas.com). English, but you pay with PayPal, so it's easy.

We grow them on vertical netting. We used to start them early in the greenhouse, but this past year we moved them to a high tunnel, which means they were almost two months later. It got hot early, and so they weren't great – we're going to try them under shade this year.

We transport them in mason jars, which happen to fit perfectly into a carry tray for 4.5" square pots.

