

Our Opening Gambit

Chris Holman & Maria Davis, Nami Moon Farms

Full Definition of GAMBIT

- 1** : a chess opening in which a player risks one or more pawns or a minor piece to gain an advantage in position
- 2 a (1)** : a remark intended to start a conversation or make a telling point **(2)** : topic
- b** : a calculated move : stratagem

<http://www.merriam-webster.com/dictionary/gambit>

This is our farm's story, and our intention behind sharing it with you is definition "2a" up above. This is a complicated story, and what follows are a few snapshots of our experiences. It's not representative of any story but our own, but I've wanted to write this story for the past year or so. Why? The biggest reason is that I haven't been able to find many people who are willing to talk about farm financials too publicly, and even those sessions at one conference or another that attempt to address this topic fall short. Their presented numbers are also not contextualized, and they "may not be the actual numbers" of the farms that are there to talk. Perhaps there are examples of what I'm looking for that I simply haven't found yet, but if they are out there, they're not easy to find. I understand why this is the case, or at least I think I do. We hope that by sharing some of our story alongside our financial realities, that we can provide one example of a farm in its first five years and some nuance to the realities that come with being beginning farmers with no background in farming prior to choosing this life.

You see, farmers who decide to jump in and make a go at it invest an incredible amount of time, effort and money into something that more often than not does not reward them well (financially) for their work. Many people getting into farming have left successful careers to pursue their dream. Many more maintain a foothold in their off-farm job so that they have a shred of stability that a farm often cannot provide, at least not early on. Farmers sleep less, work harder and—as many of the popularized sayings about a life working in Agriculture go—they are in a constant battle to have their value and the value of their products realized in society and the marketplace.

At the end of each year, many of us sit down to finalize our taxes. Some of us

do it all on our own, but more of us probably use a local CPA who can review our accounting, suggest improvements, guide us through difficult areas and put their stamp of approval on the end product that is then submitted to the government. However a farm is going to choose to operate, it can be a humbling, frustrating and even a sort of shameful experience. All year long, you're working your ass off trying to make everything work, and it often feels like you're only able to tread water well enough to catch the occasional breath. The end of the season approaches, your strength has waned and patience is a virtue. You climb out of your operation, reflect upon everything that just happened, and all of this occurs in a world full of change and circumstances that are largely out of your control. So, if you look down at your numbers and see those parentheses around the net income line—indicating a loss—or the amount of money there is a fraction of a fraction of what you used to make in much easier jobs, you feel as if you've lost. It can be crushing.

Still, we farmers are a hardy type, and if you can manage to give yourself a break and to really understand how difficult this endeavor is, preparing for next season isn't so difficult. There are signs of improvement, you've spent another year learning and re-learning, and you believe in what you're doing. This is what gets me out of bed in the morning, and it's ultimately what keeps me going even though my former self—the version of me that was 'ascending the ladder' and leading a successful, decently-paid career—goads me and tells me that I've made the wrong choice, give it up, go back from whence you came and get out while you still can. That voice used to haunt me, but now I use it as motivation to figure out how to make farming more successful for us and for everyone else.

What follows are snapshots for each year of the farm, and I will expand upon some of the numbers to give you a better idea of what it all means. I'll go into a little more depth for year one and year five too. That way you can clearly see the starting and ending points with the other years reflecting the growth that occurred between those years.

It's worth mentioning that our farm produces food in a given year that we need to sell during that year and the next year. Our operations mostly shut down at Thanksgiving or, when we weren't as good at planning, the middle of December. We still have winter farmers markets, bi-monthly deliveries to restaurants, CSA customers and we always have a smattering of other sales as well. So, we produce enough to get us through the first half of the following year. We start raising our birds in the first week of April, so we don't process new birds for any given year until June. Anyway, this is just one insight into the numbers that might help you out when you're looking at them. If we wanted a clearer understanding of how our business was doing, it might be a good idea to shift our fiscal year to June 1st – May 31st since that would better reflect the operating cycle of our new and growing farm. In other words, the numbers here are certainly illustrative of where we've been over the last several years, but we are also viewing them through the lens of the typical tax year. I'll apologize in advance for any errors I've made, and please let me know when you find those I've missed. Thank you.

Before I start, here are the basic numbers for our business, Nami Moon Farms LLC. The second table, below this one, is our approximate production schedule. I figured I would put them here for those of you who want to see this and might not be as interested in the stories I will tell about the numbers not shown in this table. In case you're not a bunch of accountants reading this, here's a basic description for each category. *Please pay special attention to "Cost of Goods Sold".*

Sales: The total amount of money earned from selling our products that year.
Cost of Goods (COG) 'Sold': This is how much it cost us to produce the end product. For us, that is typically the purchase of the animal, feeding it and processing it. *Usually, you would only show the costs for the product you sold during the tax year here (hence the title of the category), but I've shown the costs of everything produced each season. What we produce in 2013 is sold in 2013 and 2014, so the COGS for each year is actually less than what you see.*
Gross (Income): Sales – Cost of Goods Sold (aka Costs of Production).
Expenses: Bills, Repairs, Licensing, Advertising, Fuel, Bank Charges, etc.
Net P/L (Profit/Loss): Gross Income – Expenses. Numbers in () indicate a loss.
Dep. (Depreciation): Long-term expensing of large purchases, usually equipment.
Net – Dep.: This is what our net income looks like for tax purposes. The profit or loss is split 50-50 and passed on to our personal taxes. *In other words, this is our farm salary.*
Personal: Our personal money invested into the operation.
Debt: Any loans we're carrying as a business.
Total Property: This reflects the value of the equipment the farm owns.
Total Assets: This reflects everything the farm owns.

	2010	2011	2012	2013	2014*
Sales	24,236.08	42,572.51	67,307.16	88,437.39	98,223.41
COG Sold	32,627.53	33,515.99	49,029.15	76,595.49	54,224.85
Gross	7,069.51	8,458.85	32,389.93	25,931.97	48,975.74
Expenses	6,416.07	11,201.61	17,000.25	27,908.29	33,182.54
Net P/L	653.44	(2,742.76)	15,389.68	(1,976.32)	15,793.20
Dep.	4,312.00	8,202.00	7,946.00	11,387.00	N/A*
Net – Dep.	(3,658.56)	(10,944.76)	7,443.68	(13,363.32)	N/A*
Personal	41,751.30	21,280.87	7,575.66	7,400.10	20,805.58
Debt	11,876.96	7,390.77	5,714.67	41,307.54	38,150.46
Total Property	36,048.52	42,416.38	58,888.34	90,243.07	113,967.60
Total Assets	54,281.70	68,333.62	89,631.86	130,648.51	163,480.78

NOTE: For the sake of consistency, all of the numbers I'm going to use are from our own accounting (that has been vetted by our accountant). I'm doing it that way because I'm not a CPA, so it would be hard for me to look at our tax paperwork and explain why this amount went up or down by so much, and so on. The numbers I'm using are our actual numbers, but what I'm saying here is that once you've pushed them through the IRS' filtration system, some adjustments are made. They are minor adjustments and they can increase or decrease the amounts seen here.
 *Final 2014 taxes are not completed.

Approximate Production Goals and Schedule								
	Broilers	Ducks	Turkeys	Bees	Veg. (Acres)	Guineas	Laying Hens	Laying Ducks
2010	~3,600	0	~50	0	0	0	0	0
2011	~4,000	~50	~100	2 hives	~1/2	0	0	0
2012	~4,700	~100	~150	2 hives	~3/4	0	~50	~15
2013	~5,700	~450	~275	4 hives	~1	~300	~250	~75
2014	~5,000	~300	~225	2 hives	~1/2	0	~275	~150
2015	~5,000	~300	~350	4 hives	~1 1/2	0	~250	~175

- Hog production began in 2013 with two hogs. In 2014, we raised six. We plan to eventually keep a breeding pair or trio of hogs and increase our production to somewhere between 15-30 hogs per year.
- Mushroom production is currently at ~200 shitake logs, and we have plans to increase that while also increasing oyster production in order to cover the gaps between unforced flushes with the shitake.
- Row crop production for 2015 will also go down due to a mistake I made in crafting our original rotation. I will correct the mistake, but it will take a year to do so. This year, I am going to trial plant organic corn seed, conventional corn seed and open-pollinated corn seed. I will have access to five more acres in 2015, but the soils there will need to be remediated for at least one season before I'll feel confident about planting into them.
- We added 1,000 feet of Asparagus in 2013, and we plan to add to that in later years. We also have about 25 rhubarb plants, 50 raspberry plants, and 100 strawberry plants. We plan on increasing our perennial areas to include blueberries, currants and grapes.
- 2015 is also the first year that an incubator farm—Field Notes Farm—will be on our property. We have leased them two acres for three years in order to help them get established. They will be producing organic vegetables in movable high tunnels that will be sold through their CSA and at a farmers market stand.
- We have no plans of hiring an employee, as the costs associated with that are too high for us to justify. Assuming a 20% profit margin, we would need at least another \$100K in gross sales to pay for an employee. To be stable as a farm business of two people with one employee, I'd like to see gross sales between \$250-300K. That would mean \$50-60K to cover salaries, unexpected purchases and re-investment/growth in the farm. Anything else would go in the farm's savings account to help with cash flow.



Year 1—2010

‘Real Knowledge Is To [Discover] The Extent Of One’s Ignorance.’

– Adapted from Confucius

By mid-2010, we both lived in Madison, and while I taught part-time at UW-Madison for a semester, Maria worked part-time at REAP Food Group and part-time at Tornado Steakhouse. Though it was only five years ago, it’s incredible to look back and see how naïve we were and how dangerously close we came to failure given that our ability to plan ahead was directly tied to our limited knowledge of what we would need to plan for. We were lucky in many regards, but we also found the way(s) to make it work.

Maria and I met in April of 2009, and by the beginning of 2010 we had decided to farm, created our LLC (Partnership) and pooled our money for the coming season. We had to figure a lot of stuff out, and it was a little difficult because I was still living and teaching in Oregon. I flew out several times during the year though, and I even had one trip out just to work on constructing our chicken shelters. I should probably thank everyone who helped us conceptualize our farm during this time, but even that was a challenging part of getting going because one of our closest advisors began to view us as competition even though we hadn’t crossed that line, and we made it clear that we never would. After a few frustrating months of having to defend ourselves in places we didn’t expect, our relationship soured, and it got hurtful enough that we eventually cut that negativity out of our lives. We don’t dwell on this anymore of course, but I want to include it here because it came out of left field and made the whole process of trying to start a farm more frustrating than it had to be. That’s just the way things can go though.

Having said all of that, I do think that experiencing that hiccup reinforced our personal and professional approaches to other farms. That is, we believe that in order for us to succeed in the long-term, other farmers need to succeed, too. There’s also an element of economic democracy involved in that we support the idea that Agriculture should be a good option for a career and that people should be able to make an honest living on the farm that supports their family. We do not want to get exponentially larger in order to make as much money as possible. Rather, when we meet all of the demand that we can, we encourage and expect other farms to step in and take it from there. If we can help them succeed somehow, we’re happy to do that. In fact, the idea behind presenting parts of our story and our financials like this stems from our desire to help inform the conversations that inevitably come up when people talk about farming, even if it’s just a tiny bit of an incredibly complicated whole. Building on that, this all ties into our desire to be a part of a strong community of fellow farmers, food-lovers and people in general. We’ve found that community here in Wisconsin, and that’s a big part of our happiness.

As people with no farming background looking to start a new farm, we were going to have to build everything from the ground up, and since it was going to take

time for the snow to melt and our birds to grow, we wouldn't be able to sell anything until June 2010. We did have a few major assists as beginners, though. By far, the biggest factor in our ability to get into farming is that Maria's family had land that they were willing to rent to us so that the farm could exist. We looked around Madison and other places near there, but the land costs were too high, even then. There were also outbuildings on the property that we could take advantage of and invest in. Maria's father also had a small 30HP tractor, a lot of tools and mechanical know-how. Maria's mother would end up helping us feed and watch over the birds a lot because she really enjoyed having the animals on the property. The most complicated part of our first year was that we were both working and living in Madison but the farm was 115 miles north just outside of Stevens Point.

Once the farm was up and running, we would spend every weekend on the farm. We did groups of 400 birds at a time, and though that worked for us then, it required more work than we had time for. For instance, we had nine or ten different processing dates. Processing happened during the week, so I would finish teaching at UW-Madison, come home and wait for Maria to get off of work at 11pm or so (she still worked as a server part-time). I would pick her up at the restaurant, and we'd drive to the farm and get to sleep around 1am. 4am would come in a hurry, and all four of us—Maria, her mother, her father and I—were up and out the door collecting birds to take to the processor. I usually drove the birds to the processor, unloaded them and then drove back to the farm. Then, we would take a shower, get dressed and drive back to Madison in time for work. Later that week, we would pick the birds up from the processor and bring them back to the farm. This was insanity, but we did it a lot. That first year, we drove something like 12,000 miles just on farm duty.

Here's a list of what we bought that first year so that we could actually operate the farm. We decided to raise 2,700 broiler chickens our first year, but that grew to 3,600 broilers by the time we were done. We also, at the last minute (in July), decided to raise some turkeys for Thanksgiving.

Year 1 - 2010 Equip. Purchases	Amounts
A Farm Computer:	\$1,562.46
Walk-In Freezer:	\$13,642.26 (we got a loan for this)
Range Shelters:	\$7,422.66
Farmers Market Stand:	\$770.37
Brooding Area Equipment:	\$344.96
8.5 Ton Grain Bin:	\$2,875.00
Watering Systems:	\$1,724.26
Poultry Fencing and Pasture Set-Up:	\$2,565.54
Brooder Lamps:	\$918.76
Transport Crates:	\$1,122.25
Total:	\$32,948.52

Here's a list of the money the farm spent in that first year of production. This is an exhaustive list because I want to be sure that I reflect our start-up costs as accurately as possible. Also, keep in mind that we didn't have product to sell until June. That means our overall sales would be lower and the farm would begin the process of reinvesting/spending every cent it could earn so that the operation could get through the season and have some money to cash flow next season's operation.

Year 1 – 2010 Cost of Goods Sold	Amounts
Cost of Day-Old Chickens:	\$5,088.60
Cost of Day-Old Turkeys:	\$249.75
Processing:	\$15,935.48
Feed and Grain Expense:	\$11,353.70
Total:	\$32,627.53

When looking at your costs, you want to see which areas you can possibly work on getting down so that your costs go down so you can recoup more of the final selling price of your product (i.e. higher profit margin). The easiest one of these costs to negotiate is what you pay for each animal. It basically boils down to scale of purchase. Bulk purchasing being a little more affordable is not a new idea, but it might be something you don't think about right away (like us).

Processing is probably the next area you might have a shred of negotiating power with. Again, scale helps here, but there are other factors that can come into play to help you chip away at your processing costs. In Wisconsin, once you raise more than 1,000 birds, you have to take them to a state-inspected processing facility. The inspection is a nominal cost, but now you have to pay the processor instead of processing the animals yourself. There are a lot of pluses to that though! Primarily, it means that you can sell your product anywhere in the state as long as you've also obtained all of the licenses and permits to do so.

The most variable cost of them all—and the cost you have no real control over—is feed. The best you can do here is to call around to all of your options and see what they're charging. Then, go with the cheapest, or you can try to work out some other deal with a vendor you'd prefer to work with for one reason or another. You can also try to grow all or some of your own feed, but then you'll also have to make sure your final ration is healthy and fulfilling all of your animals' dietary needs. The real devil in the details here is that making the attempt to better control your costs in any of these areas is going to require a significant amount of money, time and learning. Finding room for any of those things can be difficult because a farm is demanding if you know what you're doing. If you don't know what you're doing, your main free time comes in the form of sleep, and even then the farm doesn't let you get too much of that.

Year 1 – 2010 Farm Expenses	Amounts
Advertising Expense:	\$238.35
Advertising-Food Events:	\$127.30
Bank Charges:	\$585.81
Cleaning Expense:	\$60.16
Entertainment Expense (Dining Out):	\$298.48
Fuel-Gas, and Oil Expense:	\$116.90
Freezer Storage Expense:	\$1,209.97
Insurance Expense:	\$839.00
Interest Expense:	\$494.58
Licenses and Fees Expense:	\$526.48
Small Tools Expense:	\$8.70
Outdoor Supplies Expense:	\$61.46
Indoor Supplies Expense:	\$109.99
Office Supplies Expense:	\$224.90
Office Texts (Research):	\$36.24
Subscriptions Expense and Dues:	\$195.00
Electric Bill Expense:	\$1,154.31
Rent-Equipment:	\$8.44
Rent-Ground:	\$120.00
Total Expenses:	\$6,416.07

So how can I summarize all of this? As businesses go, starting a small poultry farm doesn't take *too* much money. We did invest in a walk-in freezer, but we did that to have on-farm storage (convenience) and to avoid the costs involved with storing everything off-site. We bought that 8.5-ton grain bin, but we didn't **really** have to. That is, we were using a borrowed gravity box (basically a big box you can put grains in for transport or storage that is emptied via gravity) that we filled with feed at the mill and then brought home and backed it up onto blocks—highly dangerous—and then anchored it in place so that we could get a cart under the chute to move feed from the box to the birds. Someone was going to get hurt with that approach, eventually. So, the grain bin was a big storage upgrade, but it was also a major safety upgrade. We bought it new, but not for a lack of trying to find a used poly bin on Craigslist. The safety issue was pressing enough for me that I just took some of my teaching salary and purchased the bin. As farmer's luck would have it, a used poly bin showed up on Craigslist a couple of weeks later. Other things that might stick out to you are how much of our farm's costs are involved in feed and processing. Every year those are huge chunks of cash going out the door, and in some years (wait for 2012-2013!) it's insane due to drought, shortages and unprecedented peaks in price. We also only paid \$120 for land rent this first six months. That's a very good deal, but Maria's folks were giving us a break as we got started, and we were only really using a couple of acres for years one and two.

Our rent amount would go up in time, and the amount we now pay is actually a lot more than what it would usually cost to rent per acre from someone. Granted, we're also effectively renting the outbuildings, paying for all of our own fuel renting equipment to use and performing maintenance on said equipment. We also live here, provide \$3-400 worth of food per month so our grocery bill is a lot lower, and we work on the property and maintain things that have nothing to do with the farm. There are a lot of things that go unmentioned here that I could try to quantify, but that would be a little difficult and the topic of another write-up altogether. We also put in a second service for electricity as soon as we could, so that the farm would have its own bill. In the end, we're a family living together on a property where Maria grew up and we happen to have a farm. Situations like this lead to all kinds of different arrangements—some better, some worse—but we have always tried to make sure that we paid our fair share and didn't have anything simply handed to us. For one, we can feel better about ourselves, but we also have a truer accounting for the business' financial shape.

The first year of farming was incredibly challenging. Aside from what I've already mentioned, I can remember how difficult it was to find information that could tell us how to do whatever it was that we were trying to do. There is a lot of great information out there, but when you're starting out and you're in the middle of it all, it can be hard to track down the right website or the right hand-out from whichever conference it was that we hadn't attended yet because we didn't know that it existed either. We also didn't know anyone around us who we could ask for help, and we felt very isolated on the farm. I do remember relentlessly researching one thing or another and finding nothing useful. So, we'd do whatever it was as well as we could, and then a week or two later, I would find the perfect resource. This all led to a pretty good collection of re-invented wheels, and that was frustrating. On the upside, we had to think outside of the box, so we ended up doing things in unique ways that really fit our farm well.

The first year was also a little upsetting because we hadn't really put enough time or effort into knowing our costs of production. We had a basic idea, and we researched prices being charged across the state, but once we had the final picture it was abundantly clear that our prices were too low. In fact, the majority of our wholesale market was either breaking even or a loss because the customer (a restaurant) wanted a bird that weighed 3.5lbs. Now, before I say anything else, I have to say that what that restaurant did with our birds was incredibly delicious, and it's also the first restaurant where I sat down to eat a dinner that I had helped produce. That sort of experience is priceless. The problem with providing birds that weighed 3.5lbs was that our price at the time was \$3.15/lb. That meant we were getting paid \$11.03 per bird. When we looked at our costs, we got to around \$9 just accounting for the purchase of the chicks, feeding them and getting them processed. Once we threw expenses in and saw what was left, \$11.03 per bird was not going to get us anywhere. We still work with that restaurant, and though they did drop us as a whole bird provider in our second year, it was actually a very good thing for us. Now we could raise our prices to get closer to where we needed to be,

and the birds we had already raised for them would get a higher return. We were also free to raise our birds a little longer so that we didn't end up with a 3.5lb bird. That meant that every bird we raised brought us closer to the prices we'd need to approach financial sustainability. It's insensitive to talk about animals like this, but it's just one of the truths that comes with raising animals as a part of your business. I apologize if this sort of conversation is hard for anyone to read.

Year 2—2011

'If you have talent, you will receive some measure of success-but only if you persist.'

- Isaac Asimov

Maria lived in Madison, but I moved up to the farm to be here full-time. Maria worked part-time at REAP Food Group and part-time at Nostrano. I picked up a couple of part-time classes at Cornell College in Mt. Vernon, IA. One was in the off-season and the other was in June, so I taught via the Internet for three days per week and drove down to Iowa to be there for two days a week. Classes were one month long, so as difficult as this situation was, it was over in a hurry.

This year, we added more equipment. There was the germination chamber we built ourselves, we created our outdoor vegetable operation, we started keeping bees and we started selling eggs, which required a fully licensed and inspected egg room that we built inside of our barn. When you're tallying the cost for a fixed asset like the egg room, you keep track of everything you needed to create it (i.e. from nothing). Whatever the final receipt total is for the creation of that asset is then its value as the fixed asset. In a following year, you might have a repair in that egg room, but you'd list that as an expense instead of tacking it onto the total. The total amount of the cost to create the asset is then depreciated over time.

Year 2 - 2011 Equip. Purchases	Amounts
Germination Chamber	\$179.72
Vegetable Operation	\$1,103.36
Bees	\$788.48
Egg Room	\$1,626.68
Total:	\$3,698.24

What became abundantly clear this year was that even though we had dumped a lot of our life savings into the start-up of the farm, we had to put more of our own money in to keep it going. The culprit? Cash flow. The farm only has money if it is making sales. Those sales need to, at the very least, recover the cost of production so that you break even. Obviously, you want a healthy profit margin above that cost of production too. So, the farm breaks even and then earns some

money to pay for the bills outside of the cost of production (i.e. expenses, labor?). We found that though we had the meat equity (i.e. product in the freezer), we needed to turn that into cash as quickly as possible. Sometimes, it wasn't fast enough. So, the farm needed a boost. We gave it one. Then we gave it another. It's a very difficult stage to be in as a business, especially when you know you're sitting on product that could pay the bills but you haven't realized the profit on it because it hasn't sold. I would say that this year we made personal contributions out of sheer necessity. As time would go on, we would still give the farm some of our money, but we would use it to purchase something like a tractor. The tractor isn't too bad because it will hold its value for the most part. So, you could easily sell that and get your money back but meanwhile, the farm gets to use it. If you have to pay a feed bill though, that hurts. The somewhat confusing part is that once you've made that donation to the farm, it's tallied as a "Personal Contribution" and this is tracked so that you can see what the farm owes you. Tax calculations play into this amount as well, so there's some fluctuation, but at the end of the day this is money that you are investing into the business. The likelihood of getting it back soon is not good, and if you did reimburse yourself any of this money it would not be the same as paying yourself for your labor.

Year 2 – 2011 Costs of Goods Sold	Amounts	Change From 2010
Cost of Day-Old Chickens:	\$3,144.00	-\$1,944.60
Cost of Day-Old Turkeys:	\$808.75	+\$559.00
Cost of Day-Old Ducks:	\$196.20	+196.20
Cost of Garden:	\$761.24	+761.24
Processing:	\$12,538.10	-\$3,397.38
Feed and Grain Expense:	\$16,067.70	+\$4,714.00
Total:	\$33,515.99	+\$888.46

As for expenses, a lot of them stayed at about the same level. However, there were definitely some that increased quite a bit, and these are the expenses I've noted below. In other words, whenever I talk about expenses for 2011-2013, the lists are incomplete. This was done to save space, so if you want to see the entire list, just let me know. New expenses are labeled with an N/A in the far right column.

Year 2 – 2011 Farm Expenses		Change From 2010
Maintenance and Repairs Expense:	\$1003.74	N/A
Outdoor Supplies Expense:	\$1415.26	+\$1353.80
Indoor Supplies Expense:	\$990.12	+880.13
Pyrenees Guard Dogs:	\$1459.25	N/A
Subscriptions Expense and Dues:	\$1148.00	+\$953
Electric Bill:	\$1386.92	+232.61

So, a few of these are obviously huge because they didn't exist before. In our first year, we didn't have much in the way of maintenance or repair. Not surprisingly, we did have things to fix in the following year. We also purchased our guard dogs, which we consider to be employees. They live outside 100% of the time, and they live **with** our birds during the farming season. If they were family or 'inside' dogs, there's no way you could expense them like that. Indoor and Outdoor supplies also reflect a full season on the farm. I had moved up here at that point, but Maria stayed behind and would drive up to the farm on the weekends. We had more subscriptions and dues because we were in more farmers markets. Depending on the market, you can be paying up to several hundred dollars per year. Our electric bill went up because we raised more animals. Actually, this was an area that we needed to be more efficient in. That would lead to some big changes in the way we raised young birds in the brooding areas, but our bill—as you'll see—is going to go up, even with the changes.

Something that tends to go unmentioned in all of this is the fact that we were still very new to business. The idea of saving all of our receipts, expensing this or that and reminding each other to pay attention to it all was difficult. We probably could have expensed more if we had done a better job of tracking our purchases and keeping the receipts. We also lost money, again, this year. Once depreciation was calculated, it looked pretty bad. As sad as it is to say it, we expected to lose money. Everyone talks about how long it take to get a business really up and running, and it's well-known that business owners tend to get paid last or not at all depending on the year (and especially in the beginning), but it's still takes a special kind of fortitude to put your head down and keep going despite the losses. It really puts your desire to be in business to the test, and this is when self-doubt creeps in and you start looking back at where you were before you started this craziness.

Year 3—2012

'When In [Drought], Tell The Truth.'

– Adapted from Mark Twain

Maria lived in Madison until late August, as she quit her jobs in the city and moved to the farm to be here. Her future, at this point, was uncertain other than we knew she would be farming in some capacity. I was given a two-year contract to teach at Cornell College, so I would farm full-time during the season and then go to Iowa to teach from November-April. I would drive back on the weekends for farmers markets.

This year was incredibly difficult to get through. I remember when I'd write the biggest checks of my life in 2010, our first year, and my hands would be shaking, sweat would bead on my brow and I'd feel like I wanted to throw up as I signed the

check and handed it over to one vendor or another. The year 2012 would up the ante on that a bit because we were about to go through a really nasty drought and commodity prices were going to shoot through the roof. We never saw this coming, and there's no way you could. When we were in the thick of it we had two choices. Either we continue according to our plan, or we stop and try to save some money. If we continued, we could take the money we made and grow the farm a little bit more. If we stopped, we'd save some money because we wouldn't be paying such exorbitant amounts for things like feed, but we'd have less money to grow the farm with and given that everything on the farm happens on an annual basis...we didn't want to waste the year. So for the most part, we moved ahead according to plan. That meant our feed prices more than doubled, and in turn that led to a few price increases over the course of the season. This led to a lot of conversations with our customers, but most understood. The increases didn't cover the entire increase in our costs of production either, but they were helpful. Most importantly, however, we maintained our presence in the market despite the difficulties we faced in producing anything that season. It was a devastating year for a lot of farms, and many went out of business.

Year 3 - 2012 Equip. Purchases	Amounts
Layer House	\$3,487.82
Duck House	\$1,753.31
Incubator and Egg Room Equipment	\$1,325.83
High Tunnel	\$9,093.40 + EQIP Grant
Greenhouse	\$557.99
Total:	\$16,218.35

The big projects this year were the fully insulated, over-the-top mobile houses we made for our chicken and duck layers. We could have done this cheaper, but we tend to build things for the long haul. The egg room expansion was needed because we went from a flock of 50 to a flock of nearly 300. Starting with 50 layers was my idea, and I suggested it because everything we've done on the farm has gone from 0-75mph in less than a season. So, I always felt overwhelmed, but we made it work. We were about two hours into selling eggs from those 50 layer hens when I realized that I had made a mistake. We needed more layers. We also started to maintain small breeding flocks for turkeys and ducks. We collected their eggs, put them in the incubator and hoped for the best. As you'd expect, there were failures and there were successes. Most importantly, we learned which birds were better left to their own devices (the Muscovy ducks) and which birds we could really hatch out ourselves (everything else, so far).

The high tunnel was something we got an EQIP grant for from NRCS. To be clear, we could have bought two high tunnels with the total money we spent here. Again, we opted to build for the long haul, so we went for 4' rafter spacing, got the additional rafter support system and we opted for roll form steel instead of round

tubing. The construction crew was Maria, her father (Terry) and I. We didn't have a crane or any sort of special equipment, and that would have helped tremendously. Instead, we used scaffolding bolted onto a hay wagon to give us the height we would need to install each arch of the high tunnel. Terry and I would grab an arch, put it on our shoulder and then climb the ladder on the side of the scaffolding until we got it high enough (~18') for Maria to slide a 2 x 4 underneath the peak to hold it in place. Then, one of us would climb down and connect each side of the arch to the poles that made up the sidewall. This was a little dangerous and a little crazy, but in the end it worked out. We had to use what was available to us, because we needed to finish everything by Thanksgiving, and it was mid-November.

We ended up with a pretty expensive, hybrid-commercial structure that should be able to withstand everything and anything Mother Nature can throw at it. We had to hire out some work too because we aren't experts with concrete pouring yet, and we got creative with how we did the concrete. We also opted for double plastic, so there was a little added cost there. Most of the extra money was in the metal though. That and the incredible amount of hardware and the wood we had to supply. There were also issues with the vendor we worked with, as I'm pretty sure they never put one of these things up in the real world. We even found a design flaw that required a completely re-fashioned piece in order to fit in our tunnel. There was also the fact that when I asked them if their hardware was all hot-dipped galvanized, they were puzzled as to why I would ask that. I explained that if you put hardware through treated lumber that isn't hot-dipped galvanized, that hardware would corrode pretty quickly. Since they recommend treated lumber (it's a LOT cheaper), I thought it was worth pointing this out to them. Anyway, I bought additional hardware because the stuff they sent was not hot-dipped galvanized. To their credit, they said they would reimburse me. Our long-term plan was also to make this a large green house, and that is still in the works. Opting for the roll-form steel also means that when we want to build onto this structure, it is strong enough to hold any additional weight and we're not trying to build on round tubes.

A funny side note on the high tunnel is that a friend who was interested in building one on their farm asked me which one we had put up. I went to the vendor's website to send them a link, and I couldn't find it. I'm guessing they're not selling this version any more because of the design flaw and because it was kind of a pain in the ass to put together. That is, I have a few more arguments to support my claim that they never bothered to build one of these except via whichever design program they used on their computers. We had some good laughs putting it up.

Our first, actual greenhouse was a tiny thing, but we put a couple thousand plants through it that year. It definitely served its purpose even though it was not as strong as we would like. There were issues with overheating because we didn't get anything fancy with it, but we figured out how to make it work. After a couple of close calls, it worked out well. It wasn't bad for the money, and it was great for saving money on vegetables by not having to buy starts. We also benefited because we could use our own soil mix and know that everything is clean (i.e. disease-free).

Year 3 – 2012 Costs of Goods Sold		Change From 2011
Cost of Day-Old Chickens:	\$5,812.89	+\$2,668.89
Cost of Day-Old Turkeys:	\$100.00	-\$708.75
Cost of Day-Old Ducks:	\$902.50	+\$706.30
Cost of Garden:	\$484.37	-\$276.87
Processing:	\$18,925.89	+\$6,387.79
Feed and Grain Expense:	\$22,175.75	+\$6,108.05
Cost of Honey:	\$243.75	N/A
Cost of Bees	\$384.00	N/A
Total:	\$49,029.15	+\$15,513.16

Another addition to the farm was more bees. You can see what we spent this year in order to get a couple of hives going after experiencing a complete loss the year before. In 2011, we had put in two hives with one-pound packages that I got through a class I took down in Dane County, and I managed those bees to death. Every week I was opening them up and checking on them, and though that's not necessarily a bad thing, I think it contributed to their demise. We would experience a complete loss of this year's bees too, as they starved to death because the colony never got big enough to store the food it needed to make it to the following spring. Starting with only one-pound packages of bees is not enough for Wisconsin in my opinion. I'd say that you really need three-pound packages of bees at a minimum if you want to increase your chances at success (i.e. over-wintering). It would be even better to get a 'nuc' even though they're more expensive. In our third year of raising bees, I got two of those from a contact I had made the year before, and these bees were specially bred with what he called northern genetics. We have still experienced some losses, but one hive is headed into its third year now (2015).

In 2012, we started breeding our own turkeys, so our purchasing cost for them went down considerably. Breeding is a great way to save money and to select for traits in your animals that you feel are best for your operation. We increased our duck production, raised our usual number of chickens and feed went through the roof. Processing increased, but that's mostly because we were getting more cuts instead of wholes. We still erred on the side of not expanding our production schedule because of grain costs, and another thing that's missing from this is that we carried over some of our grain costs into the following year. We didn't have enough money to pay off all of our bills for the year, so it took us a couple of months into 2013 to catch up. You will see this reflected in next year's feed costs, as some of 2013's total feed and grain expense was actually spent in 2012.

To give you an idea of what it was like, we were purchasing eight tons of feed for around \$1,900 in the spring. That doubled two months later, and corn hit a record high of \$8.37 per bushel. If we were certified organic, that starting cost for feed would've been around \$3,800 and it would have more than doubled two months later. That could have killed or at least severely undermined the farm and its ability to stay afloat. We would have just stopped what we were doing and sat

out 2012. That is generally not a good position to be in, especially if you’ve worked hard to create the customer base you have. My guess is that they would have been behind us if that scenario had unfolded, but sales would not have been great.

The most important part of this math is that if we were certified organic our price for a whole chicken would be over \$8/lb and in 2012 we would have had to increase that to at least \$12/lb to cover the increase in production costs. Not many customers are willing to pay that for chicken. I need to clarify here that we support the organic movement, and many of our friends are operating certified organic farms. I felt it important to show you here that organic certification, for us, is a very expensive proposition. Organic Agriculture lines up with our personal philosophies, but the financial realities of today’s food systems make it difficult, if not impossible, for this farm to shift to it completely. In fact, making that decision would mean a pretty big reset for us. Why farm if you can’t farm in a way that you believe in though? This is another difficult question, and we are definitely not the only farmers contemplating the answers. The best answer I can give you right now is that we are trying to maintain our farm’s progress at this point while slowly evolving our operations so that we remain financially viable as we better reflect the type of farm that we want to be. For now, that means that we’re heading in the direction of non-GMO, and that is a more pragmatic step for us to take at this point than a shift to being certified organic. Some would disagree with me, and that’s fine. We all have our rows to hoe.

As a reminder, and for the sake of brevity, I’ll highlight those expenses that had relevant changes and note that all others remained more or less the same.

Year 3 - 2012 Farm Expenses		Change From 2011
Maintenance and Repairs Expense:	\$789.34	-\$214.40
Outdoor Supplies Expense:	\$1,512.23	+\$96.97
Indoor Supplies Expense:	\$944.20	-\$45.92
Pyrenees Guard Dogs:	\$3,127.25	+1,668.50
Subscriptions Expense and Dues:	\$1,024	-\$124.00
Electric Bill:	\$3,715.24	+\$2,328.32
Telephone Expense:	\$1,490.48	N/A
Postage Expense:	\$84.86	N/A
Clothing and Uniform Expense:	\$324.92	N/A
Garden & Hoophouse	\$324.17	N/A
Rent-Pasture	\$400	+\$280.00

Wow! Look at that electric bill! This was a reflection of how hot it was, as our walk-in freezer was running all of the time. We were also building a lot of stuff in the old horse arena, so we needed electric power for our tools and any electricity used outside of the home is on our bill. The bulk of it though, was due to excessive, dry heat. That, and because we didn’t tape the seams or make the walk-in freezer more permanent, we probably lost some cold there. We weren’t sure what was

going to happen when we first started, so we were hesitant to really seal up the freezer and make its location permanent. In the end, it worked out since we expanded the freezer in 2014 and our prior, energy inefficient approach made it a bit easier to take it apart and, essentially, put it back together again. That's the best lemonade I can make with some relatively expensive lemons.

The dogs are costing a lot too, but most of this money is being spent on food and vet bills. Looking at these costs as they add up over the years, it would be easy to think we're spending too much money on them. Once you view them as employees of the farm and realize how many losses they are preventing in the pasture though, they're worth every cent. In addition, they enable us to maintain our practice of raising the birds out in the open and without using a chicken tractor for their safety. They have shelter, food and water of course, but they can do whatever they want within the couple of acres that we fence off for them at a time. In that sense, the dogs are full participants in the farm and almost as much a part of the farm as we are.

Year 4—2013

“Farming looks mighty easy when your plow is a pencil and
you're a thousand miles from the corn field.”

- Dwight D. Eisenhower

Finally! The first year that Maria and I both lived on the farm. This year she would end up getting the job she has now, which is multifaceted but can be summarized by saying that she runs a large fundraiser each year (see: <http://www.worldbuilders.org/>) that is a part of a local author's many works. I finished my second year at Cornell College, and then my position was eliminated because the funding—from an outside source—disappeared.

This year, as with most years, more equipment was purchased for the farm. The majority of the equipment was purchased because we decided to try and figure out how to grow our own feed components. This, as we would soon discover, is a very difficult thing to do well. So much is outside of your control, but I'll summarize everything later. For now, you can see that the mere decision to try meant that we spent \$29,293.83 on only *some* of the equipment. At this point, we still didn't have a tractor big enough to do our own field preparation and tilling, so that's something we had to hire out. The same went for harvesting because we needed to custom hire a combine. I also haven't thrown in seed, fuel, etc. I bring these amounts up because we've had many conversations over the years about why we aren't certified organic or why we feed soy meal as a part of our feed ration and so on. These are well-intentioned questions, but most people don't realize that a lot of farms don't have the money to entertain these sorts of decisions. For that matter, we didn't have

enough money, but we decided that growing row crops for feed would be a good direction to head in. So, we invested some of the farm's money, and we got a loan for the CMC grain bin. The best part about that particular loan is that even if I fail spectacularly at growing crops for feed, we can still play the commodity market with the bin and save money. If I keep failing at it, we can sell most of the equipment and recoup our investment, which is minimal since we shopped for the best prices.

Year 4 – 2013 Equip. Purchases	Amounts
6.5 Ton Grain Bin	\$1,000.00
Farmers Market Scales	\$633.90
Corn Planter	\$1,500.00
Offset Disk (Tillage)	\$1,031.63
Duck Shelter/Mobile-Brooder	Frontera Foundation Grant
CMC 4,000 Bushel Grain Bin System	\$25,494.03
Row Crop Cultivator, 4-row	\$268.17
Pig Fencing/Area Set-Up	\$1,045.61
Bee Expansion	\$1,252.93
Total:	\$32,226.27

So what sticks out this year? Well, we got two digital scales for our farmers markets since we're required to use them if we're going to sell certain vegetables. It was a lot of money for a couple of scales, but they're very nice and they'll last. We raised a couple of pigs and kept them for nearly a year, as we tasked them with uprooting and killing quack grass in an area that we wanted to garden the next year. Quack grass is an exceptionally resilient species that has a knack for getting into a vegetable farmer's way, so we try to mitigate its ability to rob nutrients and water from the plants you're trying to grow. It's not easy. Though it was a heavy initial cost to get set up with what we needed for hogs, the future costs will only involve the price of the hogs that we purchase.

The bees were doing pretty well, so I split them this year. Two hives became four, but it was a cool spring and a weird summer, so my move there ended up basically killing a lot of bees. The two hives I split from recovered well and made it through the winter though. We got an extra poly bin because it was a good deal on Craigslist, but in the end we sold it to a friend of ours who needed it more and had an immediate use for it. You see, we thought we'd jump right into this 'grow your own feed' business, but there we were, four years in and naïve as ever. Once we realized that we had no use for that extra bin for at least a couple of years, there was no reason we shouldn't sell it to someone who needed it now. It was a good deal, and I hope we find another one like it, but there's no point in holding on to something like that if you're not using it.

We also received some grant funding from Rick Bayless' Frontera Foundation. It was an honor to be selected, and we are planning on applying again in 2015. The reason there is no amount listed for this item is that you can't count

grant-funded equipment as a fixed asset to depreciate. It's certainly something the farm owns, but since the farm didn't pay for it, it can't show up here. That being said, if we invested any money beyond the grant amount, we could include that here and depreciate it because this piece of equipment is definitely around for the long-term and didn't cost a few hundred bucks. All told, we were given a little over \$3,000 in our grant.

Year 4 – 2013 Costs of Goods Sold		Change From 2012
Cost of Day-Old Chickens:	\$7,130.00	+\$1,317.11
Cost of Day-Old Turkeys:	\$867.55	+\$767.55
Cost of Day-Old Ducks:	\$210.00	-\$692.50
Cost of Garden:	\$1,364.84	+\$880.47
Processing:	\$27,234.24	+\$8,308.35
Feed and Grain Expense:	\$37,854.60	+\$15,678.85
Cost of Honey:	\$210.00	-\$33.75
Cost of Bees	\$4.97	-\$379.03
Cost of Mushrooms	\$717.86	N/A
Cost of Laying Hens	\$335.43	N/A
Cost of Pigs	\$200.00	N/A
Cost of Guinea Hens	\$466.00	N/A
Total:	\$76,595.49	+\$27,566.34

As you can see, 2013 was our biggest year of production by far. This would be the winter that wouldn't be long enough for my body to fully recover from what I put it through this year. It might sound odd to you, that a few months of not farming too much wouldn't be long enough, but a couple of minor injuries nagged me the whole time and it seemed like I was endlessly exhausted. The feed and grain expense is huge in part because we increased our production, but some of that was also 2012's bills. When your costs double, it's hard to pay everything on time with, more or less, the same cash flow.

This is also the year that we stopped raising multiple rounds of ducks. We found that when we raised ducks early and late in the year, they didn't really grow very well, and when they were processed they didn't really have any fat on them and they didn't weigh much. This is a problem if you're selling food, as there's an aesthetic that chefs and other customers look for in a duck (i.e. duck fat). It's also a problem because each duck costs at least \$7.00 to process, label and package. That's high for a reason—ducks are exceptionally difficult to process. They have two layers of feathers, so you need to use wax and tweezers in order to get a mostly feather-free end product. So, we provided some nesting areas for our breeding flock, let them lay their eggs where they wanted, let them hatch them out and then let them raise their young. Muscovies are very good mothers, and as animals go, the ducks are really minimal as far as labor, feed and water goes. I should remind you that we did try to hatch out Muscovy ducklings on our own in 2012, and even

though we have a really nice incubator, the hatch rate was terrible. Of course, I would read about this after we had tried it, but experience is the best teacher and failure is the sort of thing that builds character...right? We have a lot of character.

Year 4 – 2013 Farm Expenses (Not all)		Change From 2012
Maintenance and Repairs Expense:	\$0.00	-\$789.34
Outdoor Supplies Expense:	\$3,051.22	+\$1,538.99
Indoor Supplies Expense:	\$1,093.31	+\$149.11
Pyrenees Guard Dogs:	\$1,518.13	-\$1609.12
Subscriptions Expense and Dues:	\$1,125.87	+\$101.87
Electric Bill:	\$4,386.95	+\$671.71
Telephone Expense:	\$1,550.78	+\$60.30
Postage Expense:	\$175.06	+\$90.20
Clothing and Uniform Expense:	\$587.05	+\$262.13
Row Crop Expense	\$3,091.16	N/A
Hops Expense	\$400.00	N/A
Barn Cats (Pest Control)	\$585.19	N/A
Garden & Hoopouse	\$896.53	+\$572.36
Meals Expense	\$2,096.47	N/A
Rent-Pasture	\$3,800.00	+\$3,400

Clothing and Uniform Expense? Well, it was a great idea while it lasted. You see, when we started farming, I had some ‘nice’ clothes and some work clothes but before I knew it, all of my clothes were farm clothes. That meant that if we needed to go somewhere for a nice dinner or to an event where I should look presentable, it was hard to find a clothing option that didn’t have holes in it, wasn’t stained, or was more or less looking like what we in the military call a “civilian” might wear. Anyway, the way I saw it, I needed to have normal clothes again. So, I bought overalls, muck boots, gloves and what I generally wear as my work uniform for the farm. Then, with my own money, I bought some newer jeans and some nice shirts and I put them in the closet for whenever I might need them. In early 2014, our accountant made it clear that I was not going to be able to do this anymore. No more buying a uniform for work. I could buy some things that were safety oriented and they could be expensed, but that was it. I had already purchased some other things before she told me, and you’ll see that expense showing up in 2014. It’s only \$21.05 though, but that’s after we reimbursed the farm for our erroneous purchases. I still don’t think this is really fair, but our accountant is awesome and I respect her opinion in these matters way too much to be too upset about it.

Row Crop Expense. Ugh. This is mostly seed and fertilizer, but it’s also everything else we’d need to work the fields, plant, and harvest the crop. We grew corn on about eight of our own acres and six of our neighbor’s acres. Both fields had been in pasture for quite some time, so this should be a good year for corn (it’s always best in its first year after being in pasture). Everything went well, we had an

exceptional harvest for our area and it being dry land (non-irrigated) corn. We ended up with over 1500 bushels of corn after it was combined, but there was a major problem. For one, our grain bin was put in later in the year, and we couldn't harvest until it was done. We finished the bin in the first week of December. That meant that the natural-air drying system I had purchased wouldn't work as well as it could in warmer weather, so drying the corn was going to be more difficult. Compounding everything was the fact that the moisture percentage of the corn was ridiculously high. You hope for the corn to get down toward 20% in the field, but when we harvested we were looking at 28%. In order to store the corn long-term, you need it to be at or just below 15%. If you remember, this was also the year that there was an LP fuel shortage in the US. You see, our corn wasn't the only 'wet' corn, and most other people operate with a grain drier that tends to use LP as its fuel. Given the high moisture percentages and a decent overall crop for the region, farmers had to burn around 1/3 more LP in order to dry their corn down. Some farmers, like me, had their corn in the field for as long as possible in the hope that it would somehow get a little more dry down before harvesting it. Once it's so cold though, that's a false hope. Some corn was so wet that farmers simply left it in the field rather than harvest it and then have to dry it using LP that was costing 500% more than it normally did.

So, I read about my options. It seemed like the best way to go would be to cool or 'freeze' the corn in the bin and then dry it once the weather warmed up a bit in spring. I would only really need temperatures in the high 30's to get it drying. I ran the fans for several days and brought the temperature down, and then I would check it every day to see where the temperature was at and to smell the corn to see if it was starting to spoil. Long story short, we had a warm day in January, condensation must have formed on the inside of the bin and that dripped onto the corn and then that set off a chain reaction that led to me unloading 1500 bushels of corn with my trusted shovel. In a normal year, I could've sold that corn too, but it wasn't a normal year. Remember that LP shortage? Well, the only place that would accept corn that wasn't dried down to 15% was Archer-Daniel Midland (aka ADM). They wanted it below 20% though, and my corn was still at 27-28%. I had nowhere to go, so I fed what I could and then dumped the rest onto a portion of our field so that I could spread it out and then till it into the ground once it was warm enough. Talk about a nightmare. While it was a total loss, I made some good connections (at Purdue University of all places) and I learned a lot about storing corn, the stages of rotting corn, how heavy shovels of corn are and thankfully how to operate the unload auger on our grain bin. If that didn't work, my life would have been even worse. As it was, the corn was kind of in a soft 'brick' form, so it wouldn't fall into the unload auger via gravity like usual. So, I shoveled my way to the center of the bin and then opened up the auger door, did my best not to step into the hole and shoveled until I was sick of corn. Despite all of this, we'd grow corn in 2014.

Year 5—2014

‘For as long as I can remember, the thing that gave me a sense of wonderment and renewal...has always been the work of other [farmers].’

- Adapted from Daniel Day Lewis

Year two of living on the farm together, and while I taught part-time at UW-Stevens Point, Maria worked full-time in her job at World Builders. Her schedule allows her time to farm in the summer and to work extra hours in the winter when there’s more work to do anyway. We’re very lucky to have that as an option, but as time goes on we’re also realizing that this position may become more involved for her. I think she’ll still find the time to farm at least part-time, and we’re both behind the idea of her pursuing her career while I take more responsibility on the farm.

This year started off well, and we slid through an icy January and landed on February 2nd, 2014. This was the day that Maria’s father unexpectedly passed away while he and I were outside removing snow from the roof. It was also Super Bowl Sunday. He was a big time football fan and a life-long supporter of the Green Bay Packers, so in some strange way it was a fitting time for him to go that day, if he had to go. There’s a lot one could say about Terry, as he led a full life and managed to play a part in History through his work at Cray (building the world’s first super computers). He learned how to fly a Huey helicopter as a crew chief in Vietnam and he was a parent of two incredible daughters alongside his wife Cindy. In the end, I think the best thing that can be said of his passing is that it was quick and painless, for him. Of course, we were all still here—Maria, her sister, her Mom, their extended family and I. So, we began a very long, blurry year of figuring out how to live without Terry.

I know this is sad, and I’m sad as I type it, but I don’t think I can talk about our farm without talking about him and his passing. Terry was always there when it was time to build something, and he had a lot of good insights that helped us along as we grew. He taught us a lot over the years, and as silly as it might sound, I look upon the things we built together with a little more reverence now. He was a reluctant farmer, but in the end he’d always take an interest in what we were doing. One of my fondest memories of him and the farm was when Maria brought up the idea of raising hogs. It was hilarious because he repeatedly objected only to eventually give in and let us get a couple of hogs. We could only have them in a specific space and no more than two hogs! Once we had them though, you’d find him outside watching the hogs, talking to them and then bragging about them (and us) to people when we’d go out for fish on a Friday night. He was like that with a lot of things, and the farm wouldn’t be where it is today without his help.

Year 5 – 2014 Equip. Purchases	Amounts
Corn Auger	\$1,700.00
Tax Computer (PC)	\$877.74
Field Cultivator	\$500.00
Plow	\$682.11
Allis B (1944)	\$2,376.95
John Deere 2940	\$8,621.97 + Grant Funding
Walk-In Cooler	\$1,389.83
John Deere Grain Drill (10')	\$1,410.00
3-Point Auger	\$542.78
Total:	\$18,101.38

We used the corn auger in 2013, but we paid for it in 2014. That's why you see it there at the top. Basically, this is the long tube that allows us to move corn from the field into the bin. That unload auger I mentioned before? That's in the actual bin, but it moves corn out of the bin and then I'd have that run into this same 55' auger and into a gravity box for transport. Ideally, we'd have a smaller auger for unloading, but if the big auger works, why buy another one?

We purchased a PC computer (Lenovo) for tax purposes only this year, so that way I could use my Mac as the tax computer back-up. It also meant that we could both work on taxes at the same time. Really, the best part was that it's a PC and while I prefer Macs, it seems like all of the best accounting software is made for PC. Don't be fooled by Mac versions either, they are not the same exact program, so you'll be buying some limitations depending on the program.

Finally, we bought a plow so that we didn't have to use our offset disk for all of our tilling. I also bought Maria the Allis B tractor she always wanted. Those old tractors are pretty light in comparison, and they're geared so that you can go really slowly, which is a good thing when you're using a tractor to weed your vegetables. That's what Maria wants to use it for. It came with a cultivator that mounts to the belly of the tractor, and it was in the best shape of any Allis B I've ever seen outside of a parade. The grain drill is what will allow us to re-plant pasture or small grains like oats. The John Deere 2940 was purchased to be the 'big' farm tractor even though on bigger farms it's still considered a 'chore tractor.' It will do everything we need it to do, though. It has a cab on it, which is a major added plus. The grant money was through a fellowship that I was awarded from the Farmer Veteran Coalition. They gave us \$6,000 toward the purchase, and I'm incredibly grateful for their help. The 3-point auger was something we should have bought three years ago because we've become experts at using a manual post-hole digger (a lot of fun when you live in a sandy area!). We decided to spring for it, as we've got more projects on the horizon and it's such an incredible labor saver that we'll use a lot more than we ever thought we'd need to.

Year 5 – 2014 Costs of Goods Sold		Change From 2013
Cost of Day-Old Chickens:	\$5,523.50	-\$1,606.50
Cost of Day-Old Turkeys:	\$473.38	-\$394.17
Cost of Day-Old Ducks:	\$1,000.00	+\$790.00
Cost of Garden:	\$160.39	-\$1,204.45
Processing:	\$20,766.83	-\$6,467.41
Feed and Grain Expense:	\$24,853.75	-\$13,000.85
Cost of Laying Hens	\$697.00	+361.57
Cost of Pigs	\$750.00	+\$550.00
Total Cost of Goods Sold:	\$54,224.85	-\$22,370.64

We decided to do more ducks than our breeding flock could produce on its own, so that's why our cost for ducks went up. That, and we had been purchasing ducks at a serious discount from a local lady who has a lot of ducks on her property. You see, Muscovy ducks from a hatchery almost always arrive looking like they're about to die, and then about half of them do. No matter what time of year or what temperature it is, this has been the case for us. So, a local resource like Ann was incredible. At first, we accepted the price she wanted for the ducks, which was a lot cheaper than a hatchery would've been. In 2013 we bought a few ducks from her, and she had raised her price. It still wasn't what she should be charging. Finally, we all had a talk about how we appreciated her making us her main customer and how she was happy knowing that the ducks were going to be raised on pasture and living a good life. Then, we talked about price. In the end, we all decided that what was fair was to pay her what a hatchery would get for their ducks. After all, her ducks were always very strong, and they were just down the road. We had felt guilty before by taking her lower price, but once we had all come to better, more fair terms for all involved, we felt relieved.

We raised six pigs this year, and that was not much more hassle than two. It was more feed and water of course, but the only real challenge would come when it was time to take them in to the processor. Pigs are very, very, very smart creatures, and I really like raising them. They really don't like getting into a strange trailer, though. The best way we've found for getting them in is to simply be patient and wait them out. We put food in the trailer, and we talk to them, keep them calm and gently coax them in. Then, when they're all eating inside, we close the door and they're in. Yes, this is the ultimate betrayal, but it's part of the process. Anyway, Maria really whispered them in this year, so I'll make sure and ask for her help again next year.

We also decided to cull most of our laying flock. The main reason was that they were older laying hens, and too many of them had become egg-eaters. That's just disaster really. It's not long before the others are learning about the tasty contents of an egg, and then it looks like hurricane omelet in their nest boxes. In other words, this is labor that we can avoid. So, we purchased some Brown Leghorns and Black Australorps. We've never had the former, though they look

great and the latter is super hardy and our favorite breed so far. There are other great breeds out there, but many of them do not handle Wisconsin winters well. We'd sell off the flock or cull them each year, but it takes five to six months before a laying hen will start laying an egg. If we didn't hold birds over the winter, we wouldn't have eggs each year until May.

Year 5 – 2014 Farm Expenses		Change From 2013
Advertising Expense	\$672.73	+\$553.33
Bank Charges	\$22.52	+\$10.00
Contract Labor Expense	\$840.00	+\$350.00
Row Crop (Seed) Expense	\$856.00	These 2 were combined
Fertilizer Expense	\$1,527.12	Overall: -\$708.04
Fuel-Gas and Oil Expense	\$431.63	+\$27.71
Off-road Diesel Expense	\$330.00	N/A
Freezer Storage Expense	\$459.01	+\$415.01
Insurance Expense	\$1848.32	+\$829.55
Legal and Accounting Expense	\$738.00	+\$388.00
License and Fees Expense	\$372.75	-\$52.00
Machine Hire Expense	\$1,268.30	N/A
Maintenance and Repairs Expense	\$1,159.67	+\$1,159.67
Small Tools Expense	\$372.31	+\$188.34
Outdoor Supplies Expense	\$1,878.61	-\$1,172.61
Indoor Supplies Expense	\$588.26	-\$505.05
Pyrenees Guard Dogs Expense	\$2,444.97	+926.84
Garden & Hoophouse Expense	\$1,665.53	+\$769.00
Clothing & Uniform Expense	\$21.05	-\$566.00
Barn Cats Expense	\$657.81	+\$72.62
Hogs Expense	\$286.74	N/A
NRCS Expense (Seeds)	\$382.80	N/A
Meals Expense	\$1,320.55	-\$775.92
Office Supplies Expense	\$49.44	-\$205.31
Postage Expense	\$535.58	+\$360.52
Subscriptions and Dues Expense	\$1,589.40	+463.53
Telephone Expense	\$808.73	-\$742.05
Electric Bill Expense	\$3,875.90	-\$511.05
Travel Expense	\$102.14	+\$6.50
Rent-Pasture	\$4,800	+\$1,000.00
Other Expense	\$142.60	+89.75
Total Expenses	\$32,048.47	+\$4,140.18

A friend who I asked to read a rough draft of all of this asked me if—when I looked back at everything—was there something that caused me to think, “Wow, I didn’t see that coming!” It’s a great question, and there are plenty of examples to choose from. One of the biggest things for us was taking out an operating loan in order to cover our gaps in cash flow. There are a lot of reasons that a farm could find itself short on money, but the operating loan bridges the farmer from that point to the post-harvest situation when, ideally, the sales are made. Then, the loan is paid off in whole or in part, and the rest—if there is any—goes into the bank account. I’m simplifying that a little bit, as there are many different ways that this sort of thing can take place.

We didn’t take out an operating loan until 2013, but we had our plans and we didn’t have all of the money to realize them. The loan we took out was for \$25,000. A lot of that helped us increase our production. You see, we occasionally find ourselves in the position of having more demand than we can supply. Though we’d love to meet that demand, the amount of money it takes to produce the product can get pretty big in a hurry. Anyway, the money we used for increasing our production went into raising more animals, which were then sold and we were then able to realize more profit margins (i.e. per bird) than we normally would have without the cash flow to make the increase in production happen. It all sounds pretty good, but there’s a problem that we didn’t really pay enough attention to. At least, in my opinion it’s a problem.

We used part of the operating loan to help fund our decision to try and raise our own crops for feed, but I’ve already talked a bit about that. To illustrate the point I’m making now, let’s assume that we used the entire amount of the operating loan to increase production. Given that scenario, we would have used \$25,000 to raise more birds. For simplicity’s sake, if it costs me \$10 to raise each bird, that translates into 2,500 more birds on the farm (assuming that we experience zero losses anywhere along the line). Now, let’s assume that I can sell each bird for \$15. That gives me a net profit of \$5 per bird. Wait. I left out expenses. It would be pretty difficult to figure out exactly what each bird’s share of our overall expenses was, but let’s say it took \$2 more than the costs of production. At this point, each bird has cost me \$12 to produce. That leaves \$3 per bird that the farm will make in profit, and that is a profit margin of 1/5 or 20%. That’s a pretty good profit margin! In summary, I’ve taken \$25,000 and turned it into \$7500 in profit. The problem, for me, is that even if I used every cent of that profit to pay off the operating loan, it’s going to take me around 3.5 years to pay off the loan (assuming that I can keep paying \$7500 per year, and where will that come from in the last 2.5 years?). Now the variables all come into play. What if feed costs went up and it cost me more than \$12 to produce each bird? What if we were struck by some disaster, and we lost 100 birds because of it? What if I used any of the profit for something other than paying off the loan (e.g. growing the business, paying myself)? You can see where I’m going. There are a lot of variables too, and one variable will mean it takes me longer to pay the loan off let alone two or three or more variables all occurring in what farmers tend to call a ‘bad year’. Was this operating loan really, truly worth it

for us? I don't think so. I would rather have let the farm grow a little bit slower on its own. The loan we took out did help us begin trying to raise crops for animal feed, so that's a positive even if the end result of that attempt is learning that we know we can't grow our own feed components. Wisdom isn't cheap, though.

I'm going to end this by saying that I'm sorry that I haven't provided all of the insights to all of the numbers here. There are so many decisions, reasons for those decisions and stories about those decisions that I haven't included. I wanted to, but when you're in the neighborhood of twenty-five pages you become hyper-aware of the fact that a lot of people aren't going to want to read through it all. So, that's my way of saying that this final draft is as short of a version of this story that I think I can write. It's also my way of saying that when you have questions about a particular number, or you notice something of interest to you, or you just want to hear more about a particular area...let me know. I am more than happy to discuss all of this with you, and write more to send out to the world. I want to encourage other farmers to think about sharing their numbers with other people too, even if it's just a couple of trusted friends. Just writing this out, I've learned a couple of new things about our farm, but I know that outside points of view would have a fresh look at it all, and that would shine a productive light on a lot more than I could in my thousandth time of looking at it all. In some ways, I feel like I'm in school and I just finished writing a paper at the last minute.

I can say that I love having chosen this path. The challenges involved mean I'm constantly thinking and re-thinking almost everything we do on the farm. The truly terrible or destructive losses are just another challenge, but they have given me the ability to calmly weather pretty much any storm. I was pretty good at that sort of thing before, but I would usually internalize whatever had happened, stew on it and slowly decompress over time. Now? If something goes wrong now, I immediately move to whatever the next step is. Though it starts out sounding like fatalism, it's really more of a battle-hardened pragmatism that doesn't have time to contemplate what just happened. It's what I do next that matters the most. I enjoy the long hours and hard work because it's ultimately for something we own, and we're managing to do ok so far. I love being my own boss, and I love that I'm accountable for the good, the bad and the ugly. We don't often hear about the ugly, but I think I'll find a way to write about that sometime too. I also believe in what farmers are doing, and I think that farmers and Agriculture have a unique place in the history of humanity. Though we're one small farm in Central Wisconsin, there's something very attractive about being able to be a part of that ancient tradition. Farming has also brought me to a community full of amazing people with their own incredible stories to tell. I've also found a place in organizations like the Wisconsin Farmers Union, and though that might seem like a shameless plug for them, I include them here because I feel like they are providing one of the few opportunities for anyone to have their voice heard. The democratic, grass-roots nature of the organization and the fact that our policies are member-driven have given me a philosophical home that I wasn't sure existed anymore.

If you've made it this far, thank you for reading. I hope that everyone takes this story as it is meant to be, as I have nothing but the best of intentions in putting this out to the world to see. I feel very strongly about what we're doing on our farm, and I believe that there is a strong future for farmers in the world. I want to do what I can while I'm here to help promote farmers and farming in general, and I think that this sort of conversation is one way that can happen. So, as the title says, this is our opening gambit. Now, it's your move.



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