

## Introduction to Brightflower Farm a Specialty Cut Flower Farm

### Practical Farmers of Iowa Session 1

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**Please feel free to email me with your questions. I apologize for not appearing in person to this conference and I regret causing any and all of you any inconvenience.**

--Brightflower Farm (BFF) began in Stockton in Fall 2006--We were completely self-funded. I wrote a business plan to secure operating line of credit and to develop a relationship with a local bank. I now use an operating line of credit and short term loans to keep the business going in times of low cash flow. The \$20K operating line of credit needs to be paid back every year. We own a parcel that is close to 4 acres., we have a total of 1.5 acres in cut flower production. BFFF was Certified Organic (CO) from 2007-2015. It was a deliberate marketing choice to become CO. BFF is always going to be a small business and I wanted every marketing advantage that I could muster. With the herb and vegetable starter plants it made a big difference to be CO and as long I grew and sold the starters we kept the certification status. I also wanted to become CO to learn how to keep good records.

--We sold herbs and vegetable plants to grocery stores and independent garden centers in Chicago and Suburbs through 2013. The reason to grow the starts was to start the cash flow earlier in the year—to extend the growing season. It worked well but it infringed on the cut flower production. The primary reason for discontinuing the starters was because often when weekend sales at the stores were poor due to cold or inclement weather, pre-booked orders of plants were cancelled and I had to suffer the losses. Being in such an isolated rural area, I could not sustain those large losses and the stores would not take the product. So, I made the decision to quit the sales of starter plants. I have a couple customers still that pay upfront and they take everything that they order, the cash up front really helps my cash flow and they are happy to pay.

--We received an NRCS grant for a high tunnel in 2010. It is one of 2 in-ground growing high tunnels now on the farm. The tunnels increase our growing/harvest season by about 8 weeks.

--Also in 2010 we began to lease some land in SW Wisconsin from friends which brought our total growing space up to 1.5 acres. The leased space has water, a cooler, a barn, and tillage equipment; we rent a portable toilet. It is a great addition to our production.

--In 2012 we built our second tunnel which we call our Dahlia House. It is 96'x20' with screened sides and end walls. Because Dahlias add so much to our bottom line and they are just ravaged by insects, I devised a way to grow them in a space protected by screening which provides excellent insect protection. The screening is a combination of 40 and 50 mesh which does restrict air flow somewhat but provides the necessary insect protection which is key. We use predatory mites for thrips protection, the screening keeps the chewing insects out: Northern Corn Root Worm adult and Japanese beetle.

--In 2013 we began to make space in the greenhouse for more cut flower crops by removing bench tops in the greenhouse and grow in crates in the ground between the bench supports. We grow mums, dahlias, ranunculus, and anemones in crates in the greenhouse. This year we will try some new crops: early snaps, cosmos, and heirloom mums. With our mum crop, we cover with a black cloth to induce bud formation earlier than normal so that we can be assured of an heirloom mum crop.

--In 2015 we permanently removed 4 benches for more growing space and added insect screening to reduce insect pressure. We have been very successful with growing dahlias and other flowering and foliage plants in large containers

in the greenhouses. The key to this success is careful monitoring of the fertility in the small containers. The plants in containers need regular feeding and watering. The media mix in our containers is potting soil, compost, a little elemental sulfur, and a granular fertilizer at planting. We liquid feed during the growing season with Nature's Source either 10-4-3 or 3-1-1.

--With Dahlias in the Greenhouse, thrips are the biggest problem and the thrips are worst on the white dahlias. We use Predatory mites that provide excellent control. We get our mites from Rincon Viitova [www.rinconvitova.com](http://www.rinconvitova.com). We use Entrust for chemical control, it is very expensive and needs to be used in combination with other similar chemicals to reduce insects developing resistance. Speak with your Extension Entomologist to get information about these chemicals.

--In 2016 we completed what we call our Box House. This was an old hoop house that we lost to heavy snow load. The base is many feet of compacted gravel so the decision was made to leave that and grow raised beds instead of excavating. The house already had electricity, gas and water plumbed to it. We built it like the Dahlia House with screening to reduce insect pressure. We only had funds to build raised beds in half of the house and plan to finish the beds in spring of 2017.

--So far in 2017 we have already planted ranunculus and poppies in the Box House and will be planting anemones later in January. The protective screening will let us try fussier plants that are prone to chewing insect damage like annual Scabiosa, Cosmos, Dahlias. The fact that the Box House also has heat gives us the ability to start plants very early and grow plants that have a later bloom time like Salvia leucantha or the heirloom mums.

--2017 we were fortunate to purchase a Drangen from another cut flower grower that is retiring. It is a self-propelled lay-down planter that the previous grower has outfitted with a hydraulic weeding tool and a mounting for a double row chain pot planter. You can find out more about these tools at the MOSES conference and at [www.pendragonfabrication.com/drangen](http://www.pendragonfabrication.com/drangen)

-- In 2017 we will be using chain pots again. We had used them in the past but found it difficult to plant them out and keep the beds properly weeded. We are hoping that with the use of our new Drangen, we will be able to successfully incorporate chain pots again into our systems. More about chain pots can be obtained at [www.smallfarmworks.com](http://www.smallfarmworks.com).

--We start most all of our plants from either seeds or cuttings. We have the expertise, space, and equipment to do this successfully and save money over buying in plugs. Our earliest plants have already been started: Lisianthus and Campanula. We use either heat mats or germination chamber for germinating seeds. We grow on in the greenhouse under artificial lights and natural lighting. By February we turn up the heat to 45-50 so that the plants finish in time to begin planting late March early April, as soon as we can get into the fields.

--Tillage tools at BFF include a compact 25 HP tractor with a mower and rotovator. We also use a 20" BCS tiller. From the retiring cut flower grower, we also purchased a flail mower which fits on the larger BCS tiller that is among the tools on the Wisconsin farm location.

--Weed control at BFF now includes the use of landscape fabric with 6x6 spaced holes that is burned into it. We use a template that was made from masonry support wire mesh. A roll of 6'wide mesh is about \$90.

--Continual record keeping on the farm is very important. Each year I create a detailed list of crops, seeding times, seeds per cell, planting out time, harvest time, and seed inventory. We also make a field map of all that we plant along with the date each crop is planted.

--For season extension at both the beginning and the end of the season we use frost cover. A light frost fabric like Agribon row cover will also provide shade, insects, and some wind protection for crops as well. For crop support we use both the nylon netting such as Hortonova netting as well as cages built from masonry support mesh. Our cages are simply made by cutting a length of the mesh, usually 10-12' and folding up the long ends, 12" on either side by using a long board for stability and pulling up. It works easiest with 2 people. Once they are made, they last a long time and don't get tangled like the nylon netting. We use 2 stacked on top of each other for taller crops like flowering kale.

--Cutting Flowers: we cut directly into water. We cut generally Sunday-Wednesday which corresponds to our delivery days of Monday, Wednesday, and Thursday. We use Chrysal Professional 2 and CVBN tab. The CVBN tab is a slow release bleach solution which provides the anti-bacterial component, the Chrysal Prof 2 is a holding solution which provides the carbohydrate and the acid component. After flowers are cut, they are put into the cooler to hydrate prior to any processing. We usually do not bunch in the field.

--We grow a combination of Annuals, Perennials, Shrubs, Succulents, Foliage, and Herbs.

--Our products include Mixed Bouquets, Mason Jar Bouquets, Consumer Bunches, and Florist Bunches

More details on some of our best crops:

--Dianthus: we grow primarily Amazon Neon Purple, Amazon Neon Cherry, Amazon Rose Magic, Amazon Neon Duo. The Amazon series is completely programmable; it takes about 16-17 weeks from seed to cut flower sale with no vernalization required. This Sweet William is completely day-neutral. It has tall, strong stems, no need to grow in tunnels and no need for support. It is best if you can pinch the center stem though not required. It only comes as pelleted seed so it cannot be grown in a certified organic system.

--Amaranthus: We grow a lot of Amaranthus. We plan on 3-4 plantings per season of each of the varieties. Most are cut and come again with sturdy stocks that need no support even in our extremely windy area. When processing, nearly all leaves need to be removed. We grow many varieties including green, red, bronze, coral, and bicolor. They can be direct seeded if you can handle the weed pressure and also most varieties do well by transplants.

--Sunflowers: We plant day neutral varieties which are mostly 55-65 day and pollenless. Florists only want the pollenless varieties. We do not grow the darker colored ones, even though the florists love them, they can be problematic with losing petals and then rendering the flower non-salable. We tend to plant close, the closer you plant the smaller the head size. Most of our florists prefer orange petals/dark centers. We grow Pro-Cuts, Sunrich and Sunrich Summer, Joker, and a few other novelties. We get pressure on our sunflowers from the Northern Corn Root Worm adult, however, if we cut at the colored "claw" stage and finish opening them in our processing area, we are able to get a good crop. We now get the Sunflower Midge so that we need to do a 3-year rotation for all of our sunflowers.

--Celosia: We grow Crested, Plume, and Wheat types. We get 3-4 plantings per season. The seed need light to germinate and seeds cannot stay in plug tray long. We plan no more than 5 weeks in a plug tray from planting. Celosia likes it hot, we don't start our seeds until the first of April and plant out the first of May using row cover.

--Grains and Grasses: We do a lot of different grains and grasses. Some are cut and come again, most are easy to germinate and we usually plan for at least 3-5 plantings. Some like the Limelight Millet and Frosted Explosion we can get 4 or 5 plantings per season of each. Some of the varieties are cut and come again, all have a very long vase life.

--Gomphrena: We grow both the Gomphrena haageana and Gomphrena globosa. Both add bright summer color. Both are excellent for drying too. It is easy to grow from seed, we let grow for about 7-8 weeks in a plug tray prior to transplanting. We plan on 2-3 plantings especially for the Haageana types. They are a nuisance to cut, be sure to buy "clean" seed. It is much easier to plant.

--Zinnias: We grow the Benary Giant Dahlia Hybrids, Oklahoma Series, always and usually try some new ones each year. Last year we enjoyed the Cactus Mix. We usually plan on 2-3 plantings. We plant transplants rather than direct seed. You do get more doubles if you direct seed but not only do we not have a successful for getting the seed into the ground but the weed pressure is incredible. Transplants need to be planted at the cotyledon stage or just after to prevent transplant shock. Be sure to use fresh seed, Zinnia seed does not last well from year to year. We cut zinnias into bleach water then transfer into water with a CVBN tablet. We do put our zinnias into the cooler. Many people leave at a cool room temperature of about 50° F. Because zinnias do not ship well, the market relies on fresh, locally grown zinnias for product. They do get powdery mildew late in our season, we are so windy that we usually don't have to spray however. We do get pressure from the Northern Corn Root worm adult by mid- August but if we cut early in development we are still able to harvest a product.