Seed Starting & Propagation

Seed Starts
Flower farming is very different from Veg growing….There is not a salad mix in the flower world. Succession planting is at a different speed. A lot of our beds and sections in beds are one crop per season…. Especially the perennials.

So it's not like veggies, where you are planting all the time. I start seeding in early January and my last seeding date is end of July or early August if I need certain flowers for late weddings. The spring flowers like Stock, Sweet Peas, Larkspur, I can plant right on top off once they are through. So for the most part it's usually the spring crops that get a second planting on top of them. Towards the end of the season, I'm just going in and plugging in Zinnia seeds, Sunflowers, etc. Celosia is another to plug as well….But we find that it is quite invasive here and pops up all over the farm. So I don't usually need to start any at all.

We start our seeds in bigger plug cell trays….and some easy growers with a strong root system in 72 cell trays. Like I said, I'm starting seeds in early Jan, so we utilize our walk in cooler that has a window in it that faces south-southwest. It will get sun most of the day. We use the shelving system and outfit it with heat mats & LED grow lights to start. The room stays at an ambient temp of 65-78 most days without the use of a heater because it's so heavily insulated. When flowers start getting true leaves and a heavier stalk, I then move them to our greenhouse, which does have a small heater for cold nights. This method allows me to use the space in both locations to the maximum and triple my seed starts. These are not large spaces at all. The walk-in is about 4’ x 8’ and the greenhouse is about 5’ x 12’.
For seed starting, we mix our own start mix. We use all organic material and anything purchased (like soil) is also organic. Our mix is generally at a ratio of 1/4 organic coco peat, 1/4 organic vermiculite, 1/4 organic soil and 1/4 of our organic mushroom compost. I mix in tubs and use that all the way through the season.

**Propagation of Dahlias -**

We started propagating dahlias this year as well as starting from seed. Propagation is so easy and is a great way to keep your tuber investment costs down! We start by waking up our tubers that have been dug, divided and put to bed in November. We start by “waking up the tubers” by adding them into a soil mix upright, in a pot with the neck just above soil level. Pot them up and place on heat mats. Another option is to put them into some
moist peat moss and place into plastic sealable bags that are marked with variety. Again, place on a tray and onto a heat mat. Once you see growth and have a set of 4 leaves or more, you can remove with a wriggle method. Once separated, you can literally plug

into the horticube and label your variety. Water daily and drain off excess. You will see root growth along the sides in about 2-3 weeks. Once this happens you can either pot up or plant
directly into ground. So you not only will be able to multiply your varieties, but you can get multiple cuttings from one tuber prior to planting that tuber into ground for the season. It's a win win!
Bed Prep & Soil Health

We operate on “the grass seed & weed capitol of the world”. The weeds love the heat and humidity, while the grass seed seems to multiply overnight. Wire Grass, Nut Grass….it’s all here and its enough to make me want to burn my entire farm.

Our first year, we started with fallow land. On lawn that was overrun by weeds, a field that has been fallow for 13 yrs. We did not tarp….What were we thinking?? We tilled the areas to start our beds and left grass paths in between. Mistake…big mistake.

Initially we used a biotill fabric that just couldn't stand up to the weed pressure after tilling and waking up all that weed seed. I couldn’t keep up and our plants were not as healthy as they should have been. We
amended our soil with our Certified Organic Mushroom Compost, used straw mulch over the paths and it was still bad.

Fast forward to fall......we tarped every bed after flowers were done, got rid of any and all grass pathways, tilled in the compost (smaller amount in fall) and put the beds to sleep for a while. What we have found is that if you tarp all of the flowers (non perennial) down, you are adding beneficial organic matter and that helps the overall soil health. And you can start getting things under control.

In some beds we use cover cropping to also help with this weed & grass problem. It exhausts the weeds, fixes the nitrogen and smothers out and new growth. We have found that Crimson Clover and Buckwheat have been the best here. And the Clover is amazing for the pollinators and can use in arrangements in Spring as well. Bonus. Our mantra on the perennial weeds is that we just need to exhaust the root reserves.
We use big heavy 50’ x 50’ silage tarps. We’ll tarp an area for four weeks or more, which will knock things down, but may not kill it all. We may need to crop in buckwheat and tarp again. This may happen 2-3 times and by then the root reserves are pretty much depleted. When we are ready to plant, we bring in our heavy (5 ml) landscape fabric, which we burn holes in to plant. We use a 8x10” row of three method. We feel if we plant intensely, the plants will out compete the weeds. When finished with a crop, we will weed whack that down, drag a tarp over it. Usually in the heat of summer this matter will degrade quickly and we will replant right back into it.

Zinnia, Celosia and Sunflowers couldn't care less and grow well in this system. Flowers give us a bit more flexibility, because we are not planting low-growing, fast turn-over crops. I like using taller crop, like Apple Of Peru, when done, knock it down, leave the refuse and use that as mulch. I don not rake it off unless it’s going to be a shorter flower. Once you start paying attention to the biology of your system, it will start to change what weeds will be able to thrive.
When we started, we really needed to pay a lot of attention to our micronutrient analysis of our soil. It was terrible. Was way out of balance with Magnesium/Calcium ratio, lacked minerals and had low levels of Phosphorus. We amended with Lime initially, the retested again. Added organic matter (Compost), layered on top of the poor soil and built it up. We are trying to get our organic matter up to about 8% or better. We are at about 4 % at this point. We are fortunate to have a sandy loam base to work with and that helps with drainage. Great benefit to no till is that it keeps moisture levels up, so we don’t need to irrigate as much as that first year. At the end of the season, we pull the fabric, leave the organic matter on the beds, add a layer of compost and walk away until we get ready to plant. We will start our tarping process in some areas in January and the follow with the other beds as needed.

Each year we see less weeds, healthier plants, less disease and bug pressure. The best part is the amount of labor has decreased tenfold.