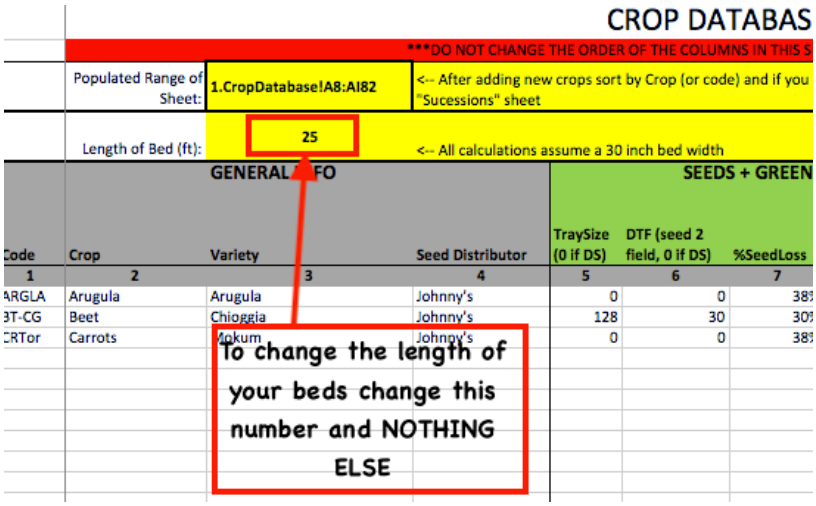
Crop Planning Tool Instructions:

There are some important things you need to know before you start to use this crop-planning tool:

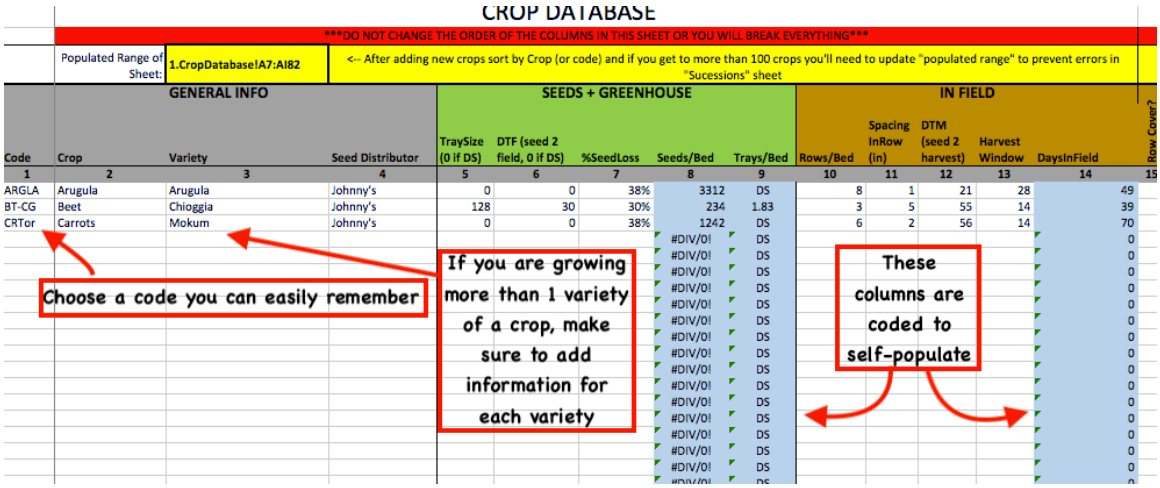
- This color blue in the spreadsheets refers to automatically calculated columns. As you fill out the plan you will see numbers and dates automatically calculate.
- You CANNOT add new columns to the "Crop Database" or you will break the code that allows numbers and dates to self populate.
- This spreadsheet assumes that all your beds are a standardized length and are 30in wide.
- This spreadsheet operates by using VLOOKUP functions with the "Code" you create in the "Crop Database" used as the "lookup value". Microsoft Office Help and youtube are good sources to explain.

1. Start by filling out the tab entitled "Crop Database". Here is where you will store information such as variety, spacing, seeding method, days to maturity, and field tasks for each of the crops you are deciding to grow.

   First, change the length of your bed ft. to match the standardized bed length for your farm. To do this change the following:



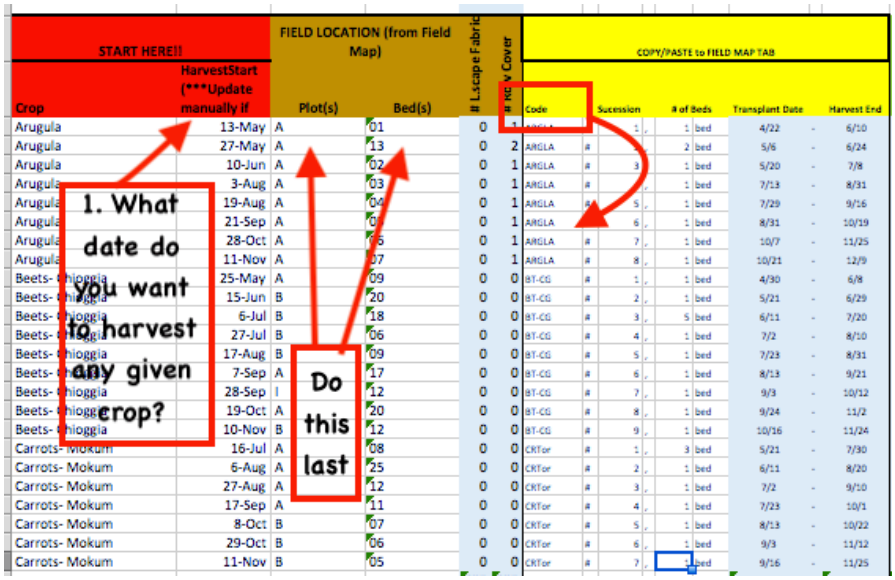
   Next fill out your crop-by-crop information. Much of this can be found in seed catalogues if you do not already know it. While you are working in the "crop database" you should fill out just one row per crop variety. You will work on successions in the next tab. While you are filling out the spreadsheet, there is an area for "Code"- this code is will be used to reference your crop's information in later spreadsheets. It is important that you choose a code you can easily associate with that crop variety.



Once you have filled out the "crop database" you do not have to touch it again, unless you are making tweaks or changing varieties in subsequent years. For those of you that are Excel savvy (or have a friend who is) it will help you to sort your crops alphabetically before moving on.

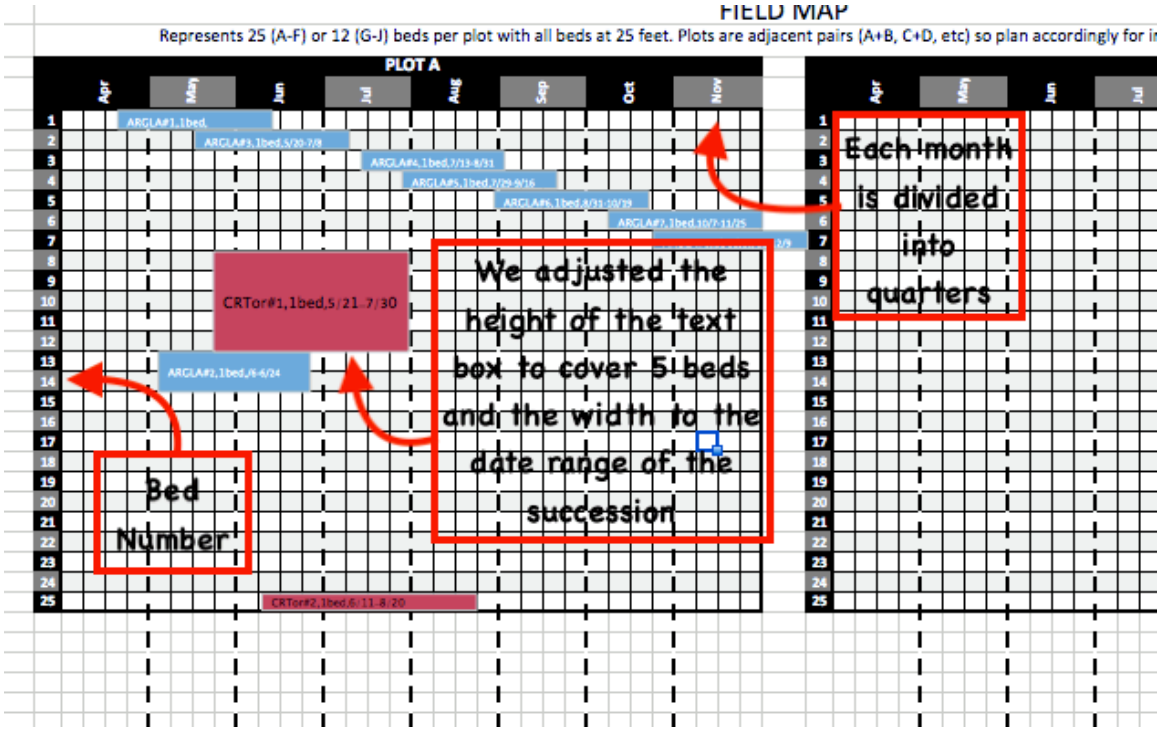
Once you have finished your "crop database" you move onto tab 2 "successions"

2. In the "successions" tab, you start by filling out your desired crop and the date you would like to harvest it. Once you have chosen your date of harvest, you can move to the bright yellow columns. This is where you will use the drop down menu to select the code the vegetable succession you created. You will manually input the succession number and amount of beds in that succession. The automatically calculated columns will use the code to pull the data from your "crop database" and populate the transplant or direct seeding date, harvest date, number of seeds/trays you will need, each of the tasks, the dates for the tasks, as well as your expected yield for that succession.



Once you have already completed your field placement map you can come back and add the field location.

3. The “field map” is the most tedious part of filling out this crop plan. We set up the field map to match the plot layout of our farm.



The logistics of using the “field map” look like this:

- Create a text box
- Give the box a color that correlates with your crop
- Copy the bright yellow section on the “successions” tab
- Paste it into your text box
- Adjust the text box height to cover the number of beds in the succession and the width to cover the time that succession is in the field
- Now place the succession wherever you desire in your field, being careful to keep it in its correct date range

You can also merge your cells or just color your cells for this portion. The reason we use text boxes is so that we can easily move the crop if we find something that fits better in its place. This is a similar approach that JM Fortier and other excel-centric farmers have to crop plan mapping.

4. The “seed order” tab will automatically populate as you create your successions and as it learns how many beds you expect to plant throughout the season. It operates using a SUMIF function to total the number of beds

across all successions with the same crop variety "code" (again see Microsoft Office Help or Youtube for more details). The number of seeds are calculated with an additional allotment % that you input in the "crop database" as "%seedloss".

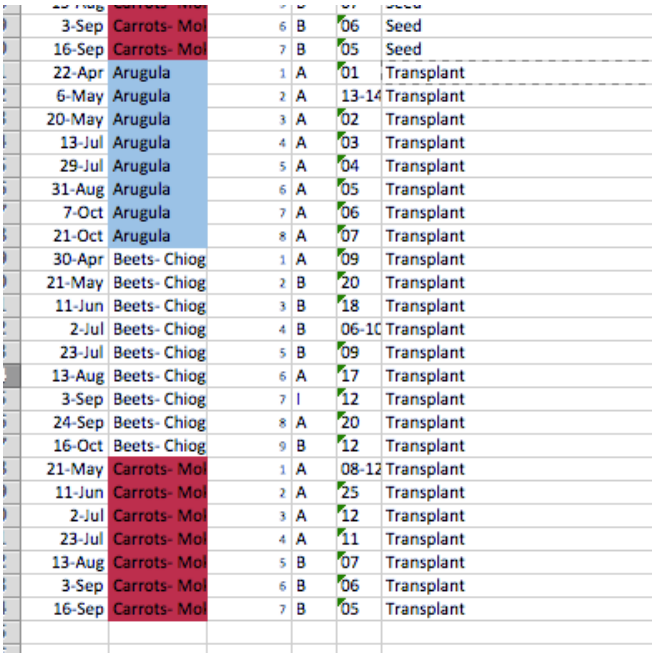
5. The task list portion of this crop-planning tool is messy but also very useful once it is built. DO NOT START THIS TASK CALENDAR UNTIL YOUR CROP PLAN IS 100% COMPLETE AND HAVE ASSIGNED ALL YOUR PLANTINGS TO A BED. You will essentially copy/paste the seeding date, transplant date, start of harvest date, and each field task date(1 through 5) from the "successions" tab to build a master list of all your tasks for the season. You will then sort this list by date to see all of your tasks in order. Essentially a daily to-do list!

   What follows is an outline of how you will build the task list (you may want to grab an Excel savvy friend). Each task obviously has a date, but it also needs to be associated with its succession. This way you can see *what* it is that you're supposed to be working on and *where* that crop is located in your field. Therefore, you will need to copy over the crop column, succession column, plot and bed columns associated with every task category (seeding, transplant, start of harvest, field tasks 1-5). IMPORTANT, when pasting data from your "Successions" tab, you need to right click, pick "Paste Special…", then select "Values" otherwise it will try to paste a formula and give you an error, or worse, incorrect values.

   1. Copy all your SEEDING tasks
      - First copy the crop name of *every* row in your "successions" tab and paste into the task calendar
      - Repeat for the plot, bed, and succession columns
      - Then copy the "seeding date" from the "successions" tab (in column P) and paste *special*
      - Finally under the "task" column in the task calendar, manually type in "seed" and copy to all rows

	A	B	C	D	E	
1	Date	Crop	Sucession	Plot	Bed	Action
7	22-Apr	Arugula	1	A	01	Seed
8	6-May	Arugula	2	A	13-14	Seed
9	20-May	Arugula	3	A	02	Seed
10	13-Jul	Arugula	4	A	03	Seed
11	29-Jul	Arugula	5	A	04	Seed
12	31-Aug	Arugula	6	A	05	Seed
13	7-Oct	Arugula	7	A	06	Seed
14	21-Oct	Arugula	8	A	07	Seed
15	31-Mar	Beets- Chiog	1	A	09	Seed
16	21-Apr	Beets- Chiog	2	B	20	Seed
17	12-May	Beets- Chiog	3	B	18	Seed
18	2-Jun	Beets- Chiog	4	B	06-10	Seed
19	23-Jun	Beets- Chiog	5	B	09	Seed
20	14-Jul	Beets- Chiog	6	A	17	Seed
21	4-Aug	Beets- Chiog	7	I	12	Seed
22	25-Aug	Beets- Chiog	8	A	20	Seed
23	16-Sep	Beets- Chiog	9	B	12	Seed
24	21-May	Carrots- Mol	1	A	08-12	Seed
25	11-Jun	Carrots- Mol	2	A	25	Seed

2. Copy all your TRANSPLATE tasks
    - First copy the crop name of every row in your “successions” tab and paste into the task calendar directly below the seeding tasks that you just built
    - Repeat for the plot, bed, and succession columns
    - Then copy the “transplant date” from the “successions” tab (in column M) and paste special
    - Finally under the “task” column in the task calendar, manually type in “transplant” and copy to all rows



3-Sep	Carrots- Mol	6	B	06	Seed
16-Sep	Carrots- Mol	7	B	05	Seed
22-Apr	Arugula	1	A	01	Transplant
6-May	Arugula	2	A	13-14	Transplant
20-May	Arugula	3	A	02	Transplant
13-Jul	Arugula	4	A	03	Transplant
29-Jul	Arugula	5	A	04	Transplant
31-Aug	Arugula	6	A	05	Transplant
7-Oct	Arugula	7	A	06	Transplant
21-Oct	Arugula	8	A	07	Transplant
30-Apr	Beets- Chiog	1	A	09	Transplant
21-May	Beets- Chiog	2	B	20	Transplant
11-Jun	Beets- Chiog	3	B	18	Transplant
2-Jul	Beets- Chiog	4	B	06-10	Transplant
23-Jul	Beets- Chiog	5	B	09	Transplant
13-Aug	Beets- Chiog	6	A	17	Transplant
3-Sep	Beets- Chiog	7	I	12	Transplant
24-Sep	Beets- Chiog	8	A	20	Transplant
16-Oct	Beets- Chiog	9	B	12	Transplant
21-May	Carrots- Mol	1	A	08-12	Transplant
11-Jun	Carrots- Mol	2	A	25	Transplant
2-Jul	Carrots- Mol	3	A	12	Transplant
23-Jul	Carrots- Mol	4	A	11	Transplant
13-Aug	Carrots- Mol	5	B	07	Transplant
3-Sep	Carrots- Mol	6	B	06	Transplant
16-Sep	Carrots- Mol	7	B	05	Transplant

The transplant and the seed date will be the same for crops you are direct seeding- so it will look like you are doing the same task twice, but you can just disregard one of the two when you go to make your weekly task list.

3. Copy all your START OF HARVEST tasks
    - First copy the crop name of every row in your “successions” tab and paste into the task calendar directly below the tasks that you’ve already built
    - Repeat for the plot, bed, and succession columns
    - Then copy the “start of harvest date” from the “successions” tab (in column B) and paste special
    - Finally under the “task” column in the task calendar, manually type in “Start of Harvest” and copy to all rows

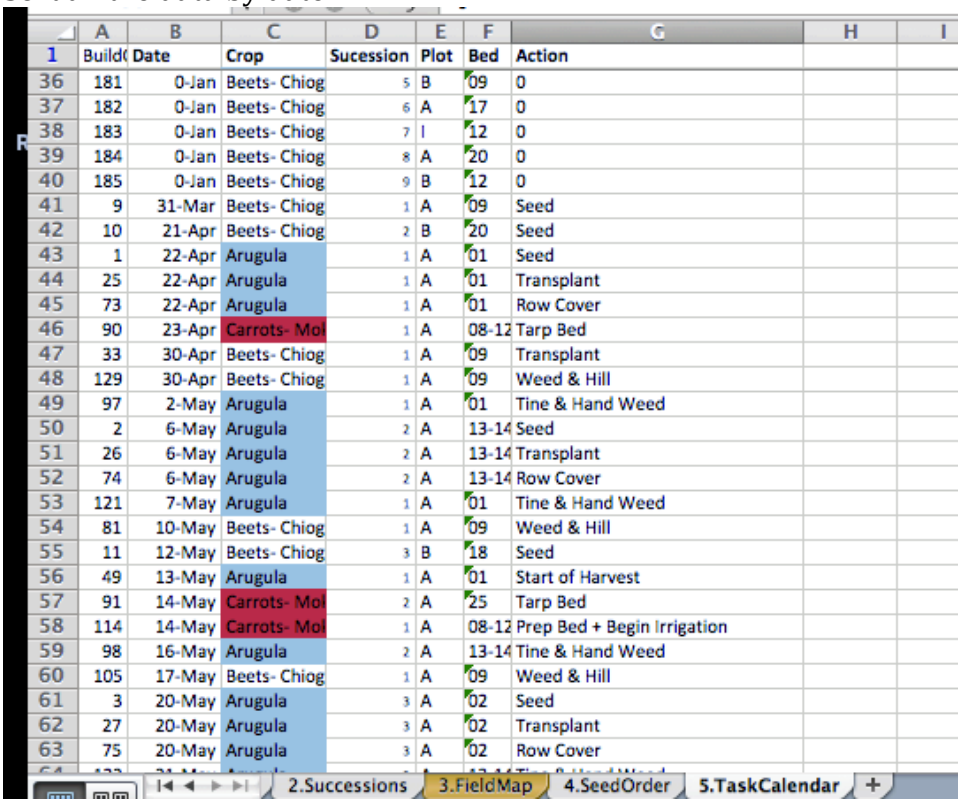
2	13-Aug	Carrots- Mol	5	B	'07	Transplant
3	3-Sep	Carrots- Mol	6	B	'06	Transplant
4	16-Sep	Carrots- Mol	7	B	'05	Transplant
5	13-May	Arugula	1	A	'01	Start of Harvest
6	27-May	Arugula	2	A	'13-14	Start of Harvest
7	10-Jun	Arugula	3	A	'02	Start of Harvest
8	3-Aug	Arugula	4	A	'03	Start of Harvest
9	19-Aug	Arugula	5	A	'04	Start of Harvest
0	21-Sep	Arugula	6	A	'05	Start of Harvest
1	28-Oct	Arugula	7	A	'06	Start of Harvest
2	11-Nov	Arugula	8	A	'07	Start of Harvest
3	25-May	Beets- Chiog	1	A	'09	Start of Harvest
4	15-Jun	Beets- Chiog	2	B	'20	Start of Harvest
5	6-Jul	Beets- Chiog	3	B	'18	Start of Harvest
6	27-Jul	Beets- Chiog	4	B	'06-10	Start of Harvest
7	17-Aug	Beets- Chiog	5	B	'09	Start of Harvest
8	7-Sep	Beets- Chiog	6	A	'17	Start of Harvest
9	28-Sep	Beets- Chiog	7	I	'12	Start of Harvest
0	19-Oct	Beets- Chiog	8	A	'20	Start of Harvest
1	10-Nov	Beets- Chiog	9	B	'12	Start of Harvest
2	16-Jul	Carrots- Mol	1	A	'08-12	Start of Harvest
3	6-Aug	Carrots- Mol	2	A	'25	Start of Harvest
4	27-Aug	Carrots- Mol	3	A	'12	Start of Harvest
5	17-Sep	Carrots- Mol	4	A	'11	Start of Harvest
6	8-Oct	Carrots- Mol	5	B	'07	Start of Harvest
7	29-Oct	Carrots- Mol	6	B	'06	Start of Harvest
8	11-Nov	Carrots- Mol	7	B	'05	Start of Harvest

4. Copy all your FIELD TASK #1 tasks
   - First copy the crop name of every row in your "successions" tab and paste into the task calendar directly below the tasks that you've already built
   - Repeat for the plot, bed, and succession columns
   - Then copy the task 1 date, "Date 1", from the "successions" tab (in column U) and paste special
   - For the "task" column you will now need to copy and paste *special* the "Task 1" tasks from column S in the "successions" tab

	17-Sep	Carrots- Mol	4	A	'11	Start of Harvest
	8-Oct	Carrots- Mol	5	B	'07	Start of Harvest
	29-Oct	Carrots- Mol	6	B	'06	Start of Harvest
	11-Nov	Carrots- Mol	7	B	'05	Start of Harvest
	22-Apr	Arugula	1	A	'01	Row Cover
	6-May	Arugula	2	A	'13-14	Row Cover
	20-May	Arugula	3	A	'02	Row Cover
	13-Jul	Arugula	4	A	'03	Row Cover
	29-Jul	Arugula	5	A	'04	Row Cover
	31-Aug	Arugula	6	A	'05	Row Cover
	7-Oct	Arugula	7	A	'06	Row Cover
	21-Oct	Arugula	8	A	'07	Row Cover
	10-May	Beets- Chiog	1	A	'09	Weed & Hill
	31-May	Beets- Chiog	2	B	'20	Weed & Hill
	21-Jun	Beets- Chiog	3	B	'18	Weed & Hill
	12-Jul	Beets- Chiog	4	B	'06-10	Weed & Hill
	2-Aug	Beets- Chiog	5	B	'09	Weed & Hill
	23-Aug	Beets- Chiog	6	A	'17	Weed & Hill
	13-Sep	Beets- Chiog	7	I	'12	Weed & Hill
	4-Oct	Beets- Chiog	8	A	'20	Weed & Hill
	26-Oct	Beets- Chiog	9	B	'12	Weed & Hill
	23-Apr	Carrots- Mol	1	A	'08-12	Tarp Bed
	14-May	Carrots- Mol	2	A	'25	Tarp Bed
	4-Jun	Carrots- Mol	3	A	'12	Tarp Bed
	25-Jun	Carrots- Mol	4	A	'11	Tarp Bed
)	16-Jul	Carrots- Mol	5	B	'07	Tarp Bed
	6-Aug	Carrots- Mol	6	B	'06	Tarp Bed

5. Repeat for FIELD TASKS 2 through 5
    a. Because of the nature of each crop being different, not every crop has 5 tasks associated with in. When one or more of the tasks is empty, you will see zeros or Jan-0 populated for the task name and date. Once you've sorted by date, you can simply hide these rows.

6. Sort all the data by date



	A	B	C	D	E	F	G	H	I
1	Build(	Date	Crop	Sucession	Plot	Bed	Action		
36	181	0-Jan	Beets- Chiog	5	B	09	0		
37	182	0-Jan	Beets- Chiog	6	A	17	0		
38	183	0-Jan	Beets- Chiog	7	I	12	0		
39	184	0-Jan	Beets- Chiog	8	A	20	0		
40	185	0-Jan	Beets- Chiog	9	B	12	0		
41	9	31-Mar	Beets- Chiog	1	A	09	Seed		
42	10	21-Apr	Beets- Chiog	2	B	20	Seed		
43	1	22-Apr	Arugula	1	A	01	Seed		
44	25	22-Apr	Arugula	1	A	01	Transplant		
45	73	22-Apr	Arugula	1	A	01	Row Cover		
46	90	23-Apr	Carrots- Mol	1	A	08-12	Tarp Bed		
47	33	30-Apr	Beets- Chiog	1	A	09	Transplant		
48	129	30-Apr	Beets- Chiog	1	A	09	Weed & Hill		
49	97	2-May	Arugula	1	A	01	Tine & Hand Weed		
50	2	6-May	Arugula	2	A	13-14	Seed		
51	26	6-May	Arugula	2	A	13-14	Transplant		
52	74	6-May	Arugula	2	A	13-14	Row Cover		
53	121	7-May	Arugula	1	A	01	Tine & Hand Weed		
54	81	10-May	Beets- Chiog	1	A	09	Weed & Hill		
55	11	12-May	Beets- Chiog	3	B	18	Seed		
56	49	13-May	Arugula	1	A	01	Start of Harvest		
57	91	14-May	Carrots- Mol	2	A	25	Tarp Bed		
58	114	14-May	Carrots- Mol	1	A	08-12	Prep Bed + Begin Irrigation		
59	98	16-May	Arugula	2	A	13-14	Tine & Hand Weed		
60	105	17-May	Beets- Chiog	1	A	09	Weed & Hill		
61	3	20-May	Arugula	3	A	02	Seed		
62	27	20-May	Arugula	3	A	02	Transplant		
63	75	20-May	Arugula	3	A	02	Row Cover		

2.Successions | 3.FieldMap | 4.SeedOrder | 5.TaskCalendar