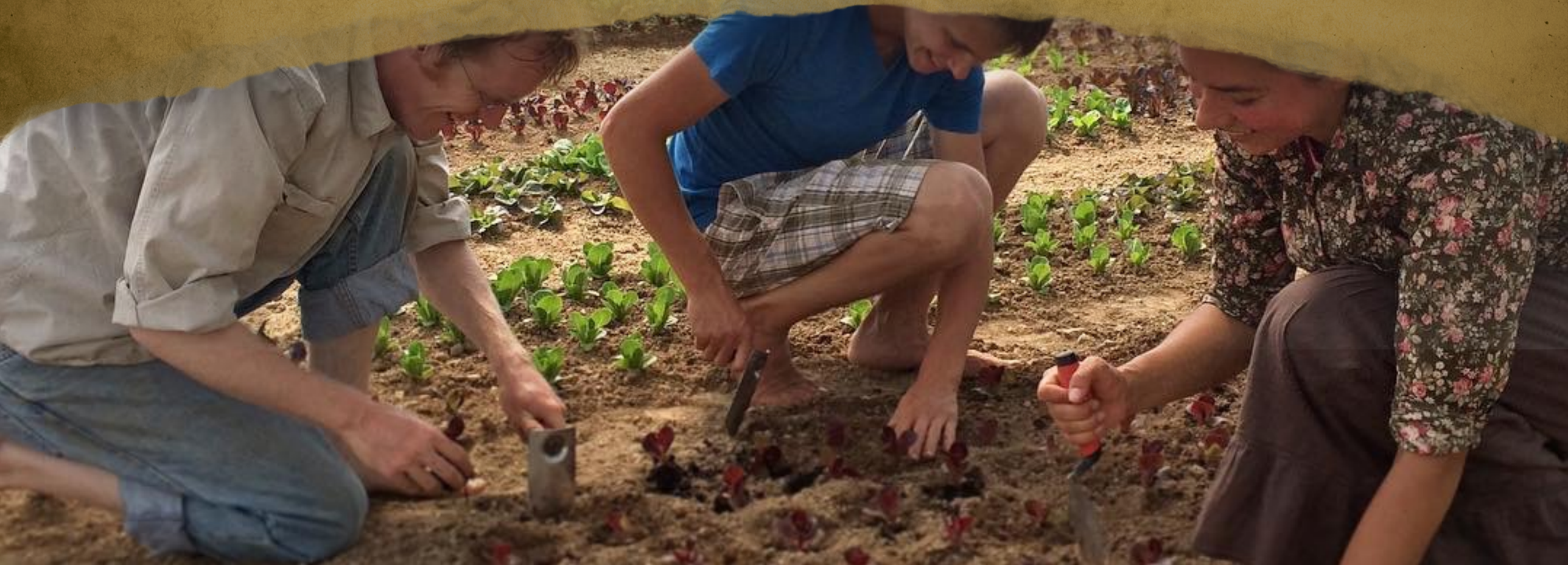
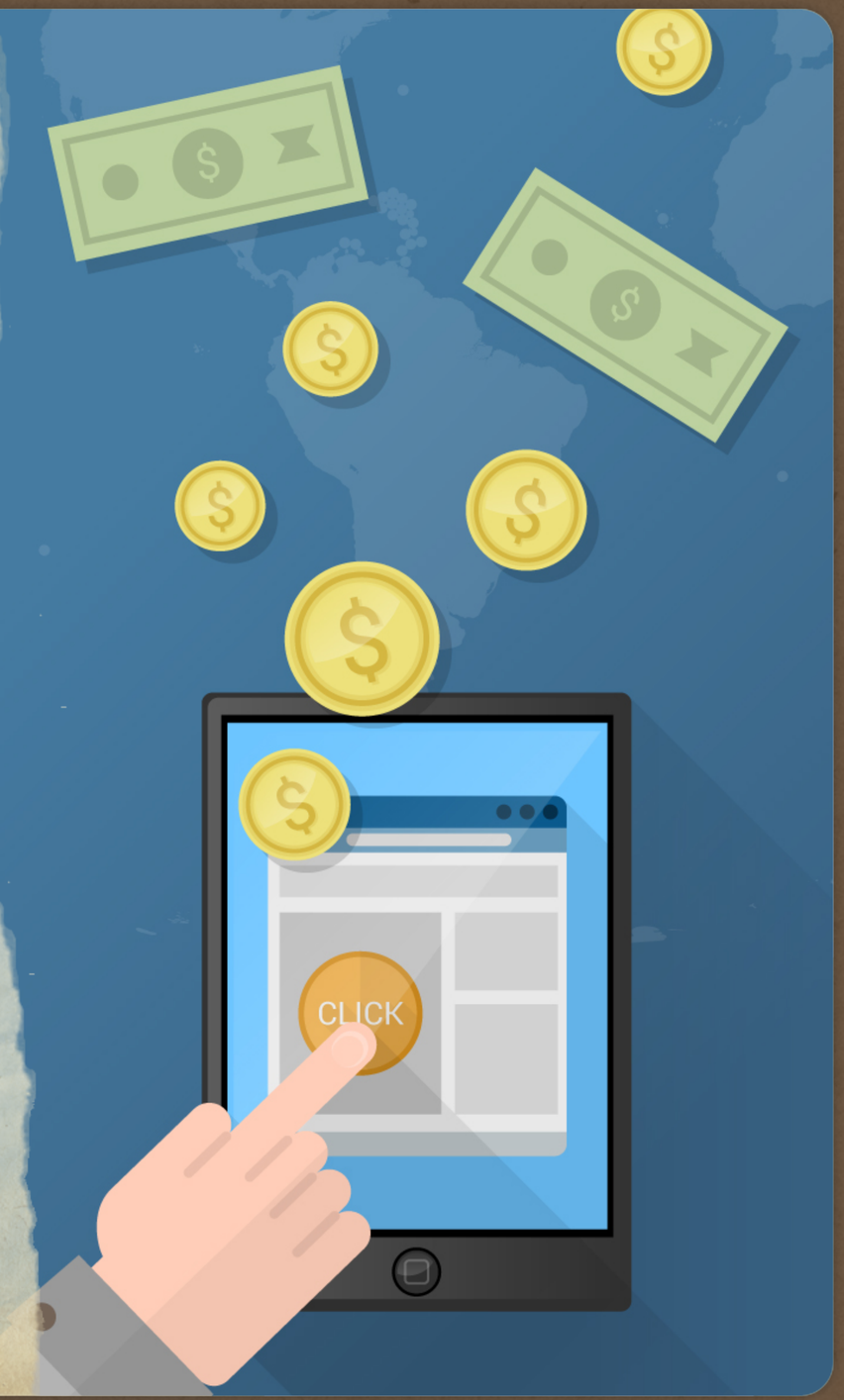
Planning, Recordkeeping, and "Lean" Systems for Efficiency



Start with an Income Plan:

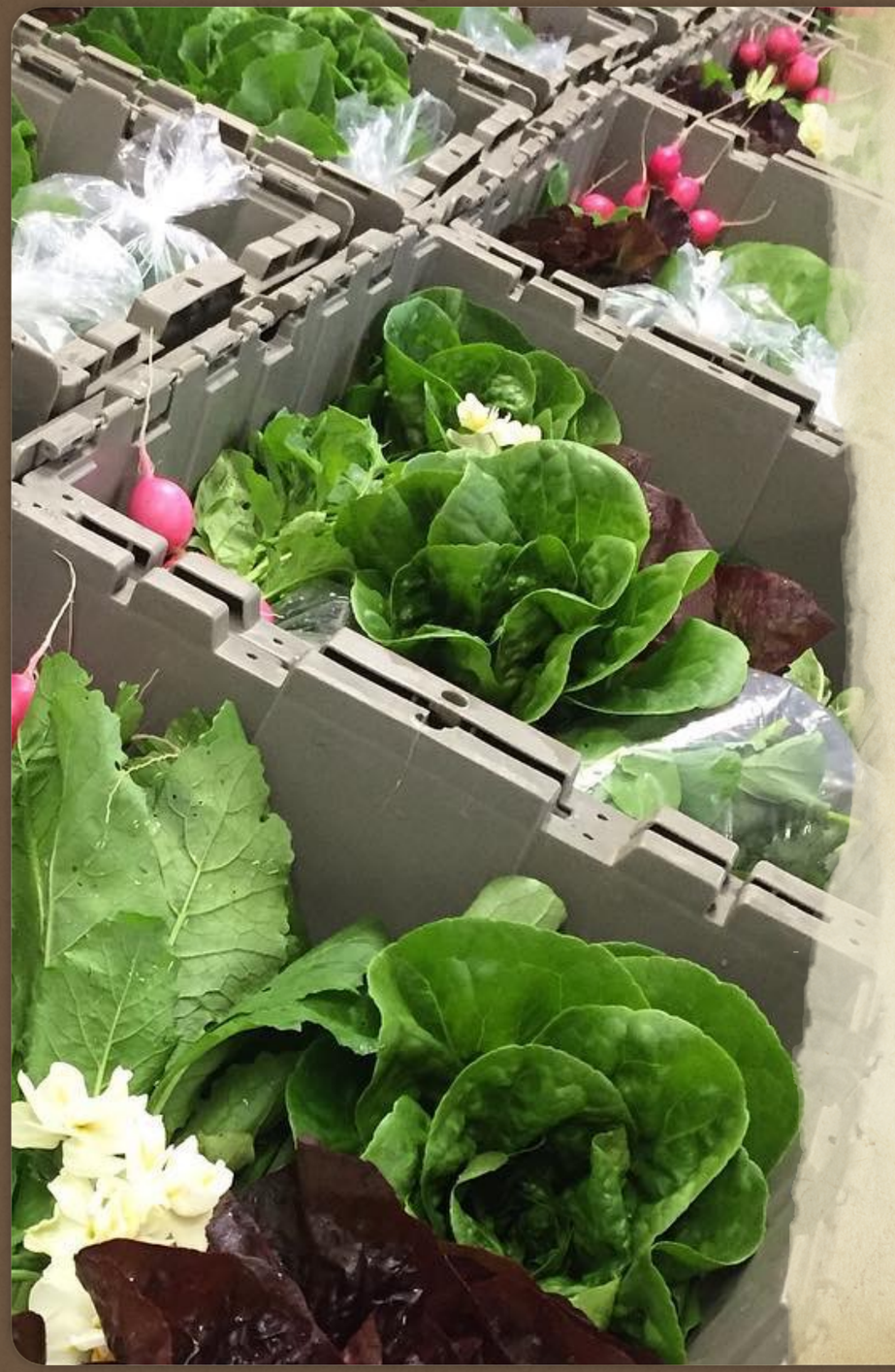
- Do you want to support yourself on the farm?
- Net income is usually between 40 and 50% of gross.
- How much can you live on?



Case-Study

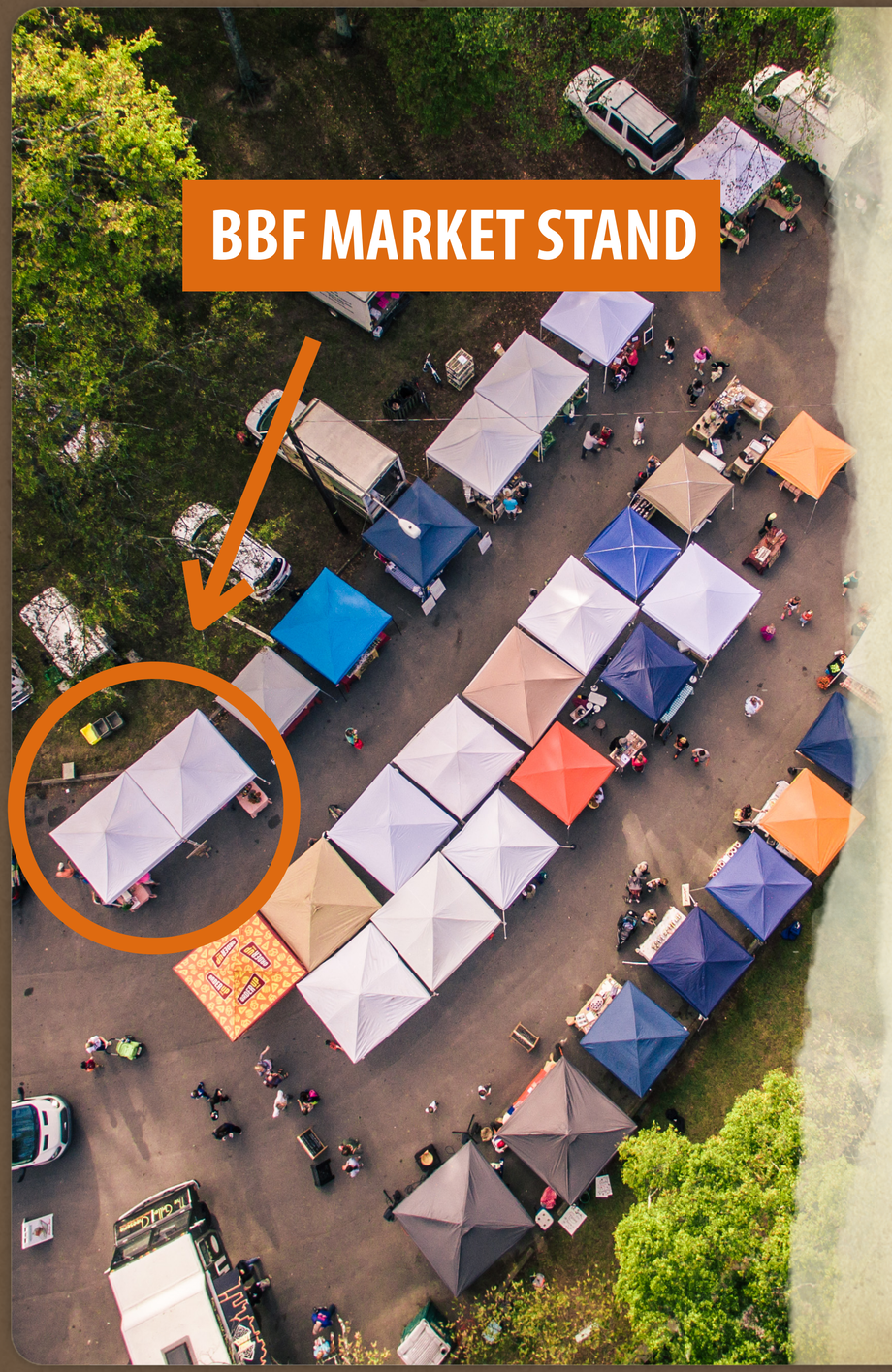
- Need to earn $24,000 net
- Must bring in at least $50,000 gross
- How do you plan to do that?
  - Start with records from somebody who's doing it - like Jean-Martin Fortier
  - don't expect to get their results right away
  - always best to start small and make small mistakes

Vegetable	Total sales	Price	Number of beds per season*	Garden space	Revenue per bed	Number of days in the garden	Rank (sales)	Rank (revenue/ bed)	Profitability**
Greenhouse tomato	$35,200	$2.75/lb.	4	3%	$8,800	180	1	1	high
Mesclun mix	$15,750	$6.00/lb.	35	18%	$450	45	2	19	high
Lettuce	$9,000	$2.00/unit	18	9%	$500	50	3	15	high
Greenhouse cucumber	$8,280	$2.00/unit	6	2%	$1,380	90	4	2	high
Garlic	$6,600	$1.50/unit	8	4%	$825	90	5	5	high
Carrots (bunch)	$6,515	$2.50/unit	14	7%	$465	85	6	18	medium
Onion	$6,075	$1.50/lb.	9	4%	$675	110	7	10	medium
Pepper	$4,400	$4.00/lb.	8	4%	$550	120	8	13	medium
Broccoli	$3,900	$2.50/unit	13	7%	$300	65	9	28	low
Snow/snap peas	$3,840	$6.00/lb.	8	4%	$480	85	10	16	medium
Summer squash	$3,690	$1.50/lb.	6	3%	$615	70	11	11	medium
Green onion	$3,360	$2.00/unit	4	2%	$840	50	12	4	high
Beans	$3,280	$3.75/lb.	8	4%	$410	70	13	24	low
Spinach	$3,000	$6.00/lb.	5	3%	$600	50	14	12	medium
Beets (bunch)	$2,900	$2.50/unit	7	4%	$415	70	15	23	medium
Turnip	$2,100	$2.50/unit	4	2%	$525	50	16	14	medium
Radish	$2,000	$1.50/unit	5	3%	$450	45	17	20	medium
Cherry tomato	$1,930	$5.00/lb.	2	1%	$965	120	18	3	high
Ground cherry	$1,650	$6.00/lb.	2	1%	$825	120	19	6	medium
Swiss chard	$1,600	$2.00/unit	2	1%	$800	90	20	7	medium
Kale	$1,600	$2.00/unit	2	1%	$800	90	22	8	medium
Cauliflower	$1,600	$3.00/unit	4	2%	$400	80	21	25	low
Basil	$1,400	$20.00/lb.	2	1%	$700	120	23	9	medium
Eggplant	$1,350	$3.00/lb.	3	2%	$450	120	24	21	low
Melon	$1,225	$4.00/lb.	5	3%	$245	85	25	29	low
Leek	$1,200	$4.00/unit	3	2%	$400	150	26	26	low
Kohlrabi	$940	$1.25/unit	2	1%	$470	55	27	17	medium
Wild leek	$840	$3.00/unit	2	1%	$420	135	28	22	medium
Arugula (bunch)	$800	$2.00/unit	2	1%	$400	45	29	27	medium
Total	**$136,025**		**193**	**100%**					



CSA Option:

- 26 weeks x $30/box = $780 per share
- $780 x 65 shares = $50,700



Farmer's Market Option

- $50,000 divided by 26 week season = Just under $2000/ week
- 2 markets/week = $1000/ market

The reality is...

You will probably want to combine a couple of options - like 40 CSA shares ($31,200) + $800/week at farmer's markets ($20,800)

Then Come Up With a Garden Plan:

- What crops do you want to grow?
- How much of each crop do you want to grow? (# of beds, # of plants, # of seeds, etc.)
- When do you need it for market? Then work backwards to transplanting and/or seeding dates.
- This is called a crop calendar

Planting Dates and Quantities

H = harvest **I** = indoor seeding **DS** = direct seeding **T** = transplanting

Spinach	**H:** Jun 16	**I:** Apr 22	**T:** May 9	2 beds (Tyee)
Radish	**H:** Jun 16	**DS:** May 10		1 bed (Raxe)
Kohlrabi	**H:** Jun 16	**I:** Apr 6	**T:** May 3	1 bed (Korridor)
Summer squash	**H:** Jun 16	**I:** Apr 26	**T:** May 16	3 beds (2 – Plato, 1 – Zephyr)
Eggplant	**H:** Aug	**I:** Apr 7	**T:** Jun 1	3 beds (2 – Beatrice, 1 – Nadia)
Spinach	**H:** Oct 20	**I:** Aug 1	**T:** Aug 25	2 beds (Space)
Etc.				

Then you make a Garden Plan:

- Where are these crops going in your garden?
- How long will they stay there?
- How does it fit into your crop rotation?

DS = direct-seed **T** = transplant **H** = harvest

PLOT 1: EARLY CUCURBITACEAE AND BRASSICACEA

Broccoli	**T:** May 15	
Broccoli	**T:** May 15	
Broccoli	**T:** May 15	
Bok choy	**T:** May 9	
Kohlrabi	**T:** May 9	
Kale	**T:** May 9	
Broccoli	**T:** May 20	Oat/pea green manure seeded in early August; mowed and turned under in late October.
Broccoli	**T:** May 20	
Broccoli	**T:** May 20	
Broccoli	**T:** May 20	
Broccoli	**T:** May 20	
Summer squash	**T:** May 18	
Summer squash	**T:** May 18	
Summer squash	**T:** May 18	
Cauliflower	**T:** June 1	
Cauliflower	**T:** June 1	

Ways to Collect your Data:

- If you are good at spread sheets, you can do it there.
- Some people just use a notebook or clipboard.
- www.agsquared.com is another option

Keeping Good Records:

- Important to keep track of dates for planting, transplanting, and harvesting.
- Yield measured in per bed, or per 1000 square feet, or per acre.
- Varieties, notes concerning variables to performance, etc.
- Notebook or Agsquared.

Metrics for Tracking Profitability:

- Dollar value per harvest container (examples)
- Yield per square foot ($2/sq. ft./crop) or per acre $20,000/acre **minimum** (example of corn)
- Harvesting $ per hour (field to cooler) $30/hour **minimum** (Conner Crickmore says $100/hour)

Lean Systems on the Farm:

- 5 S's
  - **Sort** - ruthlessly eliminate anything not absolutely necessary for your production system.
  - **Set in Order** - Store tools where you use them most & store according to frequency of use.
  - **Shine** - Clean and well-lit workspaces
  - **Standardize** - containers, tools, growing areas, etc.
  - **Sustain** - "Little attentions often repeated." Friday is our shine and sustain day.

Lean Farm Start-up:

- 4 principles of establishing lean habits from the beginning
  - Put in your 10,000 hours (10 years for mastery)
  - Test in small batches
  - Add infrastructure capacity in small increments.
  - Avoid bad debt - investment or speculation?