

# Starting a Fall Garden



Calvary Gardening Ministry Newsletter  
September 2022

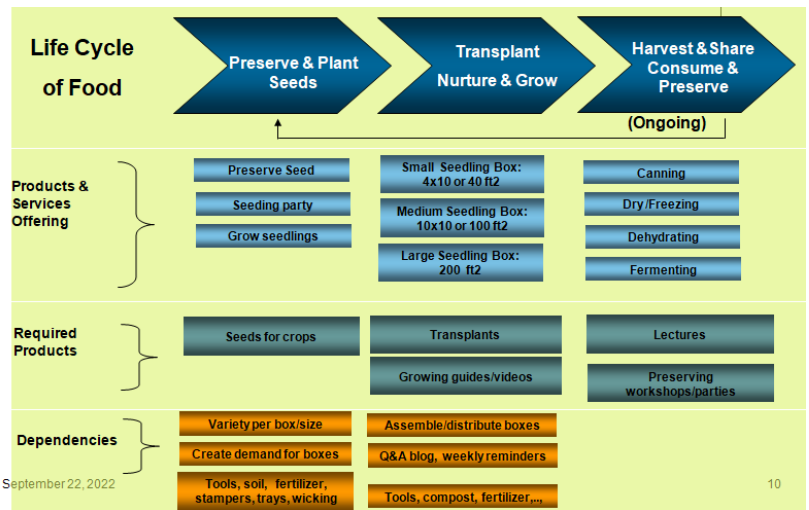
## 1. Introduction

Blessings! We are so grateful that you have joined Calvary Gardening Ministry. Over the last several months, you have helped us brainstorm and shared your thoughts, talents, passions and experiences. Since we last met, a smaller Steering Committee was created to help us organize and develop a plan both for the short and longer term.

Each member of the Steering Committee has answered God’s call to be part of this team. In God’s perfect way, He has brought together a team of people each with their own set of strengths, skills, talents and experiences.

Isaiah 1:19 “If you are willing and obedient you will eat the good things of the land”

Knowing that we can’t implement all of your ideas at the same time, we developed a plan with actionable short term solutions. This will help us learn not only how to work together, but also develop repeatable, scalable processes to achieve the ultimate goal, mission and vision of the Calvary Gardening Ministry.



**“The goal of Calvary Gardening Ministry is to help feed the church and beyond, focusing on the “life cycle of food”, teaching our community not only how to grow their own food, but also preserving it and its seeds.”**



Again, the emphasis is on **“teaching”** with this year's focus on gardening. We need active gardeners - who currently have access to land – plant a fall garden. We hope you can have plants in the ground by October 10. We have started seeds of fall crops and will be providing seedling boxes for small, medium and large gardening spaces along with growing guides on October 8. Note that we have decided to plant crops that are healthy, nutritious and provide more calories than others so you don’t go hungry. This is explained in more detail below.

Hopefully you have started to plan and prepare your fall garden by now. Because we couldn’t meet all your demand, some of you were not able to order seedling boxes this season but you still want to plant a garden on your own. We hope to be able to provide some guidance by sharing some of the best practices and processes that we used. For example, we used home-made sub-irrigated self-wicking trays for seed starting. So keep reading!

We are working on videos such as [how to prepare soil for fall planting](#) as well as [growing guides](#). We have set up a [contact page](#) where you can ask questions as well as an [FAQ page](#) where you can find answers to frequently asked questions. So please check out our GardenShare website at [gardenshare.webstarts.com](http://gardenshare.webstarts.com) frequently for updates.

But we can't do this on our own and we will need your help every step of the way.

- In the short term, we need volunteers to help assemble the seedling boxes on October 8. We also need newspapers to wrap the seedlings! Please save your newspapers and bring them to church to give them to one of us. Volunteers for October 8 can let us know per email at [calvarygardeningclub@protonmail.com](mailto:calvarygardeningclub@protonmail.com).
- In the longer term, we will be looking for champions to help organize and teach us about composting, micro-greens, seed bank and seed sharing, traditional skills such as food preservation, canning, recipes, etc.
- While this newsletter focuses on fall planting, it is important to note that almost all crops discussed here can be planted until the end of April. And while they are growing, it then becomes time to think about starting seeds for your spring vegetables indoors. So we encourage you to learn, look ahead and start growing!

In the mean time, spread the word about what we are doing! With God's grace, we are healthy and alive!

## 2. Which fall vegetables should I plant?

In order to answer this question, Rachel Kalauokalani researched both **calorie** and **nutrition** content of the commonly grown fall crops in Santa Clara County, Zone 9b. If we want to feed our church and community in the future, we want to focus on growing vegetables that are healthy and nutritious but also provide enough calories to make sure you don't go hungry. If you are new to gardening, you may also want to consider how easy it is to grow each crop.

The following list shows fall vegetables in order of calorie and protein content along with how easy they are to grow:

### VEGETABLE CALORIES AND PROTEIN FOR FALL VEGGIES

Veggie	Calories per cup	Protein	Size	Ease
Fava Bean	187	13g	6x 18" apart	grows 4' tall - easy
Peas	134	8g	12-18" rows	grow on trellis - easy
Parsnip	130	2.4g	3-4"	requires long germination
Beets	75	2.9g	4"	Easy
Collard greens	63	5.1g	12" apart	needs feeding
Brussels				
Sprouts	56	3.98g	24"	needs feeding
Broccoli	54	3.8g	18"	needs feeding
carrots	55	1.19g	6x 3"	Direct seed only, seeds are small
Rutabaga	52	1.5g	6"	Easy
Spinach	41	5.3g	6-8"	Easy
Turnips	42	1.4g	6"	Easy
Cabbage	35	1.9g	12-24"	needs feeding
Kale	36	2.5g	18"	Easy
Kohlrabi	36	2.6g	5"	Easy
Leek	32	.6g	6"	Difficult to get started in trays
Cauliflower	25	2.28g	24"	needs feeding
Bok Choy	20	2.9g	6" (toy choy)	Easy
Radish	19	.8g	2"	very easy
Mustards	15	1.6g	4-6"	EAsy
napa Cabbage	13	1.2g	12 - 18"	needs feeding
Lettuce	8	0.6g	8"	Easy
Arugula	5	.5g	6"	Easy
Garlic			6" spacing - large clove	Long growing season Oct-July

Per Rachel's research, we have decided to plant the fall vegetables in the table below.

As you can see, some seeds need to get started before planting, other seeds should be directly sown in your garden.

Direct Sow:	Transplant:
Beets – (red, yellow, chionga)	Kale
Bok Choy – (baby bok, regular)	Beets
Cabbage (Napa)	Bok Choy
Carrots (direct only) (seed parisienne if soil is hard)	Broccoli (transplant only)
Cilantro	Cabbage, green & red (transplant only)
Chard (Brite Lites)	Napa Cabbage
Collards (various)	Cauliflower (transplant only)
Kale (Siber frill, Lacinato)	chard
Lettuce (bib, red romaine, other)	Cilantro
Mustard Greens	Collards
Peas – high protein content – can be trellised	Leeks (transplant only)
Spinach – (giant)	Mustard greens
Turnips – (white, purple top, other)	peas
Rutabaga (Joan)	
Garlic (direct only)	
Onion (direct only)(various) seed now plant in Feb	
Fava Beans (direct seed only)	
Parsnips (direct only)	
Radish (direct only)	

### 3. How many plants do I need?

In order to figure out how many plants of each kind you need, you will first need to measure the size of your garden space. Second, it's important to know that your vegetables have different spacing requirements. For example beets can be planted 4 inches apart, but broccoli will need more space and should be planted 18 inches apart.

For spacing requirements of the fall crops, check out the following table:

- Peas - 2 every 3"
- Fava beans - 18"
- Parsnip = every 3-4"      9/sq foot
- Beets - every 4"      9/sq foot
- Collard greens -every 12"
- Brussels sprouts -24"      out of season
- Spinach - 6-8"
- rutabaga - 6"
- Turnips - 6"
- Carrots - every 2" or 16/foot
- Rutabaga 6"
- Spinach 6-8"
- Turnips 6"
- Cabbage 12-24"
- Kale 18"
- Kohlrabi 5"
- Leek 6"
- Cauliflower 24"
- Bok Choy 6" (toy choy)
- Radish 2"
- Mustards 4-6"
- napa Cabbage 12 - 18"
- Lettuce 8"
- Arugula 6"

#### 4. How to plan and lay out your garden?

The answer to this question depends on the size of your garden. Since every garden is different, we want to give you examples of garden plans and layouts for small (40 ft<sup>2</sup>), medium (100 ft<sup>2</sup>) and large gardens (200 ft<sup>2</sup>). The layouts will help you determine the amount of plants you will need for your garden. While those layouts are for Fall crops, keep in mind that almost all Fall crops can be succession planted until the end of March or even April. And while those crops are growing, it becomes time to think about seeding Spring vegetables indoors using heat mats underneath to help germinate. How to start seeds at home is discussed in the next section.

##### 40 SQUARE FOOT 4X10 plot

Peas 2 every 3" 4/ foot or 40 plants				
36 parsnip succession planting			36 Beet	
24 garlic			16 Spinach	
			collard greens	fava
			12 turnips	fava
				fava

North

##### 10x10 Space - 100 Square feet

1x10'				
Peas 2 every 3" 4/ foot or 40 plants 4/foot				
row for walking				
3.5x4'		3.5x4'		24 Rutabaga
Sow Parsnip dir seed		Beet		Early Oct
112 Parsnip		112 beet		Late Oct
succession		Succession		3x2'
Plant Early, Mid, late		dir sow 1st transplant		24 Turnip
		mid & Late oct		Early Oct
				Late Oct
				3x2'
24 spinach		96 carrots	Garlic	1
		direct		cabbage
		Early/mid		6 FAVA
		late sept		
3 collards				1
				cabbage

North

##### 200 Square foot space

10'x10'					10'x10'						
Peas 2 every 3" 4/ foot or 40 plants 4/foot					Second sowing of Peas in October						
row for walking					row for walking						
3.5x4'		3.5x4'		24 Rutabaga		96 carrots		Broccoli	cauliflower	cauliflower	FAVA
Sow Parsnip dir seed		Beet		Early Oct		Mid Sept					FAVA
112 Parsnip		112 beet		Late Oct		Direct seed					FAVA
succession		Succession		3x2'		2x3'		Broccoli	12 lettuce or arugula mix		FAVA
Plant Early, Mid, late		dir sow 1st transplant		Early Oct							FAVA
		mid & Late oct		Late Oct		20 bok choy					FAVA
				3x2'							FAVA
24 spinach		96 carrots	54 Garlic	cabbage	6 FAVA	cabbage	18 spinach	napa	mustards		FAVA
3x2'		direct sow	1.5x3'	green		red	2x3	Cabbage	9		FAVA
		EARLY sept						napa	Lettuce		FAVA
3 collards				cabbage		red		Cabbage	36 radish		FAVA
1x3'				green							FAVA

North

## 5. Starting your seeds

Timing is important. Each plant has different requirements for optimal growth. The **UC Master Gardeners of Santa Clara County** has a [Vegetable Planting chart](#) on their website that will give you the time of year that you can transplant or direct seed a vegetable. Find a printable version [here](#). This is one of the most valuable tools for a successful Santa Clara County garden.

As mentioned above, some seeds need to be planted directly into the garden (**direct seeded**). Others need to be started indoors and **transplanted** when the plants reach size. Check the planting chart as some seeds need 4 weeks to reach transplant size and others need 6 weeks before they can be transplanted. That means if you want to plant all your plants in your garden on the same date, you need to start the seeds with longest time-to-transplant first. You will need to do a second seeding 2 weeks later for the seeds requiring 4 weeks growth before transplanting.

For our fall plant distribution, we used **self-wicking sub-irrigated tray systems** that we put together ourselves with mesh trays donated by local nurseries. Instead of using pots, we used **soil blockers** to make our transplants. We are trying to reduce the amount of plastic we use, plus completely skip the cost of buying it. The downside of using soil blockers is the cost of the blocker itself and the cost of all the components of the soil. Several of our gardeners had blockers so we were able to make many blocks in a short amount of time with minimal cost. Instead, you can re-use 6 pack pots or any other kind of seeding tray to seed your seeds.

Again, while there are many methods to start seeds, the process described below is for making Soil Block mix and using your soil blocker. It also describes how to make a self-wicking tray which requires you water only every few days. Each tray system can hold 48 blocks. The soil blockers we used stamp 2 rows of 4 blocks for a total of 8 blocks. For more detailed instructions, please read our page about [“Seed Starting – Step by Step”](#).



Your seedling trays need to be placed next to each other in a consistently warm (preferably 70 – 85 degrees F) sunny place, preferably on a table. In fall and winter, place them in a green house or in a warm room facing a south facing window. To help with germination, place a seedling heat mat underneath your trays. Fill the bottom trays with water and make sure the wick is hanging in the water. Be careful: the bottoms of the pots/blocks should not rest in the water. Check frequently and add water as needed. Seedlings will need 4-6 weeks before they can be transplanted.

Since we planted 3 seeds per block, 3 seedlings may sprout. After a few weeks, thin the seedlings by pulling out the weakest seedlings. Every block should have one seedling.

When you are ready to plant, harden them off by moving them inside and outside for longer and longer periods of time over the course of three days. This will allow them to acclimatize to their new environment and will give them the best chance at survival outdoors.

## 6. Planning and preparing your garden beds

While your seedlings grow, it's time to prepare your garden beds.

Although different gardening methods exist, they will agree on **some important things** when it comes to planning and preparing your garden:

- Your garden needs a minimum of 6-8 hours of sun daily, from mid-morning to afternoon
- Your garden needs to be level, which is important for watering
- Avoid north facing slopes, as the light will be diffused and causes more shadows
- Stay away from low spots where drainage is poor
- Rows can be planted either direction: north-south, east-west. But tallest plants should be planted either north for east-west rows, and east for north-south rows.
- Your garden needs loamy, well drained soil
- Avoid tall trees unless they are north of your garden bed. Roots may still be an issue.
- Make sure water is close by
- Prepare the soil and incorporate organic compost. Clay soil in particular needs to be broken up and amended to make it more airy and help it drain better.
- Watch [Rachel's video](#) on how to prepare your soil in an organic, sustainable way.

## 7. Resources

If you are new to gardening, here are a few tools and resources that we found helpful:

- **Back to Eden Gardening** is educating gardeners, farmers, and homesteaders how to regenerate soils by practicing regenerative organic growing principles, eliminating the need for tilling and chemicals. Pau Gautschi is an experienced gardener but like most of us, he was toiling and tilling every season to plant his garden. As a devoted Christian, he was inspired by God and His word to develop a much simpler method, without tilling and fertilizing, called "Back to Eden Gardening".
  - We encourage you to watch the **free documentary** at <https://www.backtoedenfilm.com/#/>.
  - Find help at his website: <https://www.backtoedengardening.com/>
  - Instructions on **how to plan and prepare an organic and sustainable garden**: <https://www.backtoedengardening.com/blogs/garden/how-to-install-a-back-to-eden-garden-in-the-spring-its-not-too-late>
- **Silicon Valley Seeds** is a non-profit organization founded by Carl & Rachel, who are members of our Steering Committee. They are dedicated to instilling, encouraging, and enhancing the personal [seed stewardship](#) and [food sovereignty](#) of the people living in Silicon Valley. They are instrumental in keeping South

Bay residents informed about what's taking place within the gardening community, especially what is happening here locally.

- Check out their website at <https://siliconvalleyseeds.org/svs/>
- **Free compost** - List of places where you can find compost – some even for free - in Santa Clara County: <https://siliconvalleyseeds.org/svs/resources/compost/>
- **What to do in the garden on a weekly basis:** <https://siliconvalleyseeds.org/svs/weekly-todo-for-area-gardeners/>
  
- **UC Master Gardeners, Santa Clara County** is a volunteer organization sponsored by the [University of California Cooperative Extension](#). Their mission is to extend research-based knowledge and information on home horticulture, pest management, and sustainable landscape practices to county residents and be guided by our core values and strategic initiatives.
  - Main page: <https://mgsantaclara.ucanr.edu/>
  - **Vegetable growing guides with recommendations for varieties that grow best in our Zone 9b:** <https://mgsantaclara.ucanr.edu/garden-help/vegetables/>
  - **Why and how to compost:** <https://ucanr.edu/sites/scmg/files/29956.pdf>
  
- **Mittleider Gardening Method** brings together the best of the scientific knowledge and experience of different gardening approaches producing high yield gardens. This method is based on maximum utilization of space, time, and resources. Crops are large because plants are close together, nourished by supplemental feedings of natural mineral nutrients (as in hydroponics), but with *no* special equipment. Unfortunately this method uses commercial fertilizers and is therefore not organic and sustainable.
  - Read the **Mittleider Soil Bed Gardening Tutorial**. While we haven't tried this method, the tutorial will teach you many things about gardening, particularly if you are new to this. Find the free version at: [https://growfood.com/wp-content/uploads/2018/12/Mittleider\\_Soil\\_Bed\\_Gardening\\_v5\\_download.pdf](https://growfood.com/wp-content/uploads/2018/12/Mittleider_Soil_Bed_Gardening_v5_download.pdf)
  
- Get inspired and watch **"The Biggest Little Farm"**. This movie chronicles the eight-year quest of John and Molly Chester as they trade city living for 200 acres of barren farmland and a dream to harvest in harmony with nature. Through dogged perseverance and embracing the opportunity provided by nature's conflicts, the Chester's unlock and uncover a bio-diverse design for living that exists far beyond their farm, its seasons, and our wildest imagination.
  - <https://www.biggestlittlefarmmovie.com/>

Again, we will be providing more guides and videos on our Gardenshare website. Please ask your questions via the [contact page](#) or consult our [FAQ page](#). Keep checking Gardenshare at [gardenshare.webstarts.com](https://gardenshare.webstarts.com) for updates to help you be successful this season!

In the mean time, spread the word and forward this newsletter to your Calvary friends.

Happy gardening,  
Calvary Gardening Ministry

P.S. Did you watch the Traditional Skills Summit last week?



While we envision hosting our own Calvary Food Preserving and Traditional Skills parties in the future, we have to prioritize and are focusing on gardening first. In the mean time we can learn from others such as the School of Traditional Skills.

If you are interested in knowing more about canning, making bone broths, animal husbandry, backyard egg laying chickens, etc., you can take classes at <https://schooloftraditionalskills.com/>.

Here are some of the classes they are offering.



**Pressure Canning with Carolyn Thomas**

Join Carolyn Thomas from Homesteading Family as she shows you how to fill your pantry with safe, healthy, and delicious pressure-canned foods!



**Reclaiming Pasture with Joel Salatin**

Join Joel Salatin from Polyface Farm as he shows you how to create high-fertility, sustainable livestock pastures.



**Pasteurizing Meat Chickens with Justin Rhodes**

Join Justin Rhodes from Abundant Permaculture to learn how to raise a freezer full of healthy, pastured, meat-chickens in your backyard, in only 58 days.



**Garden Season Extension with Melissa K. Norris**

Join Pioneering Today's Melissa K. Norris to learn the time tested methods for growing and harvesting fresh vegetables in the cool seasons.



**Raised Bed Gardening with Brian Lowell**

Join Brian Lowell from Next Level Gardening to learn the simple steps to growing abundant and healthy vegetables in simple raised beds, no matter where you live.



**Keeping Milk Goats with Anne Briggs**

Join Anne of All Trades' Anne Briggs to learn how to purchase, care for and milk healthy and happy dairy goats.



**Back To Eden Garden with Paul Gautschi**

Join Paul Gautschi from Back to Eden Gardens as he shows you how to simplify your gardening by working with God's principles as observed in nature.



**Fermenting Vegetables with Lisa Bass**

Join Lisa Bass from Farmhouse on Boone to learn how to use lacto-fermentation to create healthy and delicious vegetable ferments in your own kitchen.



**Curing Pork with Brandon Sheard**

Join Brandon Sheard from Farmstead Meatsmith as he shows you the time-honored, chemical free method for curing your own bacon, ham and prosciutto.



**Nourishing Bone Broths with Sally Fallon Morell**

Join Sally Fallon Morell from the Weston A Price Foundation to learn how to make nourishing bone broths, and then turn them into delicious and health promoting soups.



**Traditional Sourdough Breads with Maureen Diaz**

Join Maureen Diaz from God's Good Table to learn how to make your own sourdough starters and craft delicious and nutrient dense breads from it.



**Backyard, Egg-Laying Chickens with Harvey Ussery**

Join Harvey Ussery from The Modern Homestead to learn to keep a healthy and sustainable flock of backyard egg laying chickens.



San Jose, September 2022