# The Family Garden Plan

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### Introduction

rowing a garden is as much food for the soul as it is for the body. There is little more satisfying, or delicious, than walking out your backdoor and picking a fresh, vine-ripened tomato or filling a colander full of carrots and beets with soil still lingering on the roots.

Watching the cycle of a garden, from the dormant earth, first seed sprouting, producing the harvest, and then gifting us with another seed to perform the cycle again, is like witnessing a small miracle each year. My heart is filled with a gratefulness for the way the good Lord created this earth and the food to nourish our bodies that I don't find in the same depth when purchasing off the store shelf.

After all, God is the Creator—this world and the very depth of nature we see before us is His canvas and design. Watching it up close, how the chill of winter is necessary for production of fruit and some seeds to sprout, to the rains of spring so those seeds can germinate, and the summer warmth to bring everything to fruition and harvest, is a testimony to His hand.

Yet there are springs when the rains aren't bountiful, the sun is scorching, and plants die; and it's in these times perhaps I'm more appreciative of the harvest I get, knowing even when the earth doesn't work with me the way I'd like, God will provide and teach me as I go.

It used to be almost every household had at the very least a small kitchen garden where they grew some of their own food. In much of today's mainstream society we've traded our connection to our food and land for the convenience of having someone else grow it for us. But you and I, my friend (because I consider all other gardeners friends), we know the importance and joy of

raising nourishing and healthy food for ourselves and our family that goes well beyond the plate and pocketbook.

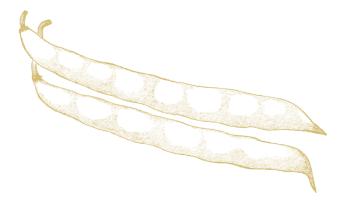
I've found gardening to be one of the simplest and most complex things there is. It really is as simple as plopping a seed into the soil, providing some sunlight and water, and letting it grow. But on the other hand, the condition of the soil, growing zones, pest management, and any number of other things come into play in determining whether that plant will thrive and provide you with a bountiful harvest.

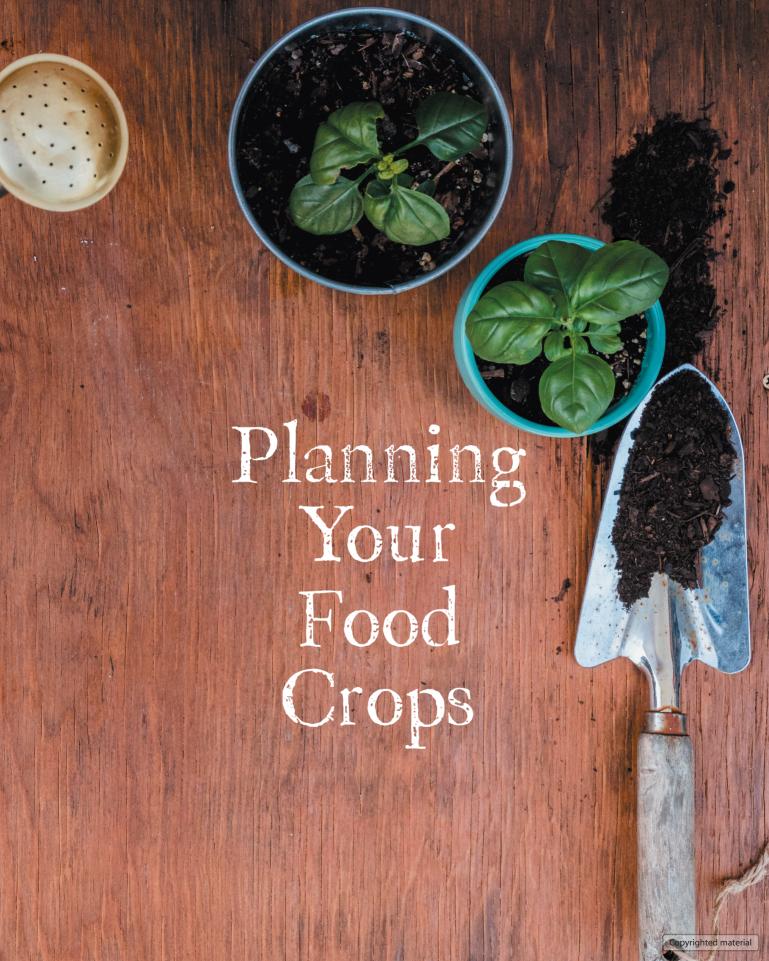
I come from a long line of gardeners. Some of my earliest memories are of springs filled with planting the garden, snapping beans alongside my father, and filling up the jars for the pressure canner alongside my mother. I hail from people who made their living from the land; and if they didn't raise or grow it themselves, they would have gone hungry.

My husband and I, along with our two children, raise all our own meat and over half of our fruits and vegetables for the year on 14.96 acres here in the foothills of the North Cascade mountain range of Washington State. As we strive to increase what we grow and preserve each year, we've learned a lot—more from the failures than the successes, though thankfully we have more successes now than when we first started some 19 years ago.

No matter how many times I've grown the same crop or raised a garden, I learn something new every year and season. A garden will teach you many lessons, and only some of them are about food. It is my aim with this book to walk you through what I've been blessed to learn, what other gardeners who have gone before me have shared, and to help you raise just a little bit more of your own food than you did the year before.

I don't believe it's possible for one book to cover every area of gardening; exhausting every facet of composting, permaculture, and seed saving are all separate books. But I will cover what you need to know to have a solid foundation to raise your own fruits, vegetables, and herbs from planning and planting to harvesting; I'll give you tips to implement and extra resources should you need to dive in deeper than we will in these pages. Deal? Good. Let the growing begin!







## Planning Your Food Crops

Commit to the LORD whatever you do, and he will establish your plans.

PROVERBS 16:3

customized plan based on your family's needs, space, and gardening zone is one of the often most overlooked but critical steps to a successful growing season and harvest. One of the biggest mistakes we made in our early years of homesteading, my husband and I both agree, is that we didn't keep the best of records when we started out.

The small amount of planning done now will guide you throughout your entire year of gardening and ensure you're raising food and crops your family will put to good use. Because, let's face it—it doesn't matter if we have a huge garden if it's full of foods our family doesn't like and we're not eating.

Whether this is your first year or you're a gardening veteran, planning will serve you well. We do this every winter as we gear up for the growing season.

No one garden is the same, nor should it be. Your garden will evolve and change every year, a living canvas for the gardener to erase his mistakes and hone his talent. You'll find my planning very practical. I believe in planting what my family enjoys and eats the most (alas, I've not found a chocolate plant that will grow here—but raspberries are a close second) and can be preserved to stock our pantry for the off-season.

#### CREATING A CUSTOMIZED GARDEN PLAN

No matter if you've been planting and preserving for years or this is your first year, we'll start by going to our cupboards and freezers.

Look at your current pantry and freezer and take note of which foods you eat on a regular basis. Keep track of the meals and foods you're consuming regularly. If you use a written meal plan, this is already done for you.

Do you have spaghetti, chili, or something with tomato sauce in it weekly? What frozen or canned vegetables are you using on a consistent basis? Don't forget the spice and herb cupboard.

Document this, write it all down, and keep a record of what you'd use in an average month. Then multiply out for a year. Use the Food Needs for a Year Worksheet at the end of this chapter to help you do so. This step lets you know what and how much to plant for the current year's gardens.

#### **Example from My Kitchen**

When I went through this process, I found in January that I had 18 jars of tomato sauce left. Our typical first large harvest of tomatoes (enough to make sauce) isn't until August. I can use approximately two jars a month if I don't want to purchase any from the store. This past year I tried a new type of tomatoes and didn't grow as many paste tomato plants as I usually do. I made a note to go back to 20 plants of San Marzano Lungo 2.

With 27 jars of cucumber pickles left, at a jar a week until main harvest time, we have plenty (we generally don't eat an entire quart of pickles in one week). This means having three hills (nine plants) of pickling cucumbers is the perfect amount for our current needs.

I go through this process with all my preserved foods, including dehydrated, canned, and frozen food.

Using the Food Needs for a Year Worksheet, evaluate how much food you have left from last year's garden or how much you need to feed your family for a year of each crop. Now it's time to plan what crops and how much of them you'll be planting for your family's needs. It's important to note: this will likely change every year.

One year I had 30 jars of salsa left over. I didn't can any salsa that year; instead, I used up what we had. Some years I preserve a double amount of a crop and skip growing it the following year. Best practice is to use home-canned goods in 12 to 18 months.

It's crucial that you go through your inventory each year and not run on autopilot. Right now, my son is hitting his teenage years (aka eating a lot more food). My daughter loves pickles (she didn't use to). Over the years, we eat more of some things or less; and the beauty and point of growing your own food is that you can tailor your harvest to your exact needs.

#### YOUR GROWING SEASON

Gardening zones and first and last frost dates will determine what you can grow and when to plant it. Basically, your entire gardening season depends upon these dates.

To search online for your gardening zone information, type into the search bar your zip code, city, and state with the words *average first and last frost date* and *gardening zone*. It's also wise to ask an experienced gardener in your area if possible.

With the widespread use of social media, you can even find gardening groups online in your specific area. These can be goldmines of information, especially when it comes to microzones and microclimates.

Your gardening zone allows you to know which plants will grow and thrive in that specific location. The USDA hardiness map divides North America into zones based on the average annual minimal winter temperature using 10-degree Fahrenheit increments. You can access the map at https://planthardiness.ars.usda.gov/PHZMWeb/.

After identifying your gardening zone and first and last frost date, you'll want to look at microzones.

#### What Is a Microzone?

Microzones are smaller growing zones within your large gardening zone based on the USDA hardiness guidelines. For example, according to multiple sources, I am the larger gardening zone 8a, with a last average frost date (when I can safely plant warm-weather plants in the spring) of April 8 and first average frost date of November 3.

This information supposedly applies to our whole county, but because I've lived and gardened on this same stretch of land my entire life, I know this isn't true. If you drive toward the ocean an hour away from us, you'll find the information fairly accurate; but we live in the foothills of the Cascades and sometimes experience extreme winter low temperatures for a week or two that would put us much closer to gardening zone 6 for frost dates and average winter temps of 7b.

The first average hard frost date for us (a killing frost that wipes out your warm-weather crops) is usually the first part of October. We can experience light frosts as early as the middle to end of September.

We've also had frost as late as May 1 and never plant our warm-weather crops until mid-May, sometimes as late as Memorial Day weekend. This is about two to three weeks later than our neighbors down the mountain and lower in the valley.

This gives us about a 150-day growing season for warm-weather crops between the frost dates. You can see why it's important to take note of frosts in your area, talk to longtime gardeners, and use the online information as your guideline. Record your gardening zone, frost dates, and growing season in the Growing Season Worksheet at the end of the chapter.

Armed with this information, you can begin to select which plants will grow in your area and which varieties to plant. When viewing seed packets, you'll often see an indication of 50 days or 120 days to harvest. This is the number of days from sowing the seed until it produces a harvest.

When you know how many days are in your growing season, you can better select varieties that are suited to your area and time frame.

Don't waste your time trying to baby plants that aren't adapted to your growing climate and season. I live in the Pacific Northwest, where it's too cold to grow okra and sweet potatoes. Could I try with a large black grow bag or using solarization methods of clear plastic to heat up the soil? Yes, maybe someday—but it would take a lot of babying and extra work on my part without a high likelihood of a large crop if we have a rainy, cool stretch during the summer months. For this reason, it's very low on my gardening priority list. In the same vein, if you live in a hot climate, you're probably not going to have luck with snow peas and spinach; they like cooler weather.

Using the list of foods you and your family eat often (see page 24), see which plants won't grow in your gardening zone and cross them off.

Below you will find lists of crops that do best in warm weather (intolerant of frosts) and cool weather (handles frosts).

If you live in southern hot climates, avoid some of the cool-weather crops; many of them won't germinate, bolt quickly (stop growing, turn bitter, and immediately go to seed), or won't produce fruit if temps get above 75 degrees Fahrenheit. You may try them in winter depending on your average temperatures.

If you live in northern climates, you may have trouble growing some of the warmer crops even in the summer months if you don't use a hoop house or other coverings on cooler nights.

That said, there are usually some workarounds that will allow you to grow most of the crops you wish, which we'll discuss next.

#### **Cool-Weather Crops**

cauliflower	celery	lettuce	potatoes
	·		
Will Tolerate Frosts			
beets	carrots	leeks	peas
bok choy	chard	lettuce (cold-hardy	radishes
broccoli	garlic	leaf varieties are best)	rutabaga
brussels sprouts	kale	onions	spinach
cabbage	kohlrabi	parsnip	turnips

#### **Warm-Weather Crops**

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beans
corn
cucumber
eggplant
herbs (basil, cilantro, dill, German chamomile, nasturtium, parsley, stevia)
melons
okra (does best with warm days and nights; cool temps result in low to no yield)
peppers
pumpkins
sweet potatoes (Soil temperature needs to be at 80 to 90+ degrees Fahrenheit. You can do this in
    northern climates, but it requires using solarization to heat the soil and enough hot days throughout the
   summer for growth and harvest.)
summer squash (zucchini, pattypan, crookneck, etc.)
tomatillos
tomatoes
winter squash (acorn, butternut, Hubbard, spaghetti, etc.)
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#### **Microclimates**

A whatta climate? So glad you asked. Microclimates exist naturally on your property, and you can even create or enhance them for your crop needs. They work very well when you may have a borderline growing environment for a specific plant.

Almost all yards or houses have four particular areas.

**Southern exposure** areas on your property or in your yard, especially tucked up near a house or shed, get hotter than any other spot on your property. If you're in a cooler climate, this is an ideal place to grow some of those heat-loving plants. When my rosemary plant was in the main garden area, it died every single winter; but when I put it in a large, black pot and nestled it against our back deck, smack-dab in the middle of our southern exposure, it's survived every winter and is now going on five years old. Behold, the power of microclimates.

**Eastern exposure** receives the first light of morning, but usually moves into the shade come midday. This is perfect for plants that don't like to get too hot and tolerate some shade. I planted my sage in our eastern-exposure area and it flourishes.

**Western exposure** usually gets the afternoon sun all the way through to sunset. This is great for plants that require a lot of sunlight and tolerate the high heat of midday sun.







Northern exposure is best for plants that don't like to get hot and can tolerate quite a bit of shade. Most vegetables require six or more hours of sunlight, so be careful if you have deep shade in your northern areas. We don't grow any of our vegetables or fruit in northern exposure with the exception of blackberries; we have invasive varieties that have been deemed noxious weeds by our county, and they don't seem to be deterred by full shade.

Other microclimates occur in natural hills, slopes, and valleys on your property. Some plants need more water and will grow better at the bottom of a slope or in a dip where water will naturally funnel. But other plants don't like wet feet and will not do well here.

**On our property**, the bottom of the hill is naturally protected from high winds. It receives more water, which helps in summer when water is scarce. But during the rainy season (here in the Pacific Northwest this would be pretty much mid-September through June), it can become waterlogged if the soil isn't draining well.

**Rocky areas**, especially with larger rocks or cement, will naturally soak up the heat from the sun and radiate it. This is best for drought-tolerant and heat-loving plants. Our lavender and oregano do quite well in these spots. We also grow our grapes over the top of our cement patio.

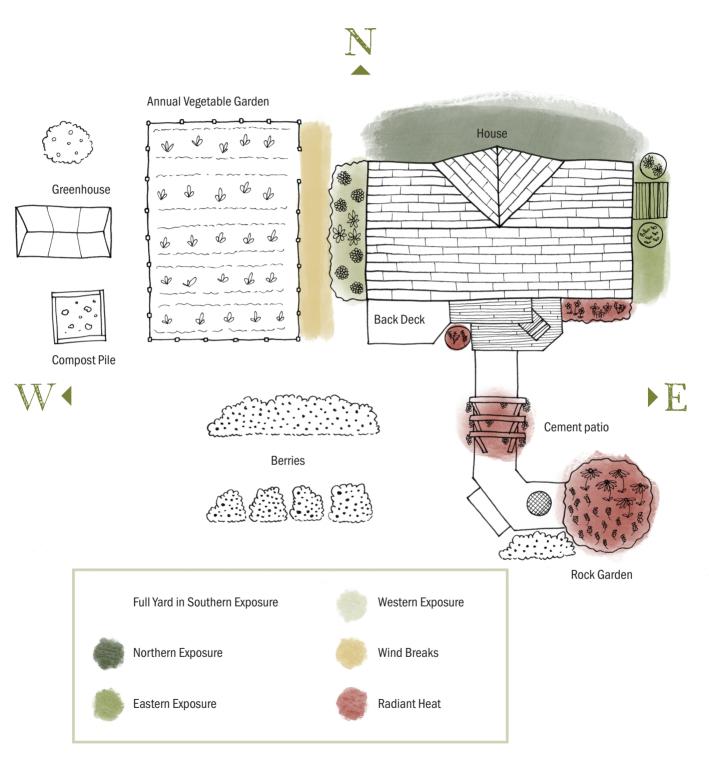
Wind breaks create a protective block from winds that can damage plants. We live in a valley, and during the winter freezing winds funnel down from the Frasier River Valley in Canada when conditions are right (the old-timers here say, "The northeastern is blowing") and blow frigid gusts across our top pasture. We have a natural wind break from the trees in front of our house, but the top pasture is wide open. Where the hill drops down to the bottom pasture, it blocks the wind. This is important for protecting younger trees and tender plants.

If you have a windy area in your yard or property, you can create wind blocks with a building, other plants and trees (make sure you choose evergreen types so you have year-round protection), or even large rocks.

Take note of the natural microclimates on your property to optimize your planting locations, and add manmade variations if needed.



#### **My Microclimates**



#### **Season Extenders**

Even though cold temps dictate our planting and harvesting, the use of season extenders can provide extra weeks or months of growing and harvest time.

Season extenders are used in the spring and the fall. Our high tunnel (unheated greenhouse) gives at least four weeks of additional growing time. I can plant two weeks earlier in the spring and keep my tomatoes protected from frost by at least two weeks in the fall. In the winter, I'm able to grow lettuce almost all season long.

There are many other options that don't include a greenhouse or building.

Frost cloth, sheets, or blankets work best for cool-weather plants. If applied correctly (staked to the ground to trap heat) they will protect plants down to 30 or 20 degrees Fahrenheit.<sup>[1]</sup>

Cold frames use a window on top of an open box, usually made of wood or straw bales, to create a greenhouse effect.

Hoop houses or mini tunnels use greenhouse plastic or row cover to insulate plants underneath.

Individual covers in glass or plastic (cloches): place a milk jug (top cut off) or glass jar upside down over top of the plant at night, and remove in the morning.

No matter which season extender option you choose, remember you need to monitor temperatures—remove or open them when temps are warm and close them when temps are cold.



#### **FOOD NEEDS FOR A YEAR WORKSHEET**

Here is a worksheet to help you document and plan out approximate yearly needs based on your family's eating habits. This will help you both during the growing season for fresh eating per week and also with your food preservation for the pantry shelf.

#### **Individual Fruits/Vegetables**

Food	Serving Amount Per Meal	Week 1	Week 2	Week 3	Week 4	Weekly Average	Yearly Need
	2 cups, 1 pound, etc.	Serving amount x meals	Total serving amounts divided by 4 weeks	Average weekly use x 52 weeks			
green beans	2 cups	2x2= 4 cups	2x0= 0 cups	2x1= 2 cups	2x0= 0 cups	6 cups/ 4 weeks= 1 1/2 cups	1 1/2 cups x 52 weeks = 78 cups

#### **MICROCLIMATE WORKSHEET**

Evaluate your yard, property, and house, and identify your existing microclimates. Write down any areas where you wish to create a microclimate. In cooler climates take advantage of southern exposure areas, especially when up against a wall, rocks, or cement areas that retain and release the heat from the day during the night hours for heat-loving crops like basil and rosemary during the winter.

Existing Microclimate	Crop
Southern Exposure	berries
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#### **SEASON EXTENDER WORKSHEET**

What season extenders do you plan to use for which crops?

*Example:* I use our greenhouse for tomatoes and peppers. The sheltered herb pots tucked up against the house allow me to harvest perennial herbs almost year-round. The house provides a wind break for the annual vegetable garden without blocking the sun and allows us to grow and harvest kale ten months out of the year. I use plastic cloches (reused milk jugs and produce clam shells) for winter sowing and greens.

Season Extender	Crop
greenhouse	tomatoes, peppers

