

# Elevate Your Garden

A GUIDE TO  
RAISED BED GARDENING

BEST PLANTS  
& SOIL FOR  
RAISED GARDENS

Designs,  
Checklists, Charts  
& More...

CELEBRATING  
**25**frame**it**all  
YEARS Eco Fence & Garden

# CONTENT

**3 Benefits & Planning Your Garden**

**6 Planting Zones**

**8 Material, Designs, & Layouts**

**15 Soil Composition**

**18 Fruits & Veggies**

**23 Herbs**

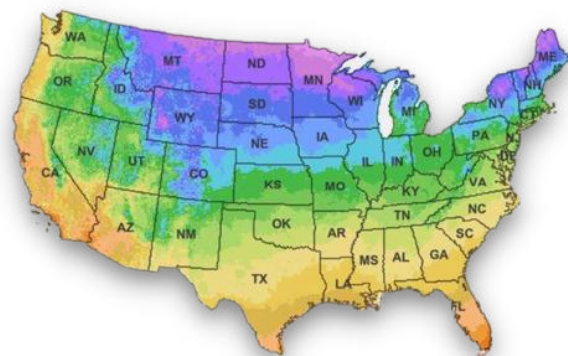
**24 Companion Planting**

**27 Year-round Gardening**

**28 Succession Planting**

**29 Pests & Beneficials**

**31 Customer Designs &  
Video Resources**



# Raised Bed Gardening: What is it?

Raised bed gardening is a technique that involves growing plants in a garden bed that is elevated from the ground. Raised bed gardening offers countless benefits. Elevating the soil above the ground allows for quality control, creating a warm, nutrient-dense, and well-draining environment that fosters healthy root development and plant growth.

By elevating your soil with a Raised Garden Bed, you can be more efficient with your growing space, be more exact with your soil composition, and even eliminate the need for weeding and bending. Frame it All's raised garden bed system allows for endless designs; but what can you actually grow in a Raised Garden Bed?



The simple answer is you can find success growing nearly anything that will fit in your raised bed so long as you have access to the appropriate sunlight, space, and climate for the plants you want to grow.

# Raised Bed Gardening: The Benefits

Raised Garden Beds can save time and energy while being a great investment for avid gardeners. Above ground garden beds allow you to bypass poor soil on your property, keep your soil temperature consistent with insulating boards, and even deter a lot of pests that can no longer access ground-level vegetation.



## **Block Weed Growth:**

Place underlayment, cardboard, or other barrier on the bottom of your raised bed before filling with soil to reduce weed growth.

## **Reduced Work:**

Eliminates the need to till heavy clay and stone filled soil, and reduce the need for bending while harvesting, watering, and weeding.

## **Soil Control:**

Gain full control over your soil composition. Ground soil can contain unwanted components such as gravel, sand, and clay that are almost impossible to amend.

## **Maximize Growing Space:**

Make more out of your available space by building gardens over areas with poor soil.

# Raised Bed Gardening: Planning Your Garden

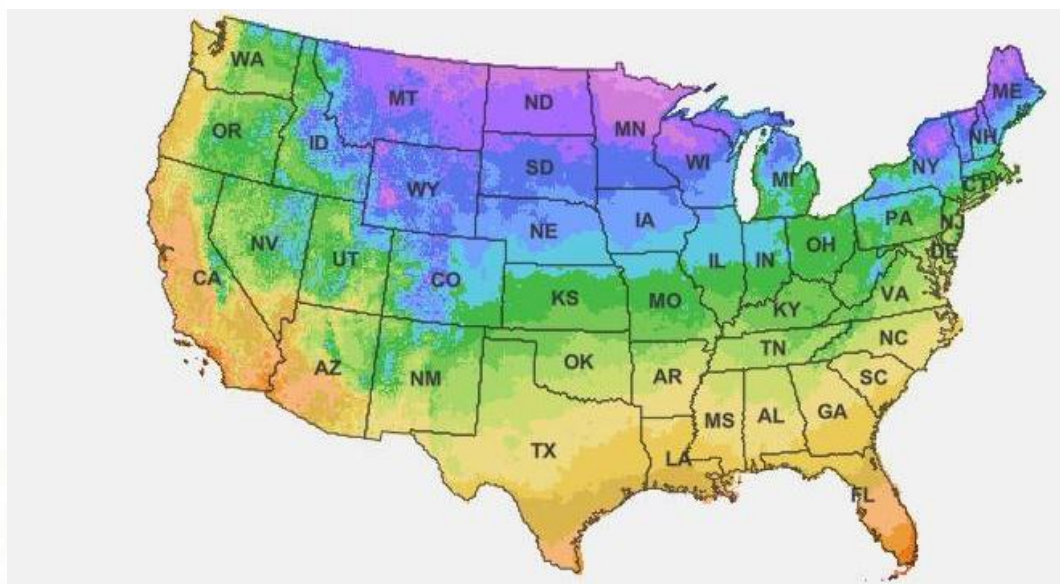
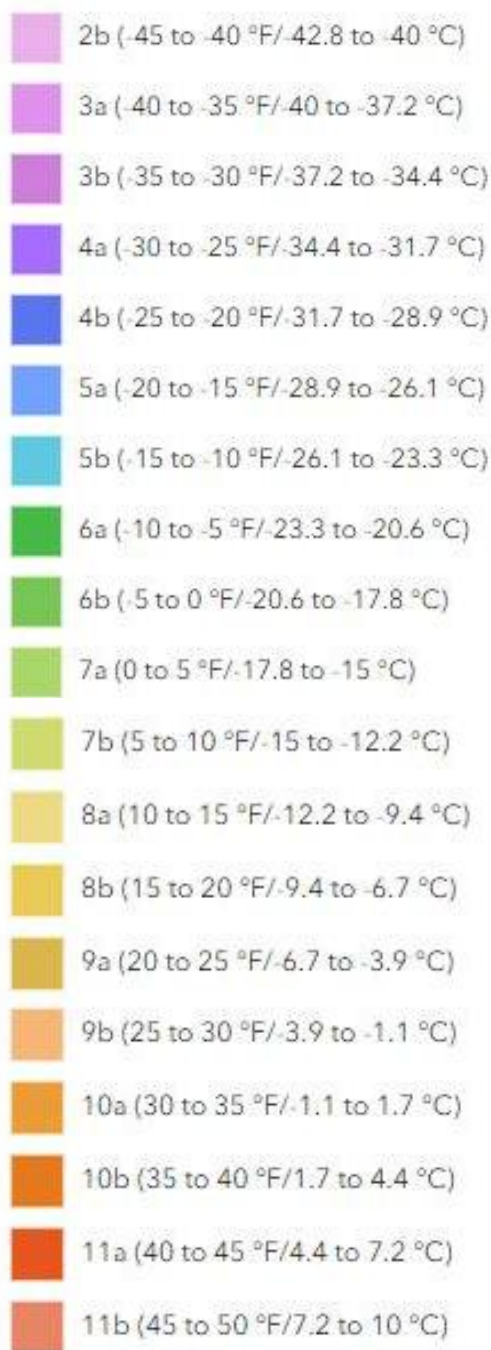
When starting your raised garden bed journey, remember these essential tips. They will guide you in cultivating robust and healthy plants, resulting in bountiful and safe-to-consume harvests.



- Choose an area of your property that meets the sunlight requirements of the plants you want to grow.
- Allow full access to your raised bed from all sides to allow for easy tending, harvesting, weeding, and watering. We recommend leaving at least 2 feet on all sides of your raised garden bed.
- Attaching a trellis can allow you to expand your growing space vertically and allow greater harvests of tomatoes, beans, cucumbers, melons, and more! **(Try our Veggie Wall Kit!)**
- Mark out and measure the layout of your raised garden bed before assembling.
- Avoid using Pressure Treated Wood
- Plan and build your raised garden bed with enough depth for the plants that you want to grow. 6-12 inches of depth is adequate for most plants.
- Grow plants that will attract beneficial pollinators to your garden.

# Raised Bed Gardening: Planting Zones

Although raised beds can grow almost anything, some plants might not be viable in your planting zone. It's important to know what your USDA grow zone is to understand what plants can be grown in your area.

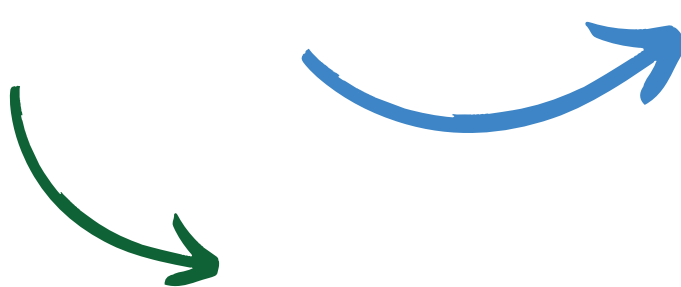


The chart above is from the United States Department of Agriculture (USDA) depicting the Plant Hardiness Zones of the USA. Each zone is categorized based on its average temperature trends and minimum temperatures. In total there are 13 planting zones, with each zone being categorized every 10° F although the coldest zone (1) and hottest zones (12 and 13) are not present in the continental United States. The higher the number of the zone, the hotter that region is. Zones are then further differentiated by "a" and "b", denoting a 5° F difference with "a" being warmer and "b" being colder.

# Raised Bed Gardening: Planting Zones

Before making decision on what you're growing in your garden, it's paramount that you understand the frost dates for your area and when to sow or transplant specific plants.

By referencing the [Frame it All Frost Charts](#) and [Know & Grow Plant Guide](#), you can choose the plants that will be sure to thrive in your region and know exactly when to plant them!



### FROST CHART

CITY	AVERAGE LAST SPRING FROST	AVERAGE FIRST FALL FROST	CITY	AVERAGE LAST SPRING FROST	AVERAGE FIRST FALL FROST
ALBANY, NY	April 27th	October 13rd	GREAT FALLS, MT	May 9th	September 25th
ALBUQUERQUE, NM	April 13rd	October 28th	GREEN BAY, WI	May 6th	October 13rd
ALTOONA, PA	May 6th	October 4th	GREENVILLE, ME	May 27th	September 20th
ASHEVILLE, NC	April 12nd	October 24th	HARRISBURG, PA	April 9th	October 30th
ATLANTA, GA	March 21th	November 18th	HARTFORD, CT	April 22nd	October 19th
ATLANTIC CITY, NJ	March 31th	November 11th	HOUSTON, TX	March 14th	November 21th
AUGUSTA, GA	March 14th	November 1th	HURON, SD	May 4th	September 30th
BAKERSFIELD, CA	February 21th	November 25th	INDIANAPOLIS, IN	April 17th	October 27th
BALTIMORE, MD	March 28th	November 19th	JACKSONVILLE, FL	February 16th	December 16th
BANGOR, ME	May 1th	October 4th	KANSAS CITY, MO	April 6th	October 30th
BEND, OR	June 8th	September 7th	KNOXVILLE, TN	March 31th	November 6th
BERLIN, NH	May 29th	September 15th	LA CROSSE, WI	May 1th	October 8th
BINGHAMTON, NY	May 4th	October 6th	LAS VEGAS, NV	March 16th	November 10th
BIRMINGHAM, AL	March 19th	November 14th	LEXINGTON, KY	April 13rd	October 28th
BISMARCK, ND	May 11th	September 24th	LITTLE ROCK, AR	March 17th	November 13rd
			LOS ANGELES, CA	January 3rd	December 28th
			Louisville, KY	April 1th	November 7th
			Brook, TX	April 1th	November 9th
			ROUETTE, MI	May 13rd	October 19th
			RYSVILLE, CA	February 21th	November 21th
			MEMPHIS, TN	March 20th	November 12nd
			MIAMI, FL	N/A	N/A
			MILWAUKEE, WI	April 20th	October 25th
			MINNEAPOLIS, MN	April 30th	October 13rd
			MOBILE, AL	February 17th	December 12nd
			MONTGOMERY, AL	February 27th	December 3rd
			MEMPHIS, TN	March 28th	November 7th
			WARK, NJ	April 3rd	November 8th
			W HAVEN, CT	April 15th	October 27th
			W ORLEANS, LA	February 20th	December 9th
			W YORK CITY, NY	April 7th	November 12th
			WFOK, VA	March 19th	November 16th
			WTH PLATTE, NE	April 30th	October 7th
			WEN, UT	May 6th	October 8th
			WYOMING CITY, OK	March 28th	November 7th
			WYOMING CITY, NE	April 14th	October 20th
			WYOMING CITY, CA	January 18th	December 18th
			WYOMING CITY, ADENA, CA	February 3rd	December 13rd
			WYOMING CITY, KERSBURG, WV	April 16th	October 21th
			WYOMING CITY, IRIA, IL	April 22nd	October 20th
			WYOMING CITY, LADELPHIA, PA	March 30th	November 17th
			WYOMING CITY, DENIX, AZ	February 5th	December 6th
			WYOMING CITY, TSBURG, PA	April 20th	October 23rd
			WYOMING CITY, TSBFIELD, MA	May 12nd	September 27th
			WYOMING CITY, CATELLO, ID	April 28th	October 6th
			WYOMING CITY, RYLAND, ME	April 29th	October 15th

### Know & Grow Plant Guide

Plant Name	Plant Spacing (Inches Apart)	Plant Height (Inches)	Partial Shade Tolerance	Nutrient Demand	Water Demand	Plant pH Preference	Best Growing Weather	Seed to Transplant size (Weeks)	Best Planted by Seed or Transplanted	Earliest Outside Planting Before (B) or After (A) Last Frost	Last Planting Before First Fall Frost
ASPARAGUS	18-24	60-72	some	high	high	6.0-8.0	warm	n/a	transplant	2 weeks (B)	n/a
BASIL	12	12-24	poor	low	medium	5.5-6.5	warm	3 to 5	seed	2 weeks (A)	11 weeks
BEAN - LIMA BUSH	6	10-15	some	low	high	5.5-6.5	warm	3 to 4	seed	3 weeks (A)	11 weeks
BEAN - LIMA POLE	3	8-15	some	low	high	6.0-7.5	warm	3 to 4	seed	3 weeks (A)	12 weeks
BEAN - SNAP BUSH	6	10-15	some	low	medium	6.0-7.5	warm	3 to 4	seed	3 weeks (A)	9 weeks
BEAN - SNAP POLE	3	8-15	some	low	medium	6.0-7.5	warm	3 to 4	seed	3 weeks (A)	10 weeks
BEEF	3	6-12	some	high	medium	6.0-7.0	cool	4	seed	2 weeks (B)	9 weeks
BORAGE	12	12-36	some	medium	low	n/a	warm	n/a	seed	1 week (B)	10 weeks
BROCCOLI	12	18-24	some	high	medium	6.0-7.0	cool	6 to 8	transplant	2 weeks (B)	10 weeks
BRUSSEL SPROUT	12	36-48	good	high	medium	6.0-7.5	cool	5 to 7	transplant	2 weeks (B)	11 weeks
CABBAGE	12	12-15	good	high	high	6.0-7.5	cool	5 to 7	transplant	2 weeks (B)	12 weeks
CARROT	3	12-18	some	low	medium	5.5-7.0	cool	4 to 5	seed	2 weeks (B)	11 weeks
CAULIFLOWER	12	18-24	some	high	medium	5.5-7.5	cool	6 to 8	transplant	2 weeks (B)	12 weeks
CELERY	6	16	some	high	high	6.0-7.0	cool	8 to 10	transplant	2 weeks (A)	17 weeks
CILANTRO	6	12-24	poor	low	n/a	n/a	warm	3	seed	2 weeks (A)	n/a
COLLARD	16	24-30	good	high	medium	6.0-7.0	cool	6 to 8	seed	2 weeks (B)	12 weeks
CORN	12	72-96	poor	high	medium	5.5-7.0	warm	4 to 5	seed	4 weeks (A)	12 weeks
CUCUMBER	6	48-72 with trellis	poor	high	high	5.5-7.5	warm	4 to 5	seed	2 weeks (A)	11 weeks
DILL	12-24	36-48	poor	low	medium	6.0-6.5	cool	4 to 6	seed	2 weeks (A)	12 weeks
EGGPLANT	12	24	poor	high	high	6.0-7.0	warm	6 to 8	transplant	2 weeks (A)	11 weeks
ENDIVE	12	8-14	good	high	high	6.0-7.0	cool	4 to 6	seed	2 weeks (B)	13 weeks
GARDEN CRESS	3	3	good	high	high	6.0-7.0	cool	1 to 2	seed	2 weeks (B)	4 weeks
GARLIC	6	12-24	poor	medium	medium	5.5-7.5	cool		clove	2 weeks (B)	25 weeks
KALE	12	8-12	good	high	high	6.0-7.5	cool	6 to 8	seed	2 weeks (B)	11 weeks
KOHLRABI	3	12-18	some	high	high	6.0-7.5	cool	6 to 8	seed	2 weeks (B)	9 weeks
LEEK	3	24-36	poor	high	high	6.0-8.0	cool	7 to 9	transplant	2 weeks (B)	13 weeks
LETTUCE	6	4-8	good	high	medium	6.0-7.0	cool	4 to 6	seed	2 weeks (B)	9 weeks
MARIGOLD	3	6-12	poor	medium	medium	5.5-7.0	warm	3 to 4	transplant	2 weeks (A)	12 weeks
MAJORAM	6	24	poor	medium	low	7.0-8.0	warm	5 to 6	seed	2 weeks (A)	n/a
MELON (MUSK)	12" (on trellis)	60-144	poor	high	high	6.0-7.0	warm	4 to 5	seed/transplant	5 weeks (A)	14 weeks
MUSTARD GREEN	6	72-216	good	high	high	6.0-7.5	cool	4 to 6	seed	2 weeks (B)	7 weeks

# Raised Bed Gardening: Material Types

At their essence, Raised Garden Beds are simply structures that can elevate soil above ground level. With this in mind, there are plenty of materials that can accomplish this task. When choosing a material, you want to avoid anything that has a harmful chemical coating, especially when you are growing edibles. Pressure treated wood and non-agricultural paints should be avoided.

## **Wood-Plastic Composite**

Wood-Plastic Composite (WPC) is a material made from a mixture of recycled plastic and sustainable wood fiber. It provides the benefits of wood with greater durability, weather resistance, and customization options.



## **Galvanized Steel**

A great choice for maximizing garden strength and height. The added strength of a metal garden allows you to build a taller garden however with greater height comes greater amounts of soil needed. Many options also offer easy assembly.



## **Wood**

A good option for beginner gardeners that are just dipping their toes into the world of growing. Wood will last for a fraction of the time of the above options, but can be more accessible than alternatives.





# Raised Bed Gardening: Designs

Raised garden beds offer endless customization potential, allowing you to optimize your growing space for output, aesthetic, efficiency, and location. Depending on your personal garden goals, some of these aspects will take priority over others. When choosing your garden design, understand that there is not one singular 'correct' way to build a raised garden bed.

## **Trellis Garden:**

Expand your growing space vertically with a trellis attachment. This will maximize your growing space and allow you to grow vining crops such as Cucumbers, Tomatoes, Beans, and Melons.



## **Animal Barrier Garden:**

Keep unwanted garden pests away from your hard earned produce with Animal Barrier fencing. This is an effective measure against rabbits, deer, pets, and other mammalian herbivores.

## **Square Foot Gardening**

A recommended gardening style for small spaces with big ideas. Square foot garden allows you to efficiently organize your garden bed into a grid, with a separate plant in each square foot.



# Raised Bed Gardening: Designs

## **Keyhole Gardens:**

If you've got a lot of unused table scraps or lawn clippings, a keyhole garden is a great consideration. Keyhole gardens are designed with a composting element in the center to repurpose organic material and evenly disperse it in your garden.



## **Walk-in Gardens:**

Designing your raised garden bed with a central walking area allows for excellent accessibility, reducing leaning and walking into your bed during harvesting. Walk-in gardens can also be very practical if you are looking to surround your garden with an animal fence.

## **Patio Gardens:**

A lawn is not a requirement for gardening! With elevated and self-watering planters being an accessible option nowadays, any hard surface can become a lush forest of vegetation. Growing space can be expanded to decks, balconies, patios, and roof tops.

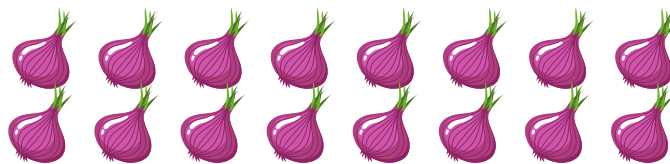


# Raised Bed Gardening: 4' x 8' Spring Layout

One of the most common and versatile Raised Garden designs is a 4' x 8' bed. Although simple in concept, the 4' x 8' design offers immense versatility for gardens of all experience levels. This design can easily fit into most spaces and multiple can be installed next to each other to maximize walking and harvesting space between garden beds.

## Spring Season Plant Layout:

2 Rows of Onion



2 Tomato Plants  
Paired with Basil



3 Pepper Plants  
(Your Choice)



1 Row Kale/Swiss  
Chard  
1ft Spacing



2 Patio Variety  
Cucumber Plants



1 Row of Beets



1 Row of Carrots



# Raised Bed Gardening: 4' x 8' Fall Layout

In the Fall you can continue your gardening season with a variety of leafy greens and root vegetables like beets and radish. A single 4' x 8' garden bed is enough to supply salads for most of the fall season.

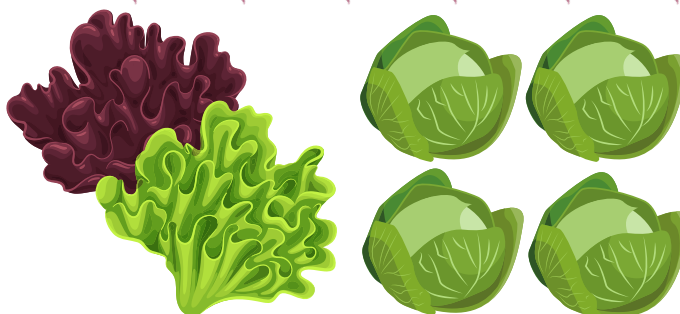
## Fall Season Plant Layout

1 Row of Beans



4 Broccoli Plant (1 sq. ft. Spacing) and 4 sq. ft. Spinach

2 Rows Beets



4 Cabbage (1 sq. ft. Spacing) and 4 sq. ft. Lettuce

2 Rows Beets



3 Rows Radish

# Raised Bed Gardening: Layouts



## Spacing & Size

- Leave room to access beds (2-4ft)
- 4ft width to prevent leaning into bed
- 5.5 - 11 in. depth for most plants
- Taller beds can reduce bending but require cross support boards

## Location Tips

- Consider light access to bed year-round
- Mulch around plants and between beds to reduce weed growth
- Build close to your water element
- Account for plant spread when they have fully matured



## Avoid

- Tight raised bed spacing
- Excessively wide raised beds
- Building too high without cross supports
- Building on an unlevel surface as this can cause structural complications to your bed over time



# Raised Bed Gardening: Layouts



## Rows

- Efficient use of space that conforms to most backyard landscapes
- Length and widths are highly customizable to fit your space
- Works seamlessly with Veggie Walls, Animal Barriers, and Greenhouse attachments



## Walk-in

- Great accessibility from center location
- Easy to defend against garden pests
- Straightforward drip irrigation layout
- Allows for gate installation
- Contained and easy to manage
- Requires a larger space



## Terraced

- Accommodates multiple root depth requirements with one bed
- Dig into unlevel ground to flow with your landscape
- Can work into small and large spaces
- Aesthetic appeal that adds interest to your landscape

# Raised Bed Gardening: Soil Composition

One of the main benefits of raised garden beds is the control they give you over your soil composition. Some areas of the United States are known for their poor soil quality, such as North Carolina where you'll find compacted clay only a few inches into the ground.



Raised garden beds allow you to bypass the shortcomings of your local soil by filling your beds with exactly what your plants need - nutrients! Every time a plant is grown in a plot of soil, it takes in nutrients, depleting those available for next growing season. The good news is, raised gardens make it easy to add organic material to replenish the reserves.

## **Raised Garden Soil Composition**

We recommend using a 1:1 mixture of compost/manure and light potting soil/screened topsoil for raised garden beds. Kellogg Raised Garden Bed & Potting Mix, Bonnie Harvest Select Raised Bed Soil, and Miracle Gro Potting Mix are all great options to fill Raised Beds. The key is to have a light soil mix, with the appropriate pH and plenty of nutrients.

**DO NOT USE** heavy soils that contain large amounts of clay, gravel or sand.

# Raised Bed Gardening: Amending Soil

Just as important as what soil you start with is what you add to your soil over time. Amending your soil each year is a necessity to ensure the best results out of your garden beds. As mentioned previously, each year nutrients are consumed by the plants that you grow. Those nutrients need to be replaced with organic material such as compost and manure.



## Here are additives to improve your soil each growing season

- Lawn Clippings
- Peat Moss
- Decomposed leaves
- Manure
- Worm Castings
- Decomposed table scraps (no animal product)

## Improving Water Retention

Light and nutrient dense soil mixtures are great for growing edible produce, but this type of soil is susceptible to drying out quickly. Covering the soil around your plants with mulch will help with water retention.

Mulch improves water retention in garden beds by reducing evaporation, preventing weed growth, and regulating soil temperature. When apply mulch to your garden bed, leave space around the stem of your plant to prevent moisture build up and mold growth on your plants.



# Raised Bed Gardening: Soil Layers

Filling raised gardens with soil can get expensive, especially if you are building a taller raised bed where the volume needed can be 2-3 times the amount required for smaller sizes. If you went with a taller raised garden bed to increase the convenience of your garden experience, there's no need to worry as there are methods of layer your raised garden to conserve on the amount of expensive soil required.



The height of each soil layer can vary but the most important aspect for taller beds is to leave at least 12 in. of high-quality soil at the top so your roots have enough space to grow out. The middle layer of highly decomposable organic material will slowly release nutrients back into the soil as they decompose. Finally, the bottom layer of logs and man-made papers will take the longest to decompose and primarily serves to raise the soil level of your raised garden bed.

# Raised Bed Gardening: Fruits & Veggies

## Tomatoes

**Maturation Time: 60-80 Days**

These versatile plants thrive in sunny locations with well-draining soil, and they can be grown in both outdoor gardens and containers. Often times the limiting factor for tomato plant height is the availability of vertical growing support. Use a Veggie Wall trellis system to grow your tomato plants to 6-8 ft. height.



## Cucumbers

**Maturation Time: 50-70 Days**

Growing cucumbers is a delightful and straightforward process that yields fresh and crisp fruits for your kitchen. Cucumbers thrive in warm temperatures and well-draining soil, making them ideal for outdoor cultivation in sunny locations or inside greenhouses. For maximum harvest, consider using a trellising system to allow greater vertical growth.



## Carrots

**Maturation Time: 60-80 Days**

Carrots are cool-season vegetables that thrive in loose, well-draining soil with consistent moisture. As the fruit of a carrot is produced underground, they are an especially good choice for raised gardens as the carrots won't have to deal with rocky soil during their growth. Make sure to sufficiently thin your carrots to make room during their development.



# Raised Bed Gardening: Fruits & Veggies

## **Leafy Greens**      **Maturation Time: 30-75 Days**

Leafy greens, such as lettuce, spinach, and arugula, are quick-growing vegetables that thrive in cooler weather and prefer well-draining soil. Whether grown in garden beds, containers, or even small spaces like window boxes, leafy greens provide a continuous supply of fresh, nutrient-rich leaves for salads, smoothies, and various culinary delights throughout the growing season.



## **Peppers**      **Maturation Time: 60-90 Days**

Peppers are warm-season fruit that require full sun, well-draining soil, and adequate water to thrive. With a wide variety of pepper types available, from sweet bell peppers to hot chili peppers, gardeners can enjoy an array of flavors, colors, and heat levels. Regular watering and protection from pests and extreme temperatures will help ensure a bountiful harvest of flavorful peppers from your garden.



## **Potatoes**      **Maturation Time: 70-120 Days**

Potatoes are versatile, cool-season vegetables that can be grown in various climates and soil types. Potatoes fall within 2 groups: determinant and indeterminant. Determinant potatoes grow all of their potatoes in a single layer and thus do not require mounding. Indeterminant potatoes will produce potatoes in multiple layers and thus you can increase your harvest by mounding around the plant



# Raised Bed Gardening: Fruits & Veggies

## Eggplants

**Maturation Time: 70-85 Days**

Growing eggplants in raised beds offers several advantages for gardeners. Raised beds provide better drainage, which is beneficial for eggplants that prefer well-draining soil. The elevated planting area also warms up more quickly in the spring, allowing for an earlier planting of eggplant seedlings.



## Brassicas

**Maturation Time: 50-120 Days**

Brassicas include vegetables such as broccoli, cabbage, kale, Brussel sprouts, and cauliflower. These cool-season vegetables thrive in well-draining soil with ample sunlight and consistent watering. Regularly monitoring for pests and diseases can help ensure a healthy crop. Watch out for pests so as cabbage worms, aphids, and cabbage loopers.



## Watermelon

**Maturation Time: 70-90 Days**

Choose a sunny spot in the garden with well-draining soil, as watermelons thrive in warm temperatures and ample sunlight. Regular watering is crucial during the growing season, especially as the fruits develop. As the watermelons mature, provide support to the fruit by placing a board or straw underneath them to prevent rotting.



# Raised Bed Gardening: Fruits & Veggies

## Beans

**Maturation Time: 60-90 Days**

Beans and their wider group, Legumes, come in many varieties from snap peas to chickpeas, lentils, & pole beans. To maximize your harvest, you first need to determine if you are growing a climbing variety or a bush variety. Climbing varieties will need a vertical support system to flourish and bush varieties will need more space in between to prevent overcrowding.



## Zucchini

**Maturation Time: 45-65 Days**

Although on the larger end of veggies to grow, zucchini is still a great option for raised garden beds. Zucchini are known for their fast growth time and abundant yield. When harvesting your zucchini, it's important to pick them when they are young and tender, about 6-8 in. in length. This will promote further fruit development and consistent harvests throughout the season.



## Strawberries

**Maturation Time: 30-45 Days**

Home grown strawberries can have their struggles but they're a rewarding fruit if given the proper care. During development, runners should be removed from the plant to focus all resources on fruit development. Strawberries are very susceptible to birds and infestation. Slugs, snails, and aphids are all known to target strawberry plants so organic pesticides and bird netting can be employed to protect your crop.



# Raised Bed Gardening: Large Varieties

Although they take up a large amount of space, options such as pumpkins, melons, zucchini, and squash can be some of the best producing players on your raised garden team. If you're thinking about growing a large plant variety in your garden, methods such as trellising and terraced garden beds can help you maximize and diversify your garden beds.

If you're growing Zucchini, add a trellis system in your garden to grow vertically oriented crops like pole beans to utilize your vertical growing space. Consider building your raised bed with open space surrounding it to allow vining melons to grow over and out of your raised garden bed. Terraced garden beds can also encourage vining melons to grow over and out instead of up.



Many melon varieties such as cantaloupe, watermelon, honeydew, and even pumpkin can even be grown vertically on a trellis. It is important to understand how big your melon varieties will grow and provide additional support if necessary. Nylon stockings, old T-shirts, or other elastic cloths can be used as a sling to provide additional support to your melons when they grow larger.

# Raised Bed Gardening:

## Herbs

Many herbs share key traits that make them excellent choices for a diverse raised garden. Herbs require moderate watering and sunlight and are generally low maintenance and quick to grow making them a great choice for beginner gardeners. Many herbs are also a natural aromatic pest repellent making them an excellent companion plant. Their diversity in culinary pursuits almost guarantees that you'll be able to find an edible application for them.

As the main attraction of herbs are their foliage, it is recommended to start your herbs from seedlings as opposed from seeds as this will allow you to begin harvesting within only a few weeks of transplanting.

### Parsley

Parsley is a biennial plant but most gardeners plant them as annuals. The scent of Parsley is known to repel such insects as Carrot Flies, Aphids, and White Flies.



### Dill

Dill is an annual plant that grows best in temperatures between 60-70° F and cooler nights. The scent of dill can attract beneficial insects such as Lady Bugs and Lacewing that will prey on Aphids and deter Cabbage Worms.



### Basil

Basil is an annual plant that thrives in temperate climates as it is very sensitive to frost. The scent of Basil deters such insects as Flies and Mosquitoes.



# Raised Bed Gardening: Companion Planting

Companion planting is the practice of purposefully pairing specific vegetations together to promote mutualism in the garden. This mutualism can come in many forms. Some plants will deter pests while others will attract beneficial insects such as pollinators and pest predators.

Some plants can even improve the flavor of others like in the case of Basil and Tomatoes. Others can simply grow tall and provide shade to low lying plants that perform best in partial sunlight.

The best all-around companion plant in the garden is often thought to be the **Marigold**. The benefits of the Marigold are vast and apply to a wide variety of plants.



- **Pest Deterrence**

Marigolds emit a strong fragrance that repels aphids, nematodes, whiteflies, and some pest beetles

- **Root Protection**

Marigolds release natural compounds into the surrounding soil that can control nematode levels.

- **Attracting Beneficials**

The scent of Marigolds attract beneficial pest predators including Lady Bugs and Lacewings

- **Low Maintenance**

Marigolds are easy to grow and require very low maintenance making them a great choice for beginner gardeners.





# Raised Bed Gardening: Companion Planting

The combinations of companion plant partners are almost endless but with plant companions, it is also essential to consider plant enemies. There are plenty of plant combinations that will negatively effect your garden growth that should be considered when planning your garden.

For a comprehensive list of plant pairs to promote and avoid, click here for our [\*\*Plant Friends & Enemies Chart\*\*](#).



## Plant Friends & Enemies

Plant	Plant Friends (Plant Together)	Plant Enemies (Don't Plant Together)
ASPARAGUS	basil, nasturtium, parsley, tomato	onion family
BASIL	benefits all, especially tomatoes	rue
BEAN (BUSH)	beet, carrot, cauliflower, cabbage, celery, corn, cucumber, eggplant, marigold, parsnip, pea, potato, strawberry, sunflower	kohlrabi, onion family
BEAN (LIMA)	carrot, cauliflower, corn, cucumber, eggplant, marigold, pea, potato, radish, strawberry	onion family, sunflower
BEAN (POLE)	carrot, cauliflower, cabbage, celery, corn, cucumber, eggplant, marigold, parsnip, pea, potato, strawberry	kohlrabi
BEAN (SNAP)	carrot, cauliflower, corn, cucumber, eggplant, marigold, pea, potato, radish, strawberry	onion family, sunflower
BEEF	bush bean, cabbage family, kohlrabi, lettuce, onion family	pole bean
BORAGE	orchards (borage attracts bees) strawberries, cabbage family	none known
BROCCOLI	SEE cabbage	SEE cabbage
BRUSSEL SPROUT	carrot, herbs	SEE cabbage
CABBAGE	beet, bush bean, celery, cucumber, carrot, aromatic herbs, kale, lettuce, nasturtium, onion, potato, spinach, tomato	pole bean, strawberry
CARROT	bean, cabbage family, leaf lettuce, marigold, pea, nasturtium, onion family, pepper, salsify, tomato, rosemary, radishes, sage	celery, parsnip, dill, anise
CAULIFLOWER	SEE cabbage	SEE cabbage
CELERY	bush bean, cabbage, cauliflower, leek, pea, tomato	carrot, parsnip
CILANTRO	benefits all	fennel
COLLARD	tomato	grapes
CORN	bean, sunflower, cabbage, cucumber, melon, parsley, pea, potato, pumpkin, squash, soybean, perennials	quack grass
CUCUMBER	bean, cabbage family, corn, lettuce, nasturtium, pea, radish, sunflower, tomato	aromatic herbs, potato
DILL	cabbage family, lettuce, onions, cucumbers	carrots, tomatoes
EGGPLANT	bean, pepper	none
GARDEN CRESS	carrots, radishes, leaf vegetables	n/a
GARLIC	tomato, eggplant, cabbage family	asparagus, bean, pea
KALE	aromatic herbs, cabbage potato	none
KOHLRABI	aromatic herbs, beet, lettuce, onion, cucumber	pole bean, strawberry, tomato
LEEK	carrot, celery, onion	SEE garlic
LETTUCE	cabbage family, radishes, peas, tomatoes, strawberries, carrots, cucumbers, beets	none known
MARIGOLD	tomato, tobacco, potato, chili pepper, eggplant	cabbage family
MARJORAM	sage, chives and other herbs	none known
MELON (MUSK)	corn, radish, sunflower, peas, nasturtium	potato
MUST. GREEN	beans, grape vines, fruit trees	turnips
NASTURTIUM	beans, cabbage family, cucumbers	none known
OKRA	eggplants, bell peppers	none known
ONION	beet, broccoli, carrot, cabbage family, kohlrabi, lettuce, parsnip, pepper, strawberry, tomato, turnip	asparagus, bean, pea, sage

# Raised Bed Gardening: Culinary Companions

Get creative when planning your garden and choose plants with the goal of making a garden-fresh dish. Planting the components of a dish together can make harvesting for a meal more convenient, more exciting, and more organized.

## Salsa

Commit gardening space with the end goal being a farm-to-table salsa and get the whole family involved and excited. Construct this traditional Mexican dish and taste the difference fresh produce can make.

### Garden Ingredients:

- Tomatoes
- Cilantro
- Jalapeno
- Lime/Lemon
- Onion (cool season)
- Garlic (cool season)



## Eggplant Parmesan

A full meal for the whole family fresh from the garden with a few components from the grocery store. An eggplant parm garden can produce this classic Italian dish multiple times throughout the garden season.

### Garden Ingredients:

- Eggplant
- Basil
- Oregano
- Tomato
- Onion (cool season)
- Garlic (cool season)



# Raised Bed Gardening: Year-round Gardening

Although Winter can put a hamper on the growing mood, gardeners have several tools at their disposal to extend their growing season well into the Winter months and in some areas, never stop growing at all.

## **Cold Frame Greenhouse**

Preventing your plants from freezing is one of the best ways to extend your growing season into the winter. Greenhouse attachments on your raised garden can trap heat and moisture maintaining the optimal environment for growing warmth loving plants.



## **Frost Blankets**

In the cool season, frost forms most mornings when moisture settles from the air and onto the leaves of your plants. Although some plants are categorized as cool season, frost formation is still very damaging to their leaves. Frost blankets create a barrier between frost and leaves.



## **Indoor Seedling Trays**

By starting your seedlings indoors, you can prepare for the upcoming warm season while growing conditions are still poor outside. This is a great option for warm season plants that have a long maturation time like many pepper varieties.



# Raised Bed Gardening: Succession Planting

Succession planting is the strategy of sowing or planting crops in a staggered manner to ensure a continuous and uninterrupted harvest throughout the growing season. By carefully timing the planting of different crops, gardeners can maximize the use of available space and optimize resources, such as sunlight, water, and nutrients. As one crop is harvested, another is already on its way to maturity, maintaining a steady supply of fresh produce.

## Plan Ahead

Create a planting schedule or calendar to determine when to start seeds or transplant seedlings for each crop. Consider the average frost dates in your region and the specific maturity times for different crops.

## Choose Suitable Crops

Select crops that have short harvest periods or are quick to mature. Leafy greens, radishes, lettuce, and certain varieties of beans and peas are excellent choices for succession planting.



## Plant in Succession

As one crop is harvested, replant the area with a new batch of seeds or seedlings. This way, you'll have a new crop coming in just as the previous one finishes.

## Keep Soil Fertile

To ensure continuous growth, maintain the fertility of your soil by adding compost or organic fertilizer between plantings.



# Raised Bed Gardening: Garden Pests



## **Deer, Rabbits, & Raccoons**

Add an Animal Barrier fence to your raised garden bed to prevent direct access for furry pests. Deer will generally not jump into enclosed spaces.



## **Aphids, Caterpillars, & Beetles**

Introducing beneficial insects such as Lady Bugs or Praying Mantis can help to control pest levels. Spraying down your plants with a soapy mixture can also deter these pests.



## **Birds**

Birds will often target berry producing plants such as blueberry bushes. Cover with bird netting, setup scare tactics like faux birds of prey, or plant distraction berry bushes nearby.



## **Gophers, Groundhogs, & Voles**

Burrowing animals can cause havoc to the root systems of your garden. Metal mesh netting can be laid down at the base of your garden beds before filling with soil to create an impassible barrier.

# Raised Bed Gardening: Beneficial Insects

## Praying Mantis

Praying Mantis are one of the most formidable insect predators that exist. They can make quick work of a caterpillar or grub infestation.

**Attractants:** Marigold, Lavender, Dill



## Lacewing Larvae

Also known as the Aphid Lion, a single Lacewing larvae can eat up to 1,000 aphids in a 2-3 week time period. Lacewing are attracted by

**Attractants:** Caraway, Cosmos, Fennel, Dill



## Ladybugs

Ladybugs are one of the most readily available pest predators for purchase online. Ladybugs will prey upon aphids, spider mites, and white flies.

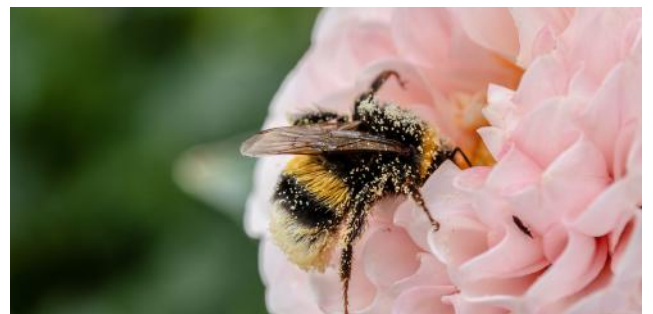
**Attractants:** Spearmint, Daises, Asters, Dill



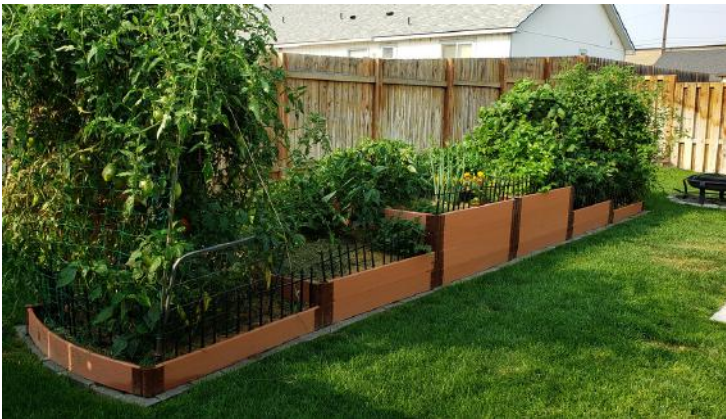
## Pollinators

Although not a predator to common garden pests, pollinators are the cog that enable the fruiting process for many garden variety plants. Any plant that cannot self-pollinate needs a pollinator.

**Attractants:** Daises, Cosmos, Bee Balm



# Raised Bed Gardening: Customer Designs



# Raised Bed Gardening: Garden Videos

Further your knowledge of Raised Gardening with professional landscaper and developer of the Stack & Extend garden system, Anthony Topping. Learn about such topics as amending your soil for the gardening season, multiplying your grasses through division, or general Frame it All garden bed assembly instructions!



AMENDING SOIL FOR PLANTING



HOW TO DIVIDE GRASS PLANTS



HOW FRAME IT ALL BRACKETS & BOARDS CONNECT



WHAT ARE WALK-IN GARDENS?

**CHECK US OUT**



Instagram





# GARDEN CHECKLIST



- 
- 
- 
- 
- 
- 
- 
- 

---

---

---

---

---

---

---

---

NOTES

