## Guide to

## Growing Your Own Food



Brought to you by Oberlin Community Services

## Table of Contents:

Planting Guide ..... 2
Chart for planning what to grow in your Raised Garden Bed ..... 5
How to Read a Seed Packet \& common terms you may see ..... 6
Seed Storage \& Germination Testing ..... 10
Watering Techniques \& a Note on Harvesting ..... 10
How to Preserve the Soil Quality/How to Rejuvenate a Raised
Bed for the Next Growing Season? ..... 11
The 5 Best Veggies to Grow in a Raised Bed. ..... 11
How to Stake Tomatoes ..... 13
Four Common Garden Pests \& How to Remove Them ..... 13
Best Fruits \& Veggies you can Grow in Planters ..... 14
Dehydrating ..... 15
Freezing Fruits \& Vegetables ..... 15

If you have questions, please email Sarah at:
Jenna@oberlincommunityservices.org Or call Oberlin Community
Services at (440)-774-6579 and leave a message for Jenna.

## Planting Guide:

Key: Direct Sow Only
Early Spring Late Spring/Summer

Note: All of the following plants below have the amount of plants that can be planted per square foot of garden space. Take a look at each type of plant that you will be planting, and see how many individual plants or seeds you should plant per 1 square foot in your garden!

Plants \& Their Planting Space in your Garden

|  | Planting Depth | Spacing Needs | Days until you can Harvest | What time of year to Transplant (from Starters) |
| :---: | :---: | :---: | :---: | :---: |
| Basil | 1/4" deep | 2 plants per sq. ft . | $\begin{gathered} 40-55 \\ \text { days } \end{gathered}$ | June 1 |
| Beans (green, bush, or pole) | 1" Deep | 4 plants per sq. ft . | $\begin{gathered} 50-80 \\ \text { days } \end{gathered}$ | May 13-Jun 3 |
| Beet | $1 / 2$ " deep | 9 plants per sq. ft . | $\begin{gathered} 45-60 \\ \text { days } \end{gathered}$ | Apr 22-May 13 |
| Broccoli | 1/4" deep | 1 plant per sq. ft. | $\begin{gathered} 50-70 \\ \text { days } \end{gathered}$ | Apr 15-May 6 |
| Brussels Sprouts | 1/4" deep | 1 plant per sq. ft. | $\begin{gathered} 90-110 \\ \text { days } \end{gathered}$ | Apr 8-29 |
| Cabbage | 1/4" deep | 1 plant per sq. ft. | $\begin{gathered} 60-105 \\ \text { days } \end{gathered}$ | Apr 8-22 |
| Carrot | 1/4" deep | 16 plants per sq. ft . | $\begin{gathered} 55-70 \\ \text { days } \end{gathered}$ | Apr 1-15 |
| Cauliflower | $\begin{aligned} & 1 / 4 \text { to } 1 / 2 " \\ & \text { deep } \end{aligned}$ | 1 plant per sq. ft. | $\begin{gathered} 50-80 \\ \text { days } \end{gathered}$ | Apr 8-22 |
| Celery | $1 / 2 "$ deep | 2 plants per sq. ft . | 80 days | May 13-27 |
| Chives | $1 / 2 "$ deep | 1 plant per sq. ft. | As soon as they are 6 " Tall | May 13-27 |
| Cilantro | $\begin{aligned} & 1 / 4 " \text { to } 1 / 2 " \\ & \text { deep } \end{aligned}$ | 9 plants per sq. ft . | 50 days | May 13-27 |


| Corn | $1 "$ deep | 2 plants per sq. ft . | $\begin{gathered} 65-75 \\ \text { days } \end{gathered}$ | May 6-20 |
| :---: | :---: | :---: | :---: | :---: |
|  | Planting Depth | Spacing Needs | Days until you can Harvest | What time of year to Transplant (from Starters) |
| Cucumber | 1/2" deep | 1 plant per sq. ft. | $\begin{gathered} 50-60 \\ \text { days } \end{gathered}$ | May 20-Jun 10 |
| Dill | 1/2" deep | 9 plants per sq. ft. | $\begin{gathered} 40-50 \\ \text { days } \end{gathered}$ | May 13-27 |
| Eggplant | 1/4" deep | 1 per sq. ft. | $\begin{gathered} 55-70 \\ \text { days } \end{gathered}$ | May 20-Jun 10 |
| Garlic | 2" deep | 4 plants per sq. ft. | Nine months | Autumn |
| Hot Peppers | 1/4" deep | 1 plant per sq. ft. | $\begin{gathered} \hline 50-65 \\ \text { green; } \\ \text { 80-85 days } \\ \text { to full } \\ \text { color } \\ \hline \end{gathered}$ | May 20-Jun 10 |
| Kale | 1/2" deep | 1 or 2 plants per sq. ft. | 60 days | May 15 |
| Leaf Lettuce | 1/4" Deep | 16 plants per sq. ft . | $\begin{gathered} 28-45 \\ \text { days } \end{gathered}$ | Apr 22-May 20 |
| Lettuce (head) | 1/4" deep | Start with five seedlings, eat four as they grow and let one head mature to harvest seeds. | 50 days | Apr 22-May 20 |
| Melons | 1/2" deep | 1 plant per season | 75 days | May 20-Jun 10 |
| Onions | 1/4" deep | 9 plants | $\begin{gathered} 100-120 \\ \text { days } \end{gathered}$ | Apr 8-29 |
| Oregano | 1/2" deep | 1 plant per sq. ft . | - | May 13-27 |
| Parsley | 1/4" deep | 2 plants per sq. ft. | 75 days | May 15 |
| Parsnips | 1/2" deep | 9 plants per sq. ft. | $\begin{gathered} 110-120 \\ \text { days } \end{gathered}$ | Apr 15-May 6 |
| Peas | 1" deep | 9-16 per sq. ft. | $\begin{gathered} 50-60 \\ \text { days } \end{gathered}$ | Mar 25-Apr 15 |
| Peppers | 1/4" deep | 1 plant per sq. ft . | $\begin{gathered} 50-65 \\ \text { green; } \\ 80-85 \text { days } \end{gathered}$ | May 20-Jun 10 |


|  |  |  | to full color |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Planting Depth | Spacing Needs | Days until you can Harvest | What time of year to Transplant (from Starters) |
| Potatoes | $4 "$ deep | $1-3$ plants per sq. ft . | $\begin{gathered} 55-90 \\ \text { days } \end{gathered}$ | Apr 29-May 20 |
| Pumpkins | 1" deep | 1 plant per sq. ft. | - | May 20-Jun 10 |
| Radish | 1/2" deep | 16 plants per sq. ft. | $\begin{gathered} 21-28 \\ \text { days } \end{gathered}$ | Mar 11-Apr 1 |
| Rosemary | 1/2" deep | 1 plant per sq. ft. | - | May 13-27 |
| Rutabaga | 1/2" deep | 4 plants per sq. ft . | $\begin{gathered} 90-95 \\ \text { days } \end{gathered}$ | May 20-Jun 10 |
| Sage | 11/2" deep | 1 plant per sq. ft. | - | May 13-27 |
| Scallions | 1/4" deep | 16 plants per sq. ft. | 60 days | Mar 11-Apr 1 |
| Strawberries | 1/2" deep | 1 plant per sq. ft. | - | April 15-May 20 |
| Spinach | 11/2" deep | 18 seeds per sq. ft., 9 full plants per sq. ft . | $\begin{gathered} 30-40 \\ \text { days } \end{gathered}$ | Mar 25-Apr 15 |
| Summer Squash (yellow) | 3/4" deep | 1 plant per sq. ft. | $\begin{gathered} 30-40 \\ \text { days } \end{gathered}$ | May 20-Jun 10 |
| Sweet <br> Potatoes | 4" deep | 1 plant per sq. ft. | 90 days | May 20-Jun 10 |
| Swiss Chard | 1/2" deep | 2 plants per sq. ft. | 30 days | Apr 15-22 |
| Thyme | 11/2" deep | 2 plants per sq. ft. | - | May 13-27 |
| Tomatoes | 1/4" deep | 1 plant per sq. ft. | $\begin{gathered} \hline 55-100 \\ \text { days } \\ \hline \end{gathered}$ | May 13-Jun 3 |
| Turnips | 11/2" deep | 9 plants per sq. ft. | $\begin{gathered} \hline 40-50 \\ \text { days } \\ \hline \end{gathered}$ | Apr 8-29 |
| Zucchini | 3/4" deep | 1 plant per sq. ft . | $\begin{gathered} 30-40 \\ \text { days } \\ \hline \end{gathered}$ | May 20-Jun 10 |
| Winter Squash | $1 "$ deep | 1 plant per sq. ft . | $\begin{gathered} 85-100 \\ \text { days } \\ \hline \end{gathered}$ | May 20-Jun 10 |

# Chart for planning what to grow in your Raised Garden Bed 

To help you know how many square feet your garden is, see below depending on which Raised Bed you received. Take a look at the Chart for planning what to grow in your Raised Garden Bed, below.

If you have a Ground Raised Bed:

- Bed size is $46^{\prime \prime} \times 35^{\prime \prime} \times 12^{\prime \prime}$
- You have roughly 12 sq. ft. to work with


If you have an Elevated Raised Bed (on legs):

- Bed size is $45.9^{\prime \prime} \times 20.3^{\prime \prime} \times 8.7^{\prime \prime}$
- You have roughly 8 sq. ft. to work with



## How to Read Seed Packets

"A Seed packet is more than just as pretty envelope. It's a miniature biography that reveals all a gardener needs to know to successfully cultivate the seeds it contains," -Nan Schiller

If you look at the photo below, you will notice things like Type, Planting depth, Thin to, Sun/shade, Height, Days to

Germination, Direct Sow, Start Indoors, etc. You may even see a map of the region with dates on them.


As not all seed packets are designed equally, you may find that your packet has more or less information on it. You may find that it tells you how many plants to put in 1 square foot, but often this information is not on all of them. Refer to the Planting Guide on page 2 for this information. Below you will
find some of the common terms you may find on your seed packets, and what they mean.

Planting Depth- This tells you how far down to plant your seeds. A general rule of thumb is to plant no deeper than a seed's diameter. The shallowest planting is on top of moist ground with no soil covering it, and the deepest is generally no more than an inch. This information may be presented in the form of a fraction, like " $1 / 4$ inch." Use your judgment, as it's better to plant too shallowly than too deeply. Seeds need air as well as moisture to germinate.

Height- Knowing the height of plants is essential to planning a layered garden in which taller types anchor the back of a planting bed, behind an array of progressively shorter varieties. Note descriptions like "giant" and "dwarf" when making selections.

Days to Germination- If your package says, "from 5 to 10 days," this means you may see sprouts as early as five days after planting. However, within the above range, this also means it may take closer to 10 , or even a bit longer. This is an estimate, and soil, light, moisture, and temperature conditions all play a role in the length of the germination period.

Thin to- Once plants have sprouted "seed leaves," the first set of leaf-like protrusions, and "true" leaves," the first pair of real leaves, it's time to reduce overcrowding and remove any weak sprouts. This is called thinning. Your package indicates how far apart the remaining plants should be, with a direction such as, "thin to 6 inches."

Sun/Shade- The amount of daylight your plants will require is also important to note. Full-sun plants do best with six hours of morning sun. If the package says they can tolerate shade, this means they will do best in sun, but will grow in shade as well. And partial-shade means that plants need to be in a location that gets some sun, preferably in the morning, before the shadows cast them into shade for the afternoon.

Maturity- When a plant grows to its full stature, with multiple leaves and stems, it is mature. At this point it may bloom, produce a crop, and fulfill its lifecycle. Knowing the time from germination to maturity is useful for planning events like when flowers may be ready for bouquets, and crops ready to harvest.

Direct Sow- Direct sowing is planting in the ground outside. It is generally recommended to wait until all danger of frost has passed. Here in the northeast, that's usually late April.

Start Indoors- Instead of sowing directly outdoors, you may start seeds indoors. Packages describe when to do this, to coincide with outdoor planting after all danger of frost has passed.

Harvest- Edible plants like herbs, vegetables, melons, and berries may include information on how and when to harvest. Picking produce at its peak is essential to good health, as well as the best flavor and texture. Notes on harvesting technique can be helpful to prevent potentially damaging a plant that is still producing.

Level of Difficulty- You may see the words "easy to grow" on packages. This is to be taken with a grain of salt, because as we said, there is no guarantee that your soil, light, moisture, and
weather conditions will exactly mimic the ideal growing conditions for a given plant. If you find varieties that are moderately difficult, take this to heart, and be prepared to plant extra, just in case.

Bloom- This section tells the time during which you may expect your plants to bloom, like early spring, or June through August. By selecting plants with differing bloom times, you may be able to create a continuously blooming garden to enjoy from spring through fall.

Square Foot Gardening- Square foot gardening is a simple method of creating small, orderly, and highly productive kitchen gardens. ... The basic concept: Create a small garden bed ( 4 feet by 4 feet or 4 feet by 8 feet are common sizes) and divide it into a grid of 1 -foot squares, which you manage individually.

## Seed Storage \& Germination Testing

Always store seeds in a dark, cold, dry, storage space. You can always save seeds from the produce that you buy or harvest and dry them to use next year!

Germination testing is a great way to see if your seeds are still good to use, if they have expired. To do this, take 10 seeds. Put them on a paper towel and lay them out. Pour water all over them and wrap it up in the paper towel, then place it, sealed in Ziploc bag. Label the bag with the date and what type of seeds
you are testing. Place it on the window sill for 7-14 days (follow the days to germination number on package). You can
plant the ones that sprout. If many of the seeds sprout during the testing, then the seeds in the package are probably good to use still, otherwise they are too old to use.

## Watering Techniques

Having the right watering technique is important in gardening. Plants should be watered every day, unless it rains on a given day. The best time to water your plants is in the morning. It is best to use a watering can, so that the water is distributed on the plants gently. One very important thing to note is be careful to

NOT to over or under water your plants. If you see water pooling up, stop. If the soil looks or feels (don't be afraid to get used to how the soil feels) dry, give your plants a little more water.

## Harvesting

When harvesting, be sure to be gentle. If you go to pick a pepper, for example, gently hold the pepper in one hand, and the stem in the other. Gently go to pull the pepper off. If the stem feels loose, or if the pepper doesn't just pop right off, the pepper is not ready to be harvested just yet, even though it may
look ready. Check back in a couple days or so. Be patient.

# How to Preserve the Soil Quality/How to Rejuvenate a Raised Bed for the Next Growing Season? 

There are three main options for making sure that your raised bed is ready to go for the following Spring.

1) Plant what is called a cover crop, right before Winter. In short, a cover crop is a crop that is planted in a raised bed until the next growing season. Some of the most common ones for a raised bed are Winter flowers, red clover, parsnips, and turnips.
2) Add a fertilizer with Nitrogen in it.
3) Simply use some compost. A little compost goes a long way.

Choose whichever one you like, or do a combination of the three. ©

## The 5 Best Veggies to Grow in a Raised Bed

Raised beds are wonderful for growing almost anything, but there are some real stars that rise above the rest.

## 1. Root vegetables

When you're growing plants for their roots, it's important to have complete control over the soil. Raised beds can be filled with the perfect soil to suit your needs; free of rocks, clay and debris that could hinder the growth of roots or cause misshapen veggies. Carrots, beets, radishes and parsnips flourish in the loose, rock-free soil where they have space to spread out.

## 2. Leafy greens

Greens such as lettuce, spinach and kale perform marvelously in raised beds. These cool-weather crops need to be planted just as soon as you can get a trowel into your soil. The fact that soil in raised beds warms more quickly than the ground means you can get started earlier and get several great harvests before summer hits. Leafy greens also despise soggy roots, so your bed's fast draining soil means your lovely lettuces will never have to stand in the water for too long.

## 3. Onions

There are three reasons that onions are the perfect vegetable to grow in raised beds: They love quick-draining soil, they need plenty of organic matter, and they require a long growing season. By nature, the soil in raised beds can be catered to your needs, so if you know you'll be planting onions in the bed, you can be sure to incorporate plenty of compost. Onions grown from seeds can take over 100 days to reach maturity. If you live anywhere with four seasons, you'll want to give these babies the
longest time in the garden you can manage. The warmer soil in a raised bed gives your onions a head start!

## 4. Tomatoes

Tomatoes are heavy feeders that need nutrient-dense soil to thrive. So as with onions, you'll want to customize this soil to have extra compost. The only downside to growing tomatoes in raised beds is it's harder for tomato cages and stakes to stand up in the loose soil.

## 5. Potatoes

Potatoes not only grow well in a raised bed, they are also much easier to harvest this way. These plants benefit from hilling soil around the shoots as they grow. In a raised bed you can easily contain your hills, and even create a bed that you can add to as your plants grow. Potatoes need loose, loamy soil that drains well. They grow best when they are able to easily spread out in the soil, and this loose soil will keep them from rotting. Potato crops grown in raised beds tend to have higher yields with bigger tubers.

These are just some of the crops that will grow well in a raised bed. While these are the crops that will grow most easily, with careful planning you can also have success with growing vining crops vertically on trellises. Now that you know what your raised bed is capable of, get out there and get your hands in the dirt!

## How To Stake Tomatoes

When your tomatoes begin to climb upward, give them some support. Whether just planted or started months ago from seed, staking your tomatoes brings the vines the support they need to grow healthy, plump and juicy fruit.

Remember, there's no wrong way. Depending on the number of and the type and size of the tomatoes you're growing, you may need a tomato cage for added support, but one of the simpler ways to support your tomato plants is by placing one stake in
the soil next to the stem of the plant. As the plant grows taller, and when it starts producing its fruit, tie the stem to the stake at different points. You can use twist ties, twine, or gardening tape to do this.

## Four Common Garden Pests \& How to Remove Them

Deer- Keeping deer away from the garden is difficult and is best done by putting up a tall fence around the garden. You could make a fishing line fence to keep them out as well. Putting reflective material, soap, or plants with thorns or irritating leaves can help deter them.

Birds- Stringing lines of reflective material along beds or berry patches can help scare away birds. There is also bird netting that can be placed over bushes and plants.

> Aphids- Aphids are very small bugs that will secrete excrement that attracts ants and mold, as well as sucking sap from plants. They are eaten by lady bugs, but you can rid yourself of them by jetting plants with water or spraying the underside of leaves with soapy water.

Snails/Slugs- Snails and slugs will eat leaves, leaving holes and uneven edges. They can be handpicked off plants, especially in the early morning, or be removed placing copper strips or abrasives which will give them an electric shock.

Catching pests early is very important. It is easiest to spot insects and other pests early in the morning. This is because they don't tend to be out, when it gets hot out. Making a habit of spending a few minutes each morning looking for pests, can help prevent many frustrating situations. Pests can be prevented by growing plants in their desired sun light, giving plants the right amount of space and water, and by having good soil nutrition. Rotation of crops around your garden over the years can help prevent soil borne pests and diseases.

# Best Fruits \& Veggies you can Grow in Planters, Grouped by Difficulty 

Note: Most of these items may be easier to grow in raised beds.

Easy<br>Herbs, Spinach, Kale, Lettuce \& Swiss Chard<br>Moderately Easy<br>Beets, Broccoli, Carrots, Figs, Onions, Garlic, Mushrooms \& Radishes<br>\section*{Moderately Difficult}<br>Beans, Cucumber, Eggplant, Peas, Squash \& Tomatoes<br>Difficult<br>Blueberries, Lemon, Melons, Potatoes, Raspberries \& Strawberries

## Dehydrate Without a Dehydrator

Use your oven or your toaster oven!

- Cut fruits and veggies into $1 / 4$ inch slices
- Place them on a lined sheet pan
- Put the pan in the oven or toaster oven
- Set to lowest setting
- Leave for 6-8 hours


## 5 Steps to Freezer Success

5 steps to freezer success:

1) Pick prime produce: Choose veggies at the peak of their season, and freeze as soon as possible
2) Quickly blanch: Cook the vegetables for a few minutes in boiling water to stunt their ripening enzymes
3) Chill thoroughly: Immerse the vegetables in ice water until they cool off
4) Place vegetables into a freezer bag in a thin layer
5) Freeze!
6) Thaw within the year
