## How to Prepare a Garden

## Site selection:

Find a sunny spot that is receiving 8 -hours of full sunlight. If you are unable to find a spot with direct sunlight consider growing more shade tolerant crops, such as greens, lettuce, and spinach. Between May and August we receive from 13 to 15 hours of sunlight. Most gardens should have enough sun. Try to avoid low lying areas or areas that tend to accumulate rainwater because plant roots need oxygen. Avoid planting around the perimeter of old houses or buildings. Before 1978, there was no regulation on lead paint. If there are any paint chips in the surrounding soil it would contaminate the soil. Make sure that your vegetable garden is easily accessible for both you and the watering system. See the links below for places where you can get more information.

## Choose the Garden Format:

We have prepared a garden plan that includes all of the crops that you received in your Tray-It-Forward bundle and also allow for future expansion. We hope that this plan will help you create a healthy garden space that you will be proud to harvest from. This garden will be broken up into three different sections: A Sicilian Garden, a Roots and

Greens Garden, and a Brassicas and Squash Garden, as seen on the next page.


Potential Layout for Your Garden!

| Box 1. Sicilian Garden |
| :--- |
| Tomato - Paste |
| Tomato - Cherry |
| Tomato- Early |
| Tomato - Slicer |
| Pepper - Snacking |
| Pepper - Jalepeno |
| Eggplant |
| Basil 'Genovese' |
| Zucchini - Eight ball |
| Box 2. Roots and Greens Garden <br> Lettuce Mix (Red and Green) <br> Onion <br> Leeks <br> Green beans |

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Box 3. Brassicas and Squash Garden
Yellow Summer Squash
Winter Squash "Delicata"
Winter Squash - Butternut
Cucumber
Broccoli
Kale 'Red Russian'
Dill
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If you can test you soil, see the services offered by UNH. https://extension.unh.edu/programs/soil-testing-services

Vegetables grow best in a pH of 6.5-6.8. The soils in New Hampshire tend to be more acidic (pH 5.0-6.0). To raise the pH , add lime or wood ash. To lower the pH , add organic materials such as compost.

## How to Cultivate and Care for Your Plants

## BOX 1. Sicilian Garden

Plants in this box like sunshine and heat. Tomatoes and Peppers are both in the same family, and Basil is an excellent companion crop to grow with Tomatoes. In this plot you can add herbs like oregano or cilantro and flowers like marigold. You can add a Zucchini in the middle of the plot.

## Tomatoes

Planting: Tomatoes can develop roots on their stem - they benefit from being planted deeply. Dig a hole that is $2 x$ the size of the root ball (the part that is in the container). Make sure that the hole is deep, so about 4 inches of the plant is above ground. You can trim off lower leaves that will be under the soil. Next, gently fill in the hole with the surrounding soil. Make gentle indents at the base of the plant. Theses indents remove any air pockets in the soil. Next, you want to take your tomato cage and place it, so the plant is in the center. Now, water your plant and be sure to create a little puddle of water around the plant.
(Tomatoes can be "indeterminant" - they grow like a vine and you need to stake them or let them grow in a tomato cage, or "determinant" - they grow like a low shrubby bush.)

You need to plan to stake the tomatoes in your garden to allow them to grow upright.

Spacing: Plant each tomato plant 18 inches apart.
Watering: Make sure that you water frequently and keep the soil moist.

Fertilizer/Compost: Prefers soil with a pH of 5.8-7. Tomatoes are heavy feeders. Add half a cup of organic fertilizer every 2 weeks.

Harvest: Tomatoes will be ready to harvest when the fruit is a deep red.

Storage: Tomatoes should be stored at room temperature in a place away from sunlight. They have optimal flavor when not refrigerated but should be refrigerated if not used within a week of harvest.

## Peppers

Planting: Wait to plant peppers outdoors until nighttime temperatures reach around $60^{\circ}$. Place them in a hole about two times the diameter of the root ball. Fill in the hole with dirt, making sure to compress the dirt around the base of the plant to remove air pockets. Water plants right after transplanting. Once pepper plants begin to grow, they may need cages/poles to help support the weight of the plant.

Spacing: Plant each pepper plant 12 inches apart.

Watering: Add 1-2 inches of water to pepper plants every week. Peppers are sensitive to heat, so warmer summers may require daily watering.

Fertilizer/Compost: Peppers prefers soil that is slightly acidic, with a pH of $5 \cdot 5-6.5$. Add compost to the soil about 1 week before planting seedlings.

Harvest: Peppers are ready to harvest once they reach your desired color/size. Peppers will change from green to red/ orange as they ripen. The more peppers ripen, the sweeter they become. They will also have higher levels of vitamin C as they ripen.

Storage: Peppers can be refrigerated in plastic bags for just over a week.

## Basil

Basil is a great companion for tomatoes. They also like warm weather and they tend to keep insects away. Many recipes include both basil and tomatoes, so you can harvest them together.

Spacing: Seeds/seedlings should be planted approximately 8 inches apart. Plant them on the sunny side of the tomato plants so they are not shaded out.

Watering: Soil should remain moist to the touch, as basil likes moisture.

Fertilizer/Compost: Compost soil prior to planting basil. Basil can be fed organic fertilizer every 1-2 weeks.

Harvest: Harvest as soon as plants are 6-8 inches tall. Harvest leaves regularly to encourage plant growth. Leaves are their juiciest in the morning. Pinch off the flowers that form at the top of the pant to encourage more leafy growth.

Storage: In addition to being used fresh or in pesto, basil can be frozen or dried in a well-ventilated area.

## Summer Squash/Zucchini - Eight Ball

Planting: Like previous plants, remove from planter and place into a hole larger than the root ball, firmly press soil around base of the plant, and then water. Don't split the plants apart - there are supposed to be 2 plants per cell. Squash can also be grown on hills, which will provide more space for vines to grow.

Spacing: Plant seedlings 2 to 3 feet apart. Squash can be planted on mounds as well. Place seedling at the top of a mound, allowing the plants to grow downhill.

Watering: Water frequently, particularly once plant starts producing fruit. Water deeply at least once a week, allowing soil to pool about an inch of water.

Fertilizer/Compost: Squash are heavy feeders. Add compost to soil prior to planting/transplanting. Fertilize occasionally after harvest begins. Misshapen fruit could be indicators of not enough water/fertilizer

Harvest: The "Eight Ball" Zucchini can be harvested when it is young and tender, or if you leave it on the vine till late
season it develops a hard skin - they make great stuffers (look forward to some recipes in our information pages this summer). Cut or twist squash off plant, avoiding denting or scratching of fruit as this will shorten shelf life.

Storage: When stored in a cool place ( $50^{\circ} \mathrm{F}-60^{\circ} \mathrm{F}$ ) squash can last for 4-6 months.

## Other options not in the Tray:

## Oregano

Oregano is a great companion plant for any vegetable garden.

Planting: Plant after last frost. Remove plant from planter. Place in a hole larger than the root ball, cover and firmly press on soil around base of the plant, and water. Trim oregano regularly to prevent it from becoming leggy.

Spacing: Give oregano approximately 12 inches of space from surrounding plants.

Watering: Oregano requires less water than other herbs, water when soil feels dry to the touch. Oregano prefers to be watered thoroughly and infrequently.

Fertilizer/Compost: Compost and manure soil prior to planting.

Harvest: Harvest as needed. Leaves often have the most flavor before the plant flowers.

Storage: Oregano can be frozen or dried. To dry, leave in a dry location that receives sunlight, such as your windowsill.

## Cilantro

Planting: Remove plant from planter. Don't split the plants apart - there are meant to be multiple plants in the soil cell. Place in a hole larger than the root ball, cover and firmly press on soil around base of the plant, and water. Cilantro will go to seed quickly, do not worry! Cilantro will sprout new plants throughout the growing season!

Spacing: Provide cilantro with 8 inches of space from surrounding plants.

Watering: Water seedlings weekly. Once plants become established water less frequently, over watering could harm the plant.

Fertilizer/Compost: Fertilize once or twice per season with nitrogen rich fertilizer.

Harvest: Harvest as needed. Cilantro seeds are also known as coriander, a popular cooking spice. Let cilantro go to seed to harvest coriander.

Storage: Cilantro and coriander can be dried or frozen. To dry, hang cilantro in a sunny location. To dry coriander, place seed heads in a paper bag and hang it in a sunny location as well.

## BOX 2. Roots and Greens.

This box will have root crops and greens. These plants require a good deep soil and compost, but not a great deal of fertilizer. The onions, leeks, and lettuce can be planted early in the season - they can tolerate some frost.
Plant green beans at the edges and leave space for some rows of beets or radish that you can seed.

## Onions

Planting: Create small indentations in the soil every 3 inches. Plant onion bulbs about an inch into the soil. Mulching between rows with straw or grass clippings will help retain moisture and fend of weeds.

Spacing: Plant onions approximately 3 inches apart from each other.

Watering: Make sure to water the plants regularly and keep the soil moist.

Fertilizer/Compost: Add manure prior to planting onions. When planting, add nitrogen rich fertilizer. Apply nitrogen rich fertilizer every few weeks to raise larger onions.

Harvest: Plants will be ready about 100 days from sowing seeds. Bend tops down. Pull the bulbs and cover with foliage to avoid them getting sun burned. Allow the onions to cure in the garden for a week. Bring the onions inside and have
them cure in a warm dry place. Cut the tops of the onions leaving about 1 inch above the bulb.

Storage: Store in a cool dry location.

## Leeks

(Leeks are in the onion family and add nice mild flavor to dishes and soups. They can tolerate cold temperatures and can be left in the garden till late October)

Planting: Create a hole every 3 inches about 2 inches deep in the soil (your thumb works well) and plant the leek in the bottom of the hole. Plant leeks about an inch into the soil. As the leek grows and the hole fills up, it will give you a long white section of the leek. Mulching between rows with straw or grass clippings will help retain moisture and fend of weeds.

Spacing: Plant leeks approximately 3 inches apart from each other.

Watering: Make sure to water the plants regularly and keep the soil moist.

Fertilizer/Compost: Add manure prior to planting leeks. When planting, add nitrogen rich fertilizer. Apply nitrogen rich fertilizer every few weeks.

Harvest: Leave your leeks in the garden till late fall. Harvest by pulling the leeks and cutting the green tops off .

Storage: Slice the leeks and keep in a freezer bag in the freezer. Add leeks to a stir fry or soup.

## Lettuce

Planting: Lettuce does not compete well with weeds. Planting lettuce close together will help to fight against weeds! Seedlings can be transplanted once they have 4-6 leaves. Remove lettuce from planters and transplant them into a hole larger than the root ball. Add soil and press firmly around the base of the plant to remove air pockets. Water gingerly and your lettuce is ready to grow!

Spacing: Place lettuce plants approximately 6 inches apart from each other.

Watering: Keep plants well-watered during the growing season.

Fertilizer/Compost: Add compost one week prior to planting/transplanting. Add nitrogen rich compost 3 weeks after transplanting.

Harvest: Pick lettuce early to avoid having it become bitter and tough. Harvest loose-leaf any time the leaves are large enough. Cut about half an inch above the soil and let then regrow for multiple harvests.

Harvest butterheads anytime the heads are large enough. Cut butterheads below the crown.

Storage: In a plastic bags or containers in the refrigerator, you can add a moist paper towel to help keep the plants fresh.

## Green Beans

Planting: Be careful when transplanting green beans into your garden as they have a fragile root structure. Don't split the plants apart - there are supposed to be 1 or 2 plants per cell. Firmly press on soil around the base of the plant and water.

Like tomatoes, beans are also indeterminate or determinate. They can be grown as pole beans or bush beans depending on your preference and gardening space. Indeterminate will often provide a consistent yield throughout the season while determinate will provide a larger yield towards the end of the season.

Spacing: Green beans should have approximately 8 inches between plants.

Watering: Gently water the seeds once they have been planted. Continue to water through-out the season. Bush beans will not produce blossoms if they do not receive enough water

Fertilizer/Compost: Bush beans prefers soil with a pH of 6.0 to 7.0. Avoid fertilizers with nitrogen, as this will cause dense foliage with few bean pods.

Harvest: Beans should be harvested when green and pods break when bent.

Storage: Beans can be stored for about a week fresh. Store refrigerated in a plastic bag/container.

Other options not in the tray:

Consider adding some rows of Beets, Radish and Carrots to this bed. They can all be seeded directly in the soil right now.

## BOX 3. Brassicas and Squash Garden.

> Winter squash and Cucumbers will need space for the vines make sure you have space behind the box where vines can run over a lawn or open area. The front of the box is designed for plants in the brassica family (broccoli, kale, cabbage etc.). The dill in this bed attracts pollinators and predatory insects to keep cabbage moths at bay.

## Cucumber

Planting: Cucumbers are susceptible to frost damage and should be transplanted a few weeks after the last frost. They like warmth and will reach maturity faster in warmer/sunnier locations. Like previous plants, remove from planter and place into a hole larger than the root ball, firmly press soil around base of the plant, and then water. Don't split the plants apart - there are supposed to be 2 plants in the soil cell. Do not disturb the roots. Cucumbers are prone to transplant shock.

Spacing: Provide 24 inches of space around the cucumber plant, allotting room for the plant to trail out into surrounding yard or around the base of other plants. The ground cover of the cucumber vine will prevent water from evaporating out of the soil.

Watering: Water frequently, about a gallon of water per week is recommended. Hotter days may require more water.

Fertilizer/Compost: Cucumbers prefer fertile soil, add compost and manure before transplanting, ensuring that compost is mixed about 6 inches into the soil. Side dress manure if needed.

Harvest: Make sure to harvest cucumbers before they become too large, as they may become bitter. Cucumbers can range 6-10 inches based on what they are being used for. Cucumbers also grow quickly and should be harvested every couple of days. Consistently harvest cucumbers to ensure that the plant will continue to produce. Leaving cucumbers on a vine will prevent the plant from producing.

Storage: Since cucumbers are mostly water, retaining moisture is very important. Wrap cucumbers in plastic wrap and refrigerate. Cucumbers should last 10 days like this.

## Winter Squash ('Delicata' and Butternut)

Planting: Like previous plants, remove from planter and place into a hole larger than the root ball, firmly press soil around base of the plant, and then water. Don't split the plants apart - there are supposed to be 2 plants per cell. Squash can also be grown on hills, which will provide more space for vines to grow.

Spacing: Space acorn squash approximately 24 inches apart.
Watering: Keep soil well-watered, squash need about 1-2 inches of rain or water every week during the growing season. The soil should be moist.

Fertilizer/Compost: Winter squash are heavy feeders. Add compost to soil prior to planting/transplanting. Fertilize occasionally after harvest begins. Misshapen fruit could be indicators of not enough water/fertilizer.

Harvest: Harvest once the fruit is matured (about 75 days). The skin will be dull and hard to puncture with your fingernail. To harvest cut stem with shears. Leave a 2-3-inch stem on the fruit.

Storage: Leave in the sun to allow for the skin to harden. Store in a cool dry place.

## Zucchini

Planting: Like previous plants, remove from planter and place into a hole larger than the root ball, firmly press soil around base of the plant, and then water. Don't split the plants apart - there are supposed to be 2 plants per cell. Zucchinis can also be grown on hills, which will provide more space for vines to grow.

Spacing: Plant seedlings 2 to 3 feet apart. Zucchini can be planted on mounds as well. Place seedling at the top of a mound, allowing the plants to grow downhill.

Watering: Water frequently, particularly once plant starts producing fruit. Water deeply at least once a week, allowing soil to pool about an inch of water.

Fertilizer/Compost: Zucchini are heavy feeders. Add compost to soil prior to planting/transplanting. Fertilize occasionally after harvest begins. Misshapen fruit could be indicators of not enough water/fertilizer.

Harvest: Harvest when zucchini is about 8 inches in length. Smaller fruit will have an overall better taste. Consistently check zucchini during the growing season. Cut vine to leave an inch of stem on the fruit. Consistent harvesting will ensure a larger overall yield. Can be stored unwashed in a refrigerator for over 10 days.

Storage: When stored in a cool place ( $50^{\circ} \mathrm{F}-60^{\circ} \mathrm{F}$ ) zucchini can last for 4-6 months.

## Kale

Planting: Kale is tolerant to cooler temperatures and can be planted in the early spring and even in the fall. Kale is said to have a better taste when matured in colder temperatures. Remove root ball from planter and transplant into a hole larger than the root ball and cover the soil until it reaches the base of the leaves. Compact the soil around the base of the plant and water thoroughly.

Spacing: Place plants 12 inches apart.
Watering: Thoroughly water the plants when first planted and continue watering through the season. The soil should be moist but not soggy and saturated.

Fertilizer/Compost: Kale prefers soil with a pH of 6.5-6.8. Nitrogen rich compost should be added to soil prior to planting. When planting, add 1.5 cups of organic fertilizer or blood meal for every 25 feet of garden. Continuous feed plant food should be added regularly.

Harvest: Pick the outer leaves when they reach 6-8 inches long about 55-60 days after planting. Leave the central bud to continue to grow.

Storage: In a plastic bags or containers in the refrigerator, you can add a moist paper towel to help keep the plants fresh. Steamed and chopped broccoli keeps well in a freezer.

## Broccoli

Planting: Remove root ball from planter. Transplant into a hole larger than the root ball and cover the soil until it reaches the base of the leaves. Compact the soil around the base of the plant and water thoroughly. Warm temperatures will stunt the growth of broccoli, so an earlier planting is preferred.

Spacing: Place plants 18 inches apart.
Watering: Thoroughly water the plants when first planted and continue watering through the season. The soil should be moist but not soggy and saturated.

Fertilizer/Compost: Broccoli prefers soil with a pH of 6.5-6.8. Nitrogen rich compost should be added to soil prior to planting. When planting, add 1.5 cups of organic fertilizer or blood meal for every 25 feet of garden. Continuous feed plant food should be added regularly.

Harvest: Pick the broccoli head when it is well formed before it starts to flower. The broccoli will continue to produce smaller side heads hat you can continue to harvest all season long.

Storage: In a plastic bags or containers in the refrigerator, you can add a moist paper towel to help keep the plants fresh.

Storage: Leaves can be dried or used when fresh. Store seeds in an air-tight container in a dark cupboard. Use the flower heads for pickles.

Planting: Remove root ball from planter. There are multiple plants in each cell - no need to separate the plants.
Transplant into a hole larger than the root ball and cover the soil until it reaches the base of the leaves. Compact the soil around the base of the plant and water thoroughly.

Spacing: Provide 8 inches between dill plants.
Watering: Water daily, make sure the soil stays moist.
Fertilizer/Compost: Dill prefers soil with a neutral/ moderately acidic pH . Add compost to ensure soil contains healthy amounts of organic material.
Harvest: Pick fresh leaves as needed from the dill plants.

## Companion Flowers

Add color and diversity to the garden by adding flowers. These varieties of flowers attract beneficial insects to help maintain a balance in the garden.

Some examples include:

Verbena

Alyssum
Marigold
Calendula
Chamomile

## Have fun, be creative and ENJOY your garden!

