

**Empowering All Generations To Grow Food** 







# HELLO GROWER

Whether you are just starting out in edible gardening or are a seasoned grower, Fleet Farming seeks to empower you to grow food!

**Fleet Farming** is an urban agriculture program of IDEAS For Us that is empowering urban farmers just like you with the knowledge and tools to get connected of our local food systems by growing delicious food! We offer various programs such as Fleet Farmlettes, Edible Landscapes, Fleet Education, & more to get your garden growing and to provide helpful gardening resources to our community.

### This Gardening Guide will provide information regarding:

- Gardening Tools
- Planting Seeds
- Transplanting
- Plant Propagation
- Watering
- Drip Irrigation
- Harvesting
- Maintenance

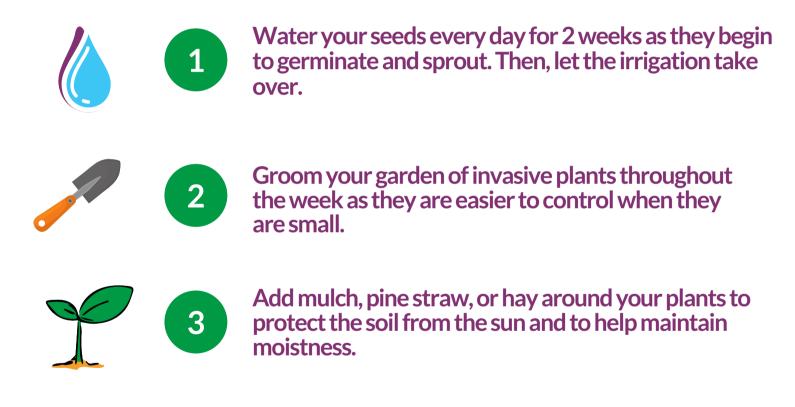
- Natural Pest Management
- Soil pH
- Composting
- Planting Schedule
- Companion Planting
- Square Foot Gardening
- Resources

If you need help in garden advice, maintenance, or education, please reach out to the Fleet Farming or Edible Landscapes team who would love to be your garden guidance counselor. **Contact:** info@fleetfarming.org



# **THE BASICS**

There are quick things to remember in gardening whatever type of garden that you have. They include the following:



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# **GARDENING TOOLS**

For the best experience, you're going to neeed:

- Gardening Gloves
- Garden Scissors
- Hand Rake

- Hand Shovel
- Spray Bottle
- Watering Can or Hose



In addition to this list above, here are other recommended gardening

- supplies:
- Neem Oil
- Worm Castings
- Composting Bin
- Cardboard & Mulch
- Seed storage container (keep indoors for optimal freshness)



In order to maintain soil quality, it is important to rotate crops each time you are planting. Planting the same crop in a space two or more times in row can lead to soil diseases and unbalanced nutrient levels.

### **Basic Seeding:**

- 1. Use a hand rake to loosen and mix the soil in the area that is being planted.
- 2. Determine the seed spacing based on the size of the plant when it is mature.
- 3. Seeds should be planted at a depth of two times the thickness of the seed.
- 4. Plants which grow closer together, such as carrots and greens, can be scattered then covered with a thin layer of topsoil.
- 5. Plant a few seeds in each space.
- 6. Cover the seeds with soil & then water thoroughly.
- 7. Water the seeded area consistently to prevent the soil from drying out.



# TRANSPLANTING

A transplant, in the gardening world, can be referred to as planting an established plant into a space instead of direct seeding. This can be potted edible plants that can make your garden more lush faster than starting from seeds.

### **Basic Transplanting:**

- Use a hand rake to loosen and mix the soil in the area that is being planted.
- Dig a hole the size of the container the transplant is in.
- "Fluff" the roots by cutting off any circling roots to encourage sprawling root growth.
- Place the plant into the hole and pack it in well.
- Water the plant and surrounding soil.

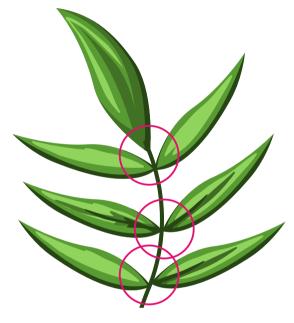


# **PLANT PROPAGATION**

An easy way to grow new plants is to take cuttings from older plants,

this is a form of plant cloning called plant propagation by cuttings.

- 1. Find a plant with some older growth such as a branch of Oregano, Basil, Rosemary, or Mint.
- 2. Take a clean knife or pruners (you can soak in soapy water to ensure a clean cutting tool) and cut the plant between two nodes.
- 3. Strip the bottom leaves so only a few leaves are left on the top.
- 4. Place in a clear glass of water with bright light to encourage root growth.
- 5. After a few days, plant in soil and be sure to keep the soil moist.
- 6. The roots will begin to sprout in a fev. weeks.



Plant Nodes





# WATERING

Watering correctly is the key to having healthy, productive plants! To determine whether to water or not, you need to check to see if the soil is dry by digging 3-4inches. Also, if you observe your plants are wilted or bending over, they may be showing signs of being too dry.

### Watering Tips:

- Thoroughly moisten the soil at each watering, and then allow the soil to dry out before watering again. Too much water in a soil causes oxygen deficiency, resulting in damage to the root system. Plant roots need oxygen to live.
- Add drip irrigation to your garden to water once during raining season and winter and perhaps twice during the summer. Best Times to water are 6 AM and 6 PM.
- Water infrequently and deeply rather than frequently and shallowly. Watering lightly, even when done frequently, only gets the top few inches of soil. Watering schedules will depend on weather and how well the soil holds onto water. Sandy/lighter soils don't hold water as long as dense soil does.
- Mulch can be a huge tool in the Florida garden! Mulch is great for retaining moisture and as it breaks down, it decomposes into rich soil.



# **DRIP IRRIGATION**

Most of our garden beds installed by Fleet Farming / Edible Landscapes include drip irrigation.

### Below are some tips and tricks for managing a drip irrigation system:

- Tighten the Y connector piece that meets the spigot head.
- Make that the hose bib is airtight to avoid a leaking nozzle. Washers can be placed in the metal hose bib to prevent watering from dripping.
- Set your timer for every 12 hours for about 10 -20 minutes depending on your garden size.
- If you find any leaks along the brown or black tubing, close the spigot knob so that the water will not flow out of the irrigation system. Contact the Edible Landscapes team to come out and patch the punctured sections.

A full drip irrigation video is available on our website at: fleetfarming.org/edible-landscapes/grow











# HARVESTING

- Vegetables: Once you can see the veggie has reached its peak ripeness, use scissors to cut the vegetable off the plant. This can refer to tomatoes becoming fully red or eggplant reaching it's maximum size. Okra can be harvested at 3 -5 in. long.
- Root crops: Carrots, beets, and radishes grow in the soil and are ready to be harvested when the top of the vegetable comes up through the ground. Once the vegetable reaches the preferred diameter, pull the entire plant out of the ground, wash the root, and enjoy.
- Fruits: Fruit plants will first produce flowers before the fruit grows. Once you can see the fruit has grown to it's usual size & begins to ripen, remove the fruit from the plant or tree.
- Harvesting Salad Green Tips: For greens such as Kale and Chard, harvest the larger leaves and leave the smaller for the next harvest. To harvest greens that grow densely such as Arugula and Greens Mixtures, grab a section of the plants and cut the greens about 1 inch from the soil. These greens will generally provide three harvest before it's time to compost the plant and start growing something different. When it's time to harvest greens that grow in a bunch or a head, cut the base of the plant just above ground level.



# MAINTENANCE

### **Trimming & Pruning**

To maintain productive plant growth, it is important to cut back overgrown plants as needed and remove dying leaves. If the plant has grown to be too dense, air cannot flow properly throughout the foliage of the plant which will attract pest, fungus and other diseases.

### Weeding

Remove unwanted pioneer plants from the garden. Make sure to remove not only the plant but also their roots.

### **Sheet Mulching**

If you would like to create paths in your garden, keep grass at bay, or beautify your yard, you should consider sheet mulching. Sheet mulching is the technique in which earth is covered by a biodegradable weed barrier usually cardboard or multiple layers of newspaper—and is then covered by mulch. If you are creating a new garden bed on top of grass, you can even add compost between the layers for a place for new plants to grow. This is a helpful trip in suppressing grass and defining pathways through your garden.



# NATURAL PEST MANAGEMENT

Most synthetic pesticides are harmful chemicals that can contaminate the soil, plants, and the environment. We encourage you to opt for natural methods that keep the insect ecology balanced.

To encourage pollinators like bees, butterflies, and other friendly insects to your garden, it is important to only spray your crops with natural pest management sprays like neem oil. Derived from the Neem seed, Neem oil is an excellent all purpose insecticide, miticide, and fungicide for organic gardening, it can be used on virtually any plant. Read the label for instructions on how to mix the plant based pesticide. Follow these or you may burn your plants! An alternative can be soapy water spray or even a mix of garlic and water sprayed on your garden plants regularly when experiencing pest issues.

Ladybugs and parasitoid wasps are predatory insects that naturally combat pest issues in the garden. Finding them in your garden is a sign that it is a healthy ecosystem. We recommend to keep harsh chemicals like Round Up away from your garden beds to encourage balanced insect ecosystems around your garden. Adding flowers to your garden not only adds beauty but also attracts pollinators such as bees, butterflies, and other beneficial insects to help with pest control.





# SOIL PH

### Soil pH:

Soil pH is a measure of the soil's acidity or alkalinity. Most plants prefer a soil pH of 6-7. You can test this level at home using household products.

- 1. Scoop a soil sample into a container for mixing.
- 2. Add half a cup of vinegar.
- 3. If the soil fizzes, it's alkaline.
- 4. If no reaction, scoop a fresh soil sample into a separate container.
- 5. Add a half cup water and mix.
- 6. Then, add half a cup baking soda. If fizzes or bubbles, the soil is highly acidic.

Your local hardwood store also sells pH probes if you are looking for better soil pH accuracy. Simply dig a hole, fill with water, and insert probe.Lime or wood ash is great to add to your garden if your soil is acidic. Oak leaves or pine needles are great for alkaline soils.

If you would like a more extensive soil test, contact your local UF IFAS Extenstion Office for instructions on official soil tests.



# COMPOSTING

Composting is a great way to improve the life of the soil while reducing your own food waste at home. It can be as easy as collecting your food scraps in a container in the freezer and when full, depositing into a composer in your yard or even keeping a worm bin.

The basic concept to keep in mind is that the food, when mixed with dry material, breaks down. Heat, water, and oxygen are all necessary for the decomposition to work properly. If the pile is too dry, it will not break down. If it is too wet, it will have a foul stench. Add the materials as needed to keep a healthy balance. Also, it is important to flip your compost every so often so that the inside gets oxygen.

### The different types of composters are listed below:



Continuous Compost Bin



Batch Compost Bin



Indoor Worm Bin

### All of these products are available from Gardener's Supply.



# **PLANTING SCHEDULE**

### Winter/Spring: November-April

#### November

Beets, Broccoli, Cabbage, Carrots, Cauliflower, Celery, Collard, Garlic, Kale, Leek, Lettuce, Mustard, Onion, Parsley, Peas, Potato, Radish, Spinach, Swiss Chard, Turnip

### December

Beets, Broccoli, Cabbage, Carrots, Cauliflower, Celery, Collard, Eggplant, Kale, Leek, Lettuce, Mustard, Onion, Parsley, Parsnip, Peas, Pepper, Potato, Radish, Spinach, Swiss Chard, Tomatoes, Turnip

#### January

Beets, Broccoli, Cabbage, Carrots, Cauliflower, Celery, Collard, Eggplant, Kale, Leeks, Lettuce, Mustard, Onion, Parsley, Peas, Pepper, Potato, Radish, Spinach, Swiss Chard, Tomatoes, Turnip

### **February**

Beans, Beets, Broccoli, Cabbage, Cantaloupe, Carrots, Cauliflower, Collard, Corn, Cucumber, Eggplant, Kale, Leek, Lettuce, Mustard, Onion, Parsley, Peas, Pepper, Potato, Radish, Spinach, Squash, Swiss Chard, Tomatoes, Turnip, Watermelon

### March

Beans, Beets, Cabbage, Cantaloupe, Carrots, Collard, Corn, Cucumber, Kale, Lettuce, Mustard, Okra, Peanuts, Pumpkin, Radish, Pea, Spinach, Squash, Swiss, Chard, Tomatoes, Turnip, Watermelon

#### April

Beans, Cantaloupe, Collard, Mustard, Okra, Peanuts, Pumpkin, Radish, Peas, Spinach, Sweet Potato, Tomatoes, Turnips, Watermelon



# **PLANTING SCHEDULE**

### Summer: May-October

#### May

Beans, Collard, Mustard, Okra, Peanuts, Pumpkin, Peas, Spinach, Sweet Potato, Tomatoes Turnip, Watermelon

#### June

Collard, Eggplant, Mustard, Okra, Pepper, Peas, Spinach, Turnip

#### July

Celery, Collard, Eggplant, Mustard, Okra, Pepper, Peas, Spinach, Turnip

#### August

Beans, Cabbage, Celery, Collard, Corn, Cucumber, Eggplant, Endive, Garlic, Lettuce, Mustard, Okra, Pepper, Radish, Rutabaga, Pea, Spinach, Squash, Tomatoes, Turnip

#### September

Beans, Beets, Broccoli, Brussel Sprouts, Cabbage, Carrot, Cauliflower, Celery,Collard, Cucumber, Endive, Garlic, Kale, Leek, Lettuce, Mustard, Okra, Onion, Parsley, Peas, Radish, Pea, Spinach, Squash, Swiss, Chard, Tomatoes, Turnip

#### October

Beans, Beets, Broccoli, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Celery,Collard, Endive, Garlic, Kale, Leek, Lettuce, Mustard, Onion, Parsley, Peas, Potatoes, Radish, Spinach, Swiss, Chard, Turnip



# **COMPANION PLANTS**

Companion planting is the planting of different crops in proximity for different reasons including: pest control, pollination, providing habitat for beneficial insects, maximizing use of space, and to otherwise increase crop productivity. Gardening is made easier by planting companion plants next to each other in the garden.

### Some quick companions:

- The Three Sisters: Corn, beans, and squash are a great combo as planted by Native American
- Tomato Companions: Basil. Marigolds, Asparagus, Carrots, Celery, Onion Family, Lettuce, Parsley, and Spinach.
- Pepper Companions: Basil, onions, spinach, and tomatoes.
- **Bean Companions:** Marigolds, Corn, Broccoli, Cabbage, Carrots, Cauliflower, Celery, Peas, Squash, Strawberries, Tomatoes.
- Lettuce companions: Mint, Chives, Garlic, Beans, Beets, Broccoli, Carrots, Corn, Peas, Radishes, and Marigolds
- Radish companions: Cucumbers, Carrots,

*Carrots Love Tomatoes* by Louise Riotte is a helpful book to take in the garden for companion planting information.



# **SQUARE FOOT GARDENING**

The Square Foot Gardening method can saves gardeners time, effort, tools, space and water. The Square Foot Gardening method is estimated to cost 50% less, uses 20% less space, 10% of the water, and only 2% of the work compared to single row gardening. Additional benefits are: virtually no weeds, no digging or rototilling, and no heavy tools are necessary.

This method is basically creating a grid using string on your raised beds to ensure plants that are planted perfectly spaced out.

The website https://squarefootgardening.org/ shares helpful tips and tricks to starting a square foot garden at home.





# RESOURCES

If you need help in garden advice, maintenance, or education, please reach out to the Fleet Farming or Edible Landscapes team who would love to be your garden guidance counselor.

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# JOIN OUR FREE COMMUNITY EVENTS

### Audubon Park Swarm Ride East End Market (3201 Corrine Drive) 9 to 11 AM, Every 2nd and 4th Sunday

\*Bathrooms available | Biking event (optional)

\*Rentable bikes first come. first serve



## **Kaley Square Friday Farming**

1030 W Kaley Ave, 32805

9 AM to 1 1 AM. Every Friday Morning \*Bring hat and sunblock | No bike needed

## <u>CONTACT US</u>



**F O Y @fleetfarming** info@fleetfarming.org

(929) 269-3276

Fleet Farming is a program of 501C3 non-profit organization IDEAS For Us

www.FleetFarming.org