



# **DEDICATION**

This Community Garden and Food Forest Handbook is dedicated to Daniel Harnden and Sean Laurence from Boy Scout Troop #37, working to earn their Eagle Scout rank, and to the leaders of that troop for their encouragement and guidance. The gardens would not have come into being without the talents and hard work of many committed people in the Wintergarden congregation and the Charlotte County community. And to children all over the world who can learn so much about the life cycle through gardening. Praise to Pastor Devon Beisser Andrews' vision and counsel to set in motion the creation of this bountiful garden.

Above all, we dedicate this handbook to our Creator who has provided us with a beautiful earth and has trusted us with every living thing. So, most importantly we dedicate the garden and our mission to "feed people" with the bounty of God's goodness and love for our community at large.

"All creatures look to you to give them their food at the proper time. When you give it to them, they gather it up; when you open your hand, they are satisfied with good things."

Psalm 104:27-28
New International Version

"You care for the land and water it; you enrich it abundantly. The streams of God are filled with water to provide the people with grain, for so you have ordained it. You drench its furrows and level its ridges; you soften it with showers and bless its crops. You crown the year with your bounty and your carts overflow with abundance."

Psalm 65:9-11 New International Version

"I pray that from his glorious, unlimited resources he will empower you....Your roots will grow down into God's love and keep you strong.

Ephesians 3:16a, 17b New Living Translation

"Then God said, "Look! I have given you every seed-bearing plant throughout the earth and all the fruit trees for your food. Then God looked over all he had made, and he saw that it was very good!"

Genesis 1:29,31a New Living Translation



# **ACKNOWLEDGEMENTS**

This handbook was created by our AmeriCorps VISTA member stationed at Wintergarden Presbyterian Church 2019-2020, Michelle O'Connor. She researched many topics and visited like-organizations that inspired her to incorporate the contents that would provide the tools and administrative processes necessary to sustain a cooperative and plentiful garden for years to come.

Among these resources, special thanks and recognition are given to the Educational Concerns for Hunger Organization (E.C.H.O) and their Community Assistance Handbook and the staff at Ft. Myers and the University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS)-both Charlotte and Sarasota County Extension Offices.





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# ABOUT THIS HANDBOOK

### Introduction

This handbook provides a clear framework to support the "Garden of Eatin" and Community Food Forest at Wintergarden Presbyterian Church (WPC), Port Charlotte, Charlotte County, Florida. The handbook is structured to encompass an administrative direction, as well as serve as a guideline for participant responsibilities and gardener's toolkit for garden management practices. These guidelines should assist all involved in the program to promote a healthy communal garden.

The community gardens will use "best practices" and promote organic gardening and pest management to the greatest extent possible. Each person using the gardens must employ these principles.

A copy of the approved handbook will be posted on the Wintergarden Presbyterian Church website under the "Start Serving" tab: https://www.wintergardenpres.org/

Copies may be downloaded and printed to provide access to garden members. A copy of this handbook can be found in the shed.

All content and supporting documents are subject to updates.

# Summary

A community garden is a piece of land gardened by a group of people for the primary purpose of growing vegetables for consumption. Participants share in the maintenance of individual plots as well as communal areas to keep the gardens pristine. Individual gardens plots are raised beds assigned to an individual, a family, or an organization.

The "Garden of Eatin" was created in 2018 on the WPC campus and offers twenty raised beds to individuals and families for the primary purpose of growing vegetables for their individual consumption. Four of the twenty beds,  $2' \times 10'$ , are compliant with the guidelines set forth in the American with Disabilities Act. The remaining beds are  $4' \times 10'$  plots. Any bed not rented for individual use is available as a communal bed to support the adjacent food pantry. Individual gardeners may also contribute harvested produce to the WPC food pantry. The community garden is also designated as a Food Forest. The campus also includes a registered Soil Site - a community composting area to generate nutrient-enriched soil for use in the gardens.



### Goals

The Garden of Eatin was established to:

- Foster community
- Provide life skills training and practical experience in agriculture
- Promote intergenerational learning
- Provide supplemental food for individual households
- Educate in the areas of food production, agriculture, awareness of nutritional value and use of harvested crops
- Reduce food insecurity in Charlotte County

# **Roles of Individuals and Groups**

### <u>Leadership Team</u>

The Garden Leadership team, formed as the vision for the gardens emerged, escalated from a dream to a reality. The team's purpose is to organize and administer the project, work with community members and partners, promote the gardens to the community at large and manage financial obligations. The team should be involved in finding businesses and suppliers that are interested in contributing to the program at reduced or no cost.

#### Garden Manager

The garden manager(s) is/are an individual or team garden member who serves as the primary contact person and representative for a community garden. The garden manager serves as the voice of the garden. The manager interacts with current and prospective garden members, the Leadership team, and other stakeholders, and must be able to maintain good working relationships. The manager should schedule workdays and meet with gardeners for work assignments in the common areas. The manager should also inspire and empower others to grow and harvest food through providing guidance on best practices.

### Garden Members

Without interested individuals and organizations, the community garden would not flourish. It takes individuals with a vested interest in this project and pride in their garden bed. Every individual and family who participates in this program must sign a lease agreement and abide by the rules.

Gardener's responsibilities include maintaining their individual garden beds through plantings, consistent watering, controlling weeds, pests and diseases, mulching and putting their garden to bed. New gardeners should



meet onsite with the Garden Manager to learn about the garden and get advice, as needed. Gardeners are also responsible to perform activities needed in the common areas; mulching aisles, weeding, cleaning garden tools, managing the compost bins, etc.

### Volunteers

We always need a helping hand..so please consider joining us. We welcome individuals who are not active plot members to help maintain and expand our community garden on a volunteer basis. Volunteers must agree to WPC guidelines, complete a volunteer registration, and release waiver form prior to engaging in volunteer work. Volunteers will help with specific additional projects around the community garden. This is a great opportunity for people on a member plot waitlist to get involved.

Volunteers may participate in scheduled or unscheduled workdays under the supervision of a designated garden manager. Volunteers will schedule available times and activities directly with garden managers. Only commit to those days and hours that can be fulfilled. If unable to attend the scheduled volunteerism event, contact the garden manager so s/he is not left waiting onsite. Typical tasks include weed control, mulching, composting, watering and general clean up. Less common, specific tasks may involve assembling or repairing raised beds, filling beds with soil, securing common grounds, disaster preparations for hurricane season, and helping with other various repairs.

### Community Groups, Vendors, Sponsors and Resources

Although this manual is not directed to groups, vendors and sponsors, nor are there responsibilities needing identification, it is essential to acknowledge that these groups have had and will continue to be vital in the life of the community gardens-at-large.

### **Annual Garden Meeting**

Prior to the September planting season, the garden leadership team will call a meeting of the garden members. The purpose of the meeting is to welcome new and renewed members, discuss updates to the garden, go over garden rules and discuss the organized workdays and how volunteer hours can be completed. This is a good opportunity for members to get acquainted, request clarification on issues or ask questions.

Garden members are requested to notify the leadership team if unable to attend or send a representative.



# **WPC Community Garden and Food Pantry Bulletin Board**

This bulletin board is located in the breezeway adjacent to the Food Pantry. Items to be posted are for official use only.

Items of interest include scheduled meetings, events and other general information. The Food Pantry hours of operations will also be listed here.

Businesses who have provided supplies and services may also post their business cards on the bulletin board.

# **Wintergarden Presbyterian Church Photo Policy**

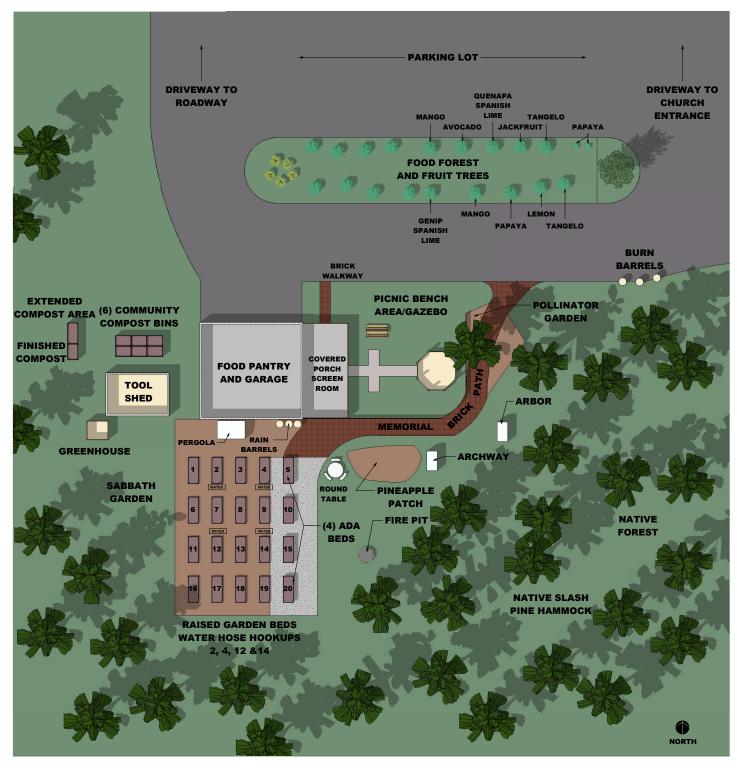
WPC reserves the right, and may give permission to the media to photograph classes, programs and participants at any sponsored or non-sponsored activity. Please be aware that these photos are for promotional purposes, grant applications, and other fundraising needs, and may be used in future publications and media communications in any format.

If you do not wish to be photographed, please inform the staff and we will make reasonable efforts to honor your request. If you do not wish to have your child(ren) photographed, please sign the appropriate forms in the WPC/Garden member agreement. If you see staff taking pictures and you do now wish to be photographed, please let us know.

If you see a photo of yourself or a family member that causes you concern, please notify us. As a courtesy, we will make every reasonable effort to dispose of the image, and will not use it in future publications. However, we will not be able to retrieve, destroy or discontinue existing printed publications in which the photograph may have been included.

Additionally, with the availability of cameras in nearly every cell phone, please be respectful of others when taking pictures for individual use or for use on social media. Be courteous - ask first!





# GARDEN OF EATIN' COMMUNITY GARDEN AND FOOD FOREST SITE MAP

Wintergarden Presbyterian Church 18305 Wintergarden Ave, Port Charlotte, FL 33948

# **Garden of Eatin' Plot Map**

4'W x 10'L	4'W x 10'L	4'W x 10'L	4'W x 10'L	2'Wx 10'L 39"H ADA
				Special
	WATER		WATER	Needs
	ACCESS		ACCESS	Designed
1	2	3	4	5
4'W x 10'L	4'W x 10'L	4'W x 10'L	4'W x 10'L	2'Wx 10'L 41"H ADA
				Special
				Needs
				Designed
6	7	8	9	10
4'W x 10'L	WATER ACCESS 4'W x 10'L	4'W x 10'L	WATER ACCESS 4'W x 10'L	2'W x 10'L 38"H ADA Special Needs Designed
11	12	13	14	15
4'W x 10'L	4'W x 10'L	4'W x 10'L	4'W x 10'L	2'W x 10'L 39"H ADA Special Needs Designed
16	17	18	19	20



# RESPONSIBILITIES

### Introduction

This chapter provides specific tasks, duties and jobs identified under 'Roles of Individuals and Groups' under 'About this Handbook.' Garden rules and regulations are in place in order for Wintergarden Presbyterian Church to provide a pleasant and healthy place for the community. Those involved should review this section on a regular basis to ensure a more complete understanding of their responsibilities. This is simply the 'basics.' Where there is doubt, concern, a need for clarification or an unwritten responsibility identified in this manual, the individual should begin by addressing the next higher level in the administration of the Garden of Eatin'.

### **Garden Members/Gardeners**

A garden member is a program participant who, in exchange for use of a community garden plot must:

- Complete, sign, submit and abide by the WPC Garden of Eatin' Community Garden and Food Forest Lease Agreement
- Pay applicable fees upon plot assignment or renewal
- Observe reasonable safety precautions
- Observe garden hours (sunrise to sunset)
- Obtain personal gardening supplies including garden gloves, seeds, soil amendments and hand tools
- Provide for supplies or improvements beyond basic garden infrastructure
- Actively maintain assigned garden plot and adjacent communal garden areas, keeping them free of litter, weeds, diseases and pests
- Participate in workdays and accumulate volunteer hours to ensure a tidy and aesthetically pleasing garden environment
- Follow all regulations and requirements within this handbook.
- Participate in a minimum of two regularly scheduled work days or a minimum of two hours per month (24 hours per year) to help maintain common areas and vacant plots. Considerations for age, special skills, physical & mental capabilities can be made.

# **Additionally:**

Garden applicants are subject to a background check at WPC expense.

Suggested plot fees are \$25 yearly unless otherwise agreed to by the Leadership Team.



Members must begin actively gardening within 14 days of plot assignment. Exceptions may be made at the discretion of the garden manager. If the member is to be away for an extended period, they are responsible for appropriately covering the plot or ensuring another garden member will tend the plot and adjacent communal areas.

Members may use the tools and equipment in and around the shed and agree to return them in the same condition after use. Garden tools cannot be removed from the community garden. If any equipment is damaged, the member will advise the garden manager. Since the community shed is locked the member may have to contact the garden manager to request the shed be opened.

Keep shed and greenhouse clean and orderly. Sheds are to be used specifically for storing garden supplies for the group as a whole and are not intended for personal use. Community equipment, supplies and other materials must be properly stored. Pathways must be kept free from obstructions.

Due to potential for injuries inherent to gardening, and the remote nature of this site, it is advised to keep a cell phone at all times. Report any suspicious persons or criminal activity to law enforcement immediately.

Remain responsible for all personal items brought into the garden. Lost or abandoned items will be held for 30 days and, if not claimed that time, will be considered a donation to the 'Garden of Eatin'.

Vegetative waste (pest-free and disease-free) should be disposed of in the compost bins. Garbage service is available on site in the dumpster. Please put all trash in the dumpster. Recycling is not available on site. Weeds do NOT belong in the compost bins but must be put next to the burn pit or for small amounts in the dumpster.

Soil amendments help refresh plot soil. Avoid FRESH manure (smells bad - contains seeds). Composted manure is permitted. Finished compost from the "Finished" compost pile closest to the woods is a good source for soil amending.

Harvest only from the assigned garden plot. Communal beds may be harvested in moderation or as determined by the garden manager.

Produce grown in community gardens is for self-consumption only. Sale or donation to any third party is prohibited without prior written approval by the Leadership Team. However, produce in excess of use by the member can be donated to the Wintergarden Food Pantry.

Decorative plantings must follow Florida-Friendly Landscaping™ principles. Plant species listed as Florida Exotic Pest Plant Council (FLEPPC) Category I or II (see



www.fleppc.org for more information) are invasive plants and are prohibited in all garden areas. "Good" invasive plants, such as mints can be planted as long as they are containerized.

Tree installation within plots is prohibited, due to shading and complications with root systems. The property owner reserves the right to remove or prune any plant that is prohibited, dead, diseased, invasive or creating a hazard or public safety issue. Individuals are responsible for any costs associated with removal of non-conforming plants that they install.

Written permission must be obtained from the Leadership Team prior to construction of any new structures or any activity that may affect existing structures or require contracted services or permitting.

Every effort should be made to conserve water resources. When rain barrels are accessible, they should be used as the first watering source. Use of water-saving methods, such as hand-watering, mulching, and micro or drip irrigation, is encouraged. Report any leaks or other observed problems to the garden manager immediately. Do not leave water turned on or in hoses. Garden hoses must be stored on racks when not in use to maintain a tidy appearance and help prevent injuries.

Members are required to observe their plantings and soil regularly for the evidence of pests and disease, i.e., tomato blight, etc. There are a number of websites that will assist the member to identify and manage pest problems. They are identified in the Garden Management section or Resources section of this manual.

Gardeners who decide NOT to renew their plot the following year must clean their plot, remove all garden plants and weeds and remove all belongings, including added structures, e.g., trellises, etc. Cleaned up means the plot is ready for tilling, clean and level. All stakes and structures removed.

Integrated Pest Management (IPM) uses proper plant selection and maintenance and the least toxic method of pest control to encourage healthy plants that resist insect and disease infestations. Prior to applying chemicals within your plot, obtain approval from the Garden Manager. Acceptable pest control methods include, but are not limited to, hand picking, soil solarization, biological controls (e.g. *Bacillus thuringiensis*), and natural botanicals.

Use of power tools in the garden is prohibited unless there is prior approval by the Garden Manager/Leadership Team/Pastor.

The use of tobacco products, alcohol or illegal substances in the gardens is prohibited.



Please make sure to supervise and clean up after your pet is in the garden. If other gardeners are present, please be respectful.

In no case shall materials that might be construed as offensive be allowed in gardens.

Any provocative, uncooperative, inflammatory or belligerent behavior is prohibited while at the garden site. Members must conduct themselves in a positive manner that contributes to an enjoyable community atmosphere while in the garden.

Wintergarden Presbyterian Church, and all affiliated organizations that are partners with, or otherwise support the Garden of Eatin' assume no liability for injuries or accidents.

Wintergarden Presbyterian Church and its partners assume no liability for losses resulting from theft or vandalism.

Report hazards or problems to the garden manager. If the manager is not available, report urgent issues to the Leadership Team. For emergencies, call 911.

Agree to the photo policy instituted by WPC. If a gardener does not want pictures used in official publications, check the box on the garden member application.

### Garden Manager(s)

The Garden manager(s) is expected to:

- Communicate with the Leadership Team on needs, vacancies, and other pertinent items
- Orient new garden members to the program
- Coordinate garden workdays with the Leadership Team
- Work with vendors, contractors and service providers to obtain goods and supplies at reasonable rates or at no cost to the garden. Coordinate work to be accomplished and completed
- Manage plot assignments, wait lists, annual renewals, and garden records
- Oversee the collection and management of member fees to support basic garden infrastructure, including perimeter fences, storage sheds, compost bins, standard signage, bulletin boards, and shared gardening tools
- Will be a member of the Leadership Team



# **Leadership Team**

The Leadership Team consists of the Pastor of Wintergarden, one Elder of the church, and other congregants and non-congregants who are interested in administering this program. From the leadership team, there shall also be a secretary and treasurer. All issues require a simple majority vote by those group members present at a meeting, provided at least two-thirds of current members are present.

## Key responsibilities include:

- Identify program objectives, rules and update the garden manual, as needed
- Manage budgetary priorities
- Apply for and manage approved grants and loans
- Offer community garden orientation and other educational courses
- Meet at least quarterly to work on fundraisers, plan work days and projects, and next steps for garden expansion
- Choose a secretary, treasurer, and public affairs/social media member.

### **Volunteers**

There are three types of Volunteers:

- Those requested on an 'as-needed' basis
- Anyone wishing to help in the garden
- Garden members accruing needed annual hours

Volunteers may be asked to help with specific projects. All volunteers will be asked to sign up for events, sign a release form, log their hours, and abide by guidelines provided for the specific event and general rules of the garden.

The notebook for volunteers is maintained in the tool shed. See the enclosure for Volunteer Release for Groups and Individuals.

Example of specific community projects:

- Arbor Day Celebration and Tree Planting
- Pathway building and mulching
- Garden expansion and land clearing
- Educational Opportunities
- Tool cleaning and sharpening, tool shed or greenhouse organizing/cleaning
- Weeding
- Communal plantings
- Aerate, mix and move compost



# Wintergarden Presbyterian Church Community Garden of Eatin' Program Registration

Primary	Member Name			Date	e	
Primary	Phone	Altern	ate Phone	2		
Email Ad	dress					
	ddress					
City				Zip	)	
	ncy Contact			Phone _		
Relations	ship to Primary Member			Alt Phon	ne	
Minor Secondary Member Secondary Name		Secondary	Member E	mail	Secondary Phone	y Member
•	have a garden plot with th			•		
If no, wh	nat type plot would you like	e to lease? 4'x1	LO'	2'x10' Sta	andina ADA pl	ot
- /	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_	. 5	
expense	sted plot fee of \$25.00 is rest of the community garest ity tools, etc.).					
	nark three areas that you we dener is expected to help					ne season.
	Site Maintenance		Pho	one calls / r	mailings	
	Assigning Plots			th maintena		
	Construction projects			tering		
	Seasonal plantings/ clean	up		ucational wo	orkshops	
	Composting			cial Events		
	Childrens' activities		Other _			



# I understand I am subject to a background check at Wintergarden Presbyterian Churches' expense.

Signature	Date
Printed Name	



# Wintergarden Presbyterian Church 'Garden of Eatin' Community Garden And Food Forest Lease Agreement

This agreement is between Wintergarden Presbyterian Church and the **Garden** Member. Please carefully read, sign and return this document with your fee. Make checks payable to Wintergarden Presbyterian Church. Annotate 'Garden Fees' on your check Memo. A receipt for cash will be provided. Online payments can be made at <a href="https://www.wintergardenpres.org/donate">www.wintergardenpres.org/donate</a>.

Once signed by the registrant and fees have been collected and/or checks cleared, the registrant becomes a garden member in good standing for a period of one year from the date of the signature.

# **Parties to this Agreement**

**Wintergarden Presbyterian Church** (hereinafter referred to as WPC) will provide the following:

- Garden Plots to grow produce for harvest by garden members
- Access to water for irrigation
- Access to basic garden tools such as shovels, rakes and wheelbarrows
- A greenhouse for seed germination and starter plants
- Compost for soil amendment
- A handbook with garden management information and resources
- Areas to sit and contemplate, meditate and enjoy nature and the fellowship with a community of people who have like-interests!

A **Garden Member** (hereinafter referred to as "you" or "your") is a program participant who, in exchange for use of a community garden plot must:

- Complete, sign the Membership agreement and Waiver of Liability
- Pay suggested fee upon plot assignment or renewal
- Actively maintain assigned garden plot and adjacent communal garden area
- Observe reasonable safety and security precautions
- Respect other gardeners and observe garden hours (sunrise to sunset)
- Agree to support WPC by doing your fair share of common work to ensure a beautifully kept and pleasing community garden. Considerations will be given for special skills, physical and mental capabilities and age.
- Follow the agreement terms

Responsibilities Enclosure 2



# **Lease Agreement Table of Contents**

# Lease Requirements, Payment, Plot Agreements and Community Service

- 1. Program Registration
- 2. Garden Terms and Plots
- 3. Fees
- 4. Plot Assignments
- 5. Responsible Party
- 6. Wait Lists
- 7. Continual Plot Maintenance
- 8. Annual Garden Meeting
- 9. Community Service Expectations
  - a. Garden Success
  - b. Working Relationships
  - c. Workdays and Work Parties
  - d. Communal Volunteer Hours
    - i. Required Monthly Volunteer Hours
    - ii. Yearly Volunteer Hours
    - iii. Considerations
    - iv. Potential Ineligibility

## **Gardening Rules**

- 1. Plot Maintenance Expectations
  - a. Upkeep
  - b. Care
  - c. Making Good Plant Choices
  - d. Excluded Plants
  - e. Irrigation
  - f. Chemicals
  - g. Soil Remediation
  - h. Harvesting
  - i. Cleaning up Your Plot
- 2. Use of WPC Equipment and Shared Spaces
  - a. Toolshed and Tools
  - b. Greenhouse
  - c. Burn Barrels
  - d. Dumpster
  - e. Compost Area and Bins
  - f. Shared Communal Areas
  - g. Bulletin Board

Responsibilities

Enclosure 2



- h. Fire Pit
- i. Excluded Property
- 3. Additional Rules
- 4. Garden Conduct
- 5. Safety, Security and Vandalism

# **Warnings, Conflict Resolutions and Penalties**

- 1. Garden Checklist
- 2. Abandoned or Neglected Plots
- 3. Conflict Resolution and Grievance Procedures

# Waiver of Liability, Release of All Claims and Gardener's Signature

**WPC Internal-Use Form** 



# **Terms and Conditions**

# Lease Requirements, Payment, Agreement and Community Service

1. Program Registration. Each program registrant must complete and sign the WPC Community Garden of Eatin' Program Registration and submit it to the Garden Manager or Leadership Team. This form is for new applicants and returning garden members. You may request a specific plot but remember since the lease agreement is on a first-come, first served basis, you may not get your first choice.

<u>2.Garden Term and Plots</u>. All plots are leased for a one-year period, beginning at the signing of this agreement. There are sixteen 4'x 10' raised beds filled with garden soil and four  $2 \times 10'$  garden soil-filled standing plots built to American Disability Act standards. Please indicate which type plot you desire in the Program Registration form.

<u>3.Fees</u>. A suggested fee of \$25 per year is recommended. Fees are due at time of signing this agreement by cash, check or online donation to Wintergarden Presbyterian Church. The Leadership team may reduce or waive the fee in special circumstances.

4.Plot Assignments. Plots are leased on a first-come, first served basis. Preference will be given to current year participants in good standing first. Garden plots are assigned to one person, family or organization and are not transferable. One signature is required. A numbered plot map can be found in the handbook.

5.Responsible Party. Others you designate may garden at your site however, the responsibility for payment of fees, cleanup and other duties at the site will be the responsibility of the individual whose name is assigned to the plot.

<u>6.Wait Lists</u>. If no plots are available, WPC will maintain a wait list and notify applicants in the order waitlisted.

7.Continual Plot Maintenance. Garden members agree to keep their plot maintained throughout their year's term. You may be away for extended periods of time for various reasons, i.e, vacation, illness, work etc. You may designate someone to tend your plot during your absence and agree to notify the garden manager or leadership team of your designated individual if you will be away for two weeks or more.

8. Annual Garden Meeting. Most program registrants will begin their lease in the fall at the beginning of the planting season. The WPC will hold an annual Garden meeting around this time, attempting to accommodate all garden applicants and current

members. Returning garden members and applicants are requested to notify the

# leadership team if unable to attend or send a representative. 9. Community Service Expectations

a. <u>Garden Success</u>. Gardeners understand that this is a community garden and in order for it to succeed, gardener support is needed to maintain the entire site,

Responsibilities Enclosure 2



- manage and turn compost weekly, keep tools and equipment clean, help keep the shed and greenhouse neat and orderly, weed common areas, etc.
- b. <u>Working Relationships</u>. Gardeners are encouraged to work together as a group on communal aspects of the garden at the beginning of the planting season and are encouraged to share gardening information with new gardners.
- c. <u>Workdays and Work Parties</u>. A spring and fall workday will be scheduled and garden members are encouraged to participate if possible. Intermittent work parties may be scheduled and are a great time to share time as a community with a vested interest.

### d. Communal Volunteer Hours

- i. <u>Monthly</u>. Gardeners agree to volunteer 2 hours per month toward community gardening effort and special projects as well as scheduled workdays.
- ii. <u>Yearly</u>. A total of 24 hours of yearly communal "volunteer time" is expected of each garden member. All completed hours should be logged within one week on the shared Members volunteer hours log.
- iii. <u>Considerations</u>. WPC will give special consideration for special skills, physical and mental capabilities and age.
- iv. <u>Potential Ineligibility</u>. Gardeners who have not completed their service hours at the end of their lease agreement may not be eligible for automatic renewal of their plot.

# **Gardening Rules**

### 1.Plot Maintenance Expectations

- a. <u>Upkeep</u>. You are responsible for the maintenance and upkeep of your garden plot throughout your annual term: watering, weeding, pest and disease management, harvesting and any other garden-related maintenance are all your responsibility. You agree to begin plot maintenance within 2 weeks of signing this agreement. You may arrange to have others help you but you are ultimately responsible for its upkeep.
- b. <u>Care</u>. Garden plots should be cared for at least once a week. It is your responsibility to notify the Garden Manager if you are not able to care for your plot in any given week (or if you plan to be away for two or more weeks).
  - c. <u>Making Good Plant Choices</u>. You may grow a variety of fruits, vegetables, herbs and flowers. Choosing from among the wide range of plants for the garden is challenging and fun! When purchasing vegetables and herb plants, be sure to pick pest-free, healthy-looking plants. "Good" invasive plants, e.g., mints are welcome but must be planted in containers.

### d. Excluded Plants

- i. Illegal plants and substances
- ii. Do not plant trees in your plot
- iii. If it's woody, it's not allowed in your plot

Responsibilities Enclosure 2



- iv. "Bad" invasive plants are prohibited. See the Florida Exotic Pest Plant Council (FLEPPC) website for a list of Category I or II plants.
- e. <u>Irrigation</u>. Every effort should be made to conserve water resources. When Rain barrels are accessible, they should be used as the first watering source. Use of water-saving methods, such as hand-watering, mulching is encouraged. Report any leaks or other observed problems to the garden manager immediately. Garden hoses must be stored on racks when not in use to maintain a tidy appearance and help prevent injuries. Water hoses must not cross other plots and must be attended at all times. Sprinklers are not permitted in the garden.
- f. <u>Chemicals</u>. Pest-ridden and diseased plant management is complex. The application of herbicides (weed killers) or pesticides (to kill insects or control disease-causing organisms) to garden plots without the Garden Manager's written approval is prohibited. Horticultural oils and insecticidal soaps are generally more safe and effective than relying on "quick" yet potentially harmful solutions such as herbicides, pesticides and conventional "ready to use" chemicals. Several insects (i.e. dragonflies, praying mantis and pollinators) are beneficial to the natural environment, so applying insecticides indiscriminately, especially harsh pesticides that affect even the beneficial insects can have a detrimental effect on the local garden ecosystem. **If a more strong remedy seems warranted, check with the Garden Manager to ensure the stronger method is approved.** Also, do not be afraid to pull the plant so avoid contaminating other plants in your plot and other plots. See the handbook for further information.
- g. <u>Soil remediation</u>. Keep your plot fresh by adding compost and mulches to increase the nutrients and stabilize soil temperatures. Avoid FRESH manure which may contain weed seeds, smells bad and may have sanitary issues that could affect the gardens. Composted manure is permitted. Compost in the black bins is available for your use. Soil by the burn pits is also available to use.

### h. Harvesting

- i. Pick only the plants you are growing or have permission to pick.
- ii. You may also harvest produce from the communal areas, i.e., green peppers, etc. however, please pick only what you can use.
- iii. Large scale canning is prohibited from communal areas.
- iv. Share your harvest. Donations to the food pantry are always welcome!
- b. <u>Cleaning up your Plot</u>. If you decide not to renew your plot the following year, or if you must abandon your plot, your plot must be cleared and cleaned. Cleaned up means your plot is ready for tilling, clean and level. All plants and weeds must be removed. All stakes, structures, materials must be pulled out and removed from the site. Cover crops must be applied.



# 2. <u>Use of WPC Equipment and Shared Spaces</u>.

### a. Toolshed and Tools.

- i. The Toolshed is kept locked for safety and liability reasons but garden members can arrange access by contacting the Garden Manager or secondary keyholder. Shovels, rakes, pruners, watering cans, wheelbarrows and other garden tools are available to all garden members. Gardeners will agree that the garden tools are for everyone to use and will therefore clean and return them promptly after using them. Do not remove equipment from the WPC campus. There are donated seed packets for use by gardeners; gardening books and copies of the WPC Community Garden and Food Forest Handbook.
- ii. Please return any tools borrowed from the shed in the condition that you received them. If a WPC garden tool is damaged or needs replaced, please bring it to the attention of the Garden Manager. You may not remove equipment from the WPC campus.
- iii. Members can bring their own tools for use or use the tools available in the shed.
- b. <u>Greenhouse</u>. The greenhouse is available for members for seed germination and to protect fragile and young plants from extended cold weather. When using the greenhouse, make sure all plants are labeled and identified with your name, date, and plot number. Space is at a premium in our mini greenhouse, so be mindful of keeping open shelf or floor space for other gardeners to use. Vents in the greenhouse help with aeration when the weather is hot and dry.
- c. <u>Burn Barrels</u>. Three barrels have been added to the WPC site. These barrels are managed by the WPC. WPC must obtain permission during specific times to use the burn barrels. Do **not** start fires in the burn barrels.
- d. <u>Dumpster</u>. WPC provides a dumpster for waste generated from the food pantry or gardening waste generated in connection with normal gardening.
- e. <u>Compost Area and Bins</u>. WPC has a registered Soil Site created by a global platform that is for all to use AND maintain. See the garden handbook for details on managing and using the compost.
  - f. <u>Shared Communal Areas</u>. Please enjoy resting, relaxing or reflecting under the pergola, the Sabbath space, porch or kiosk; use the concrete table and chairs and picnic areas on campus. Please clean up after yourself and your guests.
- g. <u>Bulletin Board</u>. WPC has an official bulletin board in the breezeway for information relating to the garden and food pantry hours. The bulletin board is for garden business only, soliciting is not allowed. Please check it regularly for news, meetings, and garden information.
- h. <u>Fire Pit</u>. WPC has built a fire pit within the communal area. Please do not use the fire pit without prior approval from the Garden Manager or leadership team.

Responsibilities Enclosure 2



i. <u>Excluded Property</u>. The riding tractor-lawnmower and trailer is not for gardeners' use.

# 3. Additional Rules

- a. You are responsible for your own trash removal. Sort all **waste** from your plot and use during your time in the garden. Separate by category:
  - i. trash for the dumpster (those items generated when gardening)
  - ii. recyclables please remove from the campus and dispose in your home recycling bin
  - iii. compost items (including disease-free, pest-free plants, leaves and other green waste plant parts that can be composted (place in the black compost trash bin next to the food pantry
  - iv. diseased plants and plants with pests, weeds, brush and branches must be moved to the burn barrel area
- b. You may use **garden structures** such as trellises, row covers, stakes, etc. Modifications to your plot are prohibited.
  - c. Do not use **power equipment** without approval of the garden manager.
  - d. Observe **garden hours** sunrise to sunset daily.
  - e. Actively maintain **adjacent areas** by your plot, as if it IS your plot!
- f. Remain responsible for all **personal items** brought into the garden. Lost or abandoned items will be held for 30 days, and if not claimed during that time, may be considered a donation to WPC.
- g. **Harvest** only from your assigned garden plot. Produce grown at the WPC Garden of Eatin' is for **self-consumption** only. Sale or donation to any third party is prohibited without prior written approval by the leadership team. However, produce in excess of your individual/family use can be donated to the Wintergarden Food Pantry.
- h. **Communal beds** may be harvested in moderation or as determined by the garden manager.
- i. **Tree planting** within plots is prohibited due to shading and complications with root systems. WPC reserves the right to remove or prune any plant that is prohibited, dead, diseased, is on the FLEPPC invasive list or is creating a hazard or public safety issue. You may be responsible for any costs associated with removal of non-conforming plants you have installed.
- j. Written permission must be obtained from the leadership team prior to construction of any **new structures** or any activity that may affect existing structures or require contracted services or permitting.
- k. Report any **observed problems**, including water leaks to the garden manager Immediately.
  - I. The use of **tobacco products**, **alcohol or illegal substances** in the gardens is prohibited.

Responsibilities Enclosure 2



- m. **Hurricane management** and inclement weather management are the responsibility of every gardener. Consult the handbook for hurricane preparedness management.
  - n. **Professional or media photography** may be sanctioned by WPC for promotional purposes. If you do not wish to be photographed, or wish to keep your children from being photographed, please notify the garden manager or leadership team.

### 4. Garden Conduct

- a. In the spirit of cooperation, be considerate of your garden neighbors.
- b. In no case shall materials that might be construed as offensive be allowed on the WPC campus.
- c. Any provocative, uncooperative, inflammatory or belligerent behavior is prohibited while on the WPC campus. Members must conduct themselves in a positive manner that contributes to an enjoyable community atmosphere.
- d. Members must conduct themselves in a positive manner that contributes to an enjoyable community atmosphere while in the garden.
- e. Please make sure to supervise and clean up after your pet is in the garden. If other gardeners are present, please be respectful.
- f. Parents are encouraged to bring children to the garden and introduce them to the wonders of gardening. Please monitor their behavior and whereabouts at all times. Teach young children to stay on paths and out of other gardeners plots.
- g. Pets. Should you wish to bring your best friend to the garden, please remember to clean up after your pet. If other gardeners are present, remember not all people are animal-lovers and some may be frightened of animals. Please be respectful. Leashes must be available to use, if appropriate.
- h. Service dogs are permitted, no questions asked.
- i. Water hoses must not cross other plots.
- i. Access paths should not be restricted in any way.
- k. Should you wish to listen to music, please use headphones so as not to disturb the tranquility of the garden.

## 5. Safety, Security and Vandalism.

## a. Safety.

- 1. Keep the leadership team advised of your current address, telephone number and email address; notify the team of any changes.
- 2. Due to the potential for injuries inherent to gardening and the remote natures of this site, it is advised to keep a cell phone at all times.
- 3. Access paths should not be restricted in any way.
- b. <u>Security</u>. Report any suspicious persons or criminal activity to law enforcement immediately.
- c. <u>Vandalism</u>. Most gardens experience occasional vandalism. The best action you can take is to replant immediately. Generally vandals become bored after a while and stop.
- d. For personal property losses, be sure to notify the garden manager or leadership team and contact the local police to file a report, if warranted.

Responsibilities Enclosure 2



# **Warnings, Conflict Resolutions and Penalties**

- 1. <u>Garden Checklist</u>. WPC may on an announced or unannounced basis do a walk-through of the garden or a particular garden plot. A checklist has been created to use which will assist the WPC representative in identifying various problem areas or issues. Consult the handbook to view the checklist. You will be notified to meet with WPC in an attempt to resolve any problem areas in a respectful and expeditious manner.
- 2. <u>Abandoned or Neglected Plots</u>. WPC will make every reasonable effort to work with you when it appears your plot is abandoned or neglected.
- a. <u>Abandoned Plots</u>. Except for temporary absences of two weeks or more and where you have notified the garden manager or leadership team of a planned absence, WPC may determine that your plot has been abandoned and may take reasonable efforts to clear the plot, reassign the plot, or use the produce in the food pantry. No refund of fees will be made.
- a. <u>Neglected Plots</u>. Gardens in an 'uncared for' condition may be cleared. Every effort will be made to work with you to resolve the situation. However, produce may be harvested for the food pantry. Failure to maintain your garden plot may result in reassigning the plot. No refund of fees will be made.
- 3. <u>Conflict Resolution and Grievance Procedure</u>. On occasion, conflicts and complaints cannot be resolved informally. For these situations, the following steps will be taken:
  - a. The grieving party should use the Garden Program Grievance Form within one week following the incident and submit it to the Garden Manager/Team Leadership.
  - b. The Garden Manager/Leadership Team then will consult the parties involved to collect facts and follow the normal process for rule violations, if any have occurred.
  - c. The WPC will render a decision within a reasonable timeframe.
  - d. Members may appeal a grievance-related decision/termination within 14 calendar days of the outcome by requesting reconsideration by the Garden Program Team Leadership.
  - e. The Leadership Team will review the information and determine whether it warrants further consideration.
  - f. WPC will issue a final decision. This decision stands.
  - g. If the decision results in forfeiture of the plot, no refunds of payment shall be made.



Enclosure 2

# Waiver of Liability, Release of All Claims, Photo Release and Gardener's Signature

As a condition of being allowed to participate in the Garden of Eatin' and Community Food Forest, please initial next to each number to confirm your agreement:

the Garden of Eatin' Community	ks and hazards that may arise through participation i Food Forest, and assume any expenses and liabilities
incur in the event of an accident,	• • •
	o Wintergarden Presbyterian Church to use photograph intergarden Presbyterian Church in publications, new
	mmunications related to the mission of the Food Pantr
and Community Garden.	
Eatin' and Community Food Fore and assigns do hereby release an the Garden Leadership Team, Gar from all claims of damages, dema on negligence, in any manner aris	granted the opportunity to participate in the Garden of st, I, for myself, my executors, administrators, agent and forever discharge Wintergarden Presbyterian Church den Program Manager, volunteers, and other gardener ands, and any actions whatsoever, including those base sing out of my participation in this activity. I understan ong other things, I am giving up my right to sue for an costs that I may incur.
	is either $18$ years old or, if I am under $18$ years old o has read and signed this form. I have read this entire to be legally bound by it.
	Plat Number
V	Plot Number
X Participant's Signature	
raiticipant's Signature	
V	V
Printed Name	X Date
Printed Name	Date
X Parent/Guardian's Signature	
Talenty dual dian 3 Dignature	
V	X
X Printed Name	
Triniced Haine	
<u>X</u>	X
Approved by: WPC Signature	Date
Responsibilities	



# WPC INTERNAL FORM - THIS PORTION RETAINED BY THE WPC

Garden Member Name	
Assigned Plot Number	
Agreement Start and End Date	
Payment and Date of Payment	_ Type
Payment:	
\$25 Other Amount Reduced Fee Waived	
Type Payment: CashCheck Number WPC Website Electronic Pay	
Date of Check Date Check Cleared	

IMAGE OF CHECK:

Responsibilities Enclosure 2



# WPC GARDEN OF EATIN' VOLUNTEER RELEASE AGREEMENT FOR GROUPS AND INDIVIDUALS

I	(print name	of volunteer	) have read and
understand the terms and con Community Food Forest Agreem in the WPC Garden of Eatin' and conduct myself according to all t Community Food Forest Agreeme Forest rules.	ent prior to taking pa Community Food Fore he terms and condition	rt in community est, and I hereby ons of the WPC (	gardening activities agree to follow and Garden of Eatin' and
I do hereby release and dis and it's officers, agents, employ and causes of action of every k from any cause whatsoever which in the WPC Garden of Eatin' and	ees, and volunteers find whatsoever for a charactly	rom all liabilities ny damages and or indirectly fro	s, claims, demands, d or injuries arising
I further agree to hold had and its officers, agents, employ injuries resulting from any acts of WPC Garden of Eatin' and Comm	yees, and volunteers or failure to act on my	from liability for part during my	or any damages or
Signature		Date	
PARENT/GI	JARDIAN CONSENT	AND RELEASE	
I am the parent or legal generation (hereinafter "my child"), who is of group or organization). I have in the WPC Garden of Eatin' and to my child's participation in conconsent to my child's participation the WPC Garden of Eatin' and Coof Eatin' and Community Food I child to follow and conduct him WPC Garden of Eatin' and Community Food I were supported to the conduct of Eatin' and Community Food I were supported to the conduct him were support	a member ofe read and understand longer from the read and understand longer from the read and understand longer from the read and undersally and the read and undersally are read and the read and undersally are read and undersally and the read and undersally are read and undersally and undersally are read and understand and understand and understand and understand are read and understand and understand and understand are read and understand and understand are read are read and understand are read and understand are read are read and understand are read are read are read and understand are read are read are read are read and understand are read are read are read are read are read are read and understand are read	I the terms and corest Safety Recordivities and work ening activities a in accordance whendations. I accordance I accordan	(print name conditions contained ommendations prior projects. I hereby and work projects in with the WPC Garden gree to instruct my

I do hereby release and discharge WPC Garden of Eatin' and Community Food Forest and all of Wintergarden Presbyterian Church officers, directors, employees, and volunteers from all liabilities, claims, demands, and causes of action of every kind whatsoever for any damages and or injuries arising from any cause whatsoever which may result directly or indirectly from my child's participation in the WPC Garden of Eatin' and Community Food Forest.

I further agree to hold harmless WPC Garden of Eatin' and Community Food Forest and its officers, agents, employees, and volunteers from liability for any damages or

injuries resulting from any acts or failure participation in any activities on or near W	e to act on my child's part during my child's intergarden Presbyterian Church property.
Signature of Parent/Legal Guardian 1	Printed Name
Signature of Parent/Legal Guardian 2	Printed Name
Date	Date

# **GROUP VOLUNTEER ACTIVITY RECORD**

Organization/Community Group	Date of Event
Contact Person	Phone
Email Address	
Total number of volunteers worked Total number of hours worked	
Description of Garden project/volunteer se	ervice work performed:

VOLUNTEER NAME	SIGNATURE	ADDRESS	TELEPHONE NUMBER

#### **SAFETY RECOMMENDATIONS**

The following safety recommendations are provided for organizations and individuals participating in volunteer garden work.

- 1. Observe posted Garden Rules.
- 2. Gloves and closed toe shoes (boots or sneakers are recommended) should be worn by GROUP members while working in the Garden.
- 4. An adequate supply of drinking water should be readily available.
- 5. Sunglasses, wide brim hats and sunblock should be considered.
- 7. Carpool to the site to reduce the number of vehicles.
- 8. Observe ground conditions in the Garden before activity begins. Gopher Tortoise burrows may be difficult to see and fire ants can be prevalent throughout the WPC Garden of Eatin' and Community Food Forest.







WPC COMMUNITY 'GARDEN OF EATIN' VOLUNTEER HOURS LOG							
First and Last Name	Address	Date of Volunteer Hours	Volunteer Hours	Type of Volunteer - First (F), Repeat (R)	Recruited - Y/N	Managed Y/N	Organization Name (if applicable)



#### **PROCEDURES**

# **Plot Applications, Agreements and Assignments**

Interested gardeners can contact the Wintergarden Presbyterian Church at 951-743-5335 or visit our website: <a href="https://www.wintergardenpres.org/">https://www.wintergardenpres.org/</a> to obtain more information about our community garden.

Plots are assigned on a first come first served basis. If no plots are available at the time of request, the applicant will be put on a wait list. New gardeners are invited to meet onsite with the garden manager to view the plot and learn about the garden. Upon plot assignment, new members will complete the WPC Community Garden Program Registration Agreement & Liability Waiver and submit annual fees, payable to Wintergarden Presbyterian Church. Monies collected go towards utilities and general garden maintenance expenses.

#### **Wait Lists**

Plots are assigned by WPC Garden Manager on a first-come, first-served basis. If no plot is available at the time of the request, the applicant will be placed on a waitlist and notified when a plot becomes available. Each garden member is entitled to one plot when there is a wait list for the garden. If there is no wait list and available plots remain, gardeners may secure additional plots on a first come, first-served basis. Members are responsible for the annual fee on any additional plot assigned. Members may not transfer their plot to another person. When a plot becomes available, the WPC Garden Manager will reassign it to the next person on the waitlist.

#### **Community Garden Checklist**

This checklist is to be used by the Garden Manager and Gardeners to identify any difficulties or problems needing resolution. WPC will make the final decision. See Enclosure.

#### **Annual Plot Assignment, Renewals and Fees**

Membership agreements are valid one year. Membership fee is \$25. This fee may be reduced or waived under special circumstances.

If the garden member decides to abandon the plot, the member should notify the Garden Manager so the community can plant and harvest produce for the food pantry.



To renew plot assignments, garden members must submit a signed membership agreement and payment to: Wintergarden Presbyterian Church for further credit to Garden of Eatin'.

#### **Garden Manager**

The garden manager position is a yearly appointment. The position requires approximately 4-5 hrs per week. See "Responsibilities" section for duties that the Garden Manager must perform.

#### **Garden Member Termination**

Any member who chooses to stop gardening or not renew their membership agreement should notify the garden manager. Members are responsible for removing all vegetation in the plot to prepare it for the next gardener. Failure to abide by the rules stated within the membership agreement shall result in forfeiture of the participant's plot and associated fees.

WPC Garden of Eatin' Leadership reserves the right to immediately terminate membership for any violation(s). In the event of a membership agreement violation, the garden manager will attempt to resolve the matter by contacting the member directly. If no resolution occurs, the garden manager will send a warning letter to the member. The Garden Member will then have 14 calendar days to resolve the identified violation(s) as stated in the warning letter. If violations are not corrected, WPC Garden Manager will send a final warning letter to the member. The member then will have seven calendar days to comply or forfeit the plot and membership fee.

#### **Conflict Resolution and Grievance Procedure**

In the true sense of a "community" garden, disagreements should be handled informally through discussion between the parties involved whenever practical. A member should first attempt to work out any issue directly and respectfully with the other party.

If needed, collect the facts, including the date, time, place, and nature of the incident(s) and document any attempted resolution(s). If members are unable to resolve concerns on their own, the next step is to ask a garden manager for help. If the grievance is with a manager, the issue should be addressed with the Leadership Team when feasible.



On occasion, conflicts and complaints cannot be resolved informally. For these situations, the parties involved should complete a grievance form to notify the Garden Manager/Team Leadership. The Garden Manager/Leadership Team then will consult the parties involved to collect facts and follow the normal process for rule violations, if any have occurred. Grievances must be filed within one week following an incident to be reviewed. Members may appeal a grievance-related decision/termination within 14 calendar days of the outcome by requesting reconsideration by the Garden Program Team Leadership. The Leadership Team will review the information and determine whether it warrants further consideration.

#### **Use of Toolshed, Tools and Equipment and Greenhouse**

The Toolshed is kept locked for safety and liability reasons, but garden members can arrange access by contacting the Garden Manager or secondary keyholder. Members can bring their own tools for use or use the tools available in the shed. Please return any tools borrowed from the shed in the condition that you received them. If a WPC garden tool is damaged or needs replaced, please bring it to the attention of the Garden Manager.

Our greenhouse is available for members for seed germination and to protect plants from extended cold weather. When using the greenhouse, make sure all plants are labeled and identified with members' name, date, and plot number. Space is at a premium in our mini greenhouse, so be mindful of keeping open shelf or floor space for other gardeners to use. Space is at a premium in our mini greenhouse, so be mindful of keeping open shelf or floor space for other gardeners to use. Vents in the greenhouse help with aeration when the weather is hot and dry.

#### **Community Compost**

#### General

Compost is essential not only to regenerate our garden plot soils, but to regenerate and heal our ecosystems on a global scale. Composting food scraps and yard waste keeps valuable nutrients out of landfills, restores nutrients to our food system, prevents and captures greenhouse gases and provides abundant living soil to grow nutritious food for our community in need.

Two ingredients are essential to make compost: nitrogen and carbon. "Green" materials like coffee grounds, egg shells, garden & grass clippings, fresh fruit and vegetable scraps are high in *nitrogen* and need to be covered with a thick layer of



"brown" dried leaves, twigs and branches, wood chips, newspapers, which supply carbon and allow the compost cycle to begin and reduce odors of rotting materials.

According to Josh Whiton who created the MakeSoil platform and established Wintergarden as a MakeSoil community compost site, "Together we can address the food waste crisis, regenerate the planet, and reconnect with the earth and each other." This concept works perfectly in our situation with a community garden and garden members who are responsible for the upkeep of the entire area.

The four simple steps to make a nutrient-rich compost are:

- Build
- Aerate
- Mix
- Harvest

There are many resources for learning more about composting. One good resource with free webinars is available from The Institute for Local Self Reliance (ISLR). <a href="https://www.ilsr.org">www.ilsr.org</a>. See Resources for more links on composting.

#### The WPC Compost Site

The compost bins are a communal area and garden members are responsible for the maintenance of the bins. There are currently 6 connected wood & screen bins (two rows of 3 bins) in active stages of compost, from beginning raw materials to finished soil ready for use. Finished composted soil is kept in the black plastic pallet shipping container across from the bins closest to the wooded edge of the property. Adjacent to the finished soil area is an open pallet stall that contains dried leaves, dried twigs or branches, wood chips (carbon) for use in covering rotting material such as vegetable/fruit produce, egg shells, coffee grounds (nitrogen). There is a black trash bin with a connected lid located by the food pantry in the same area for raw compost items to be added. The site map for the composting area is shown at the enclosure.

#### Steps in "Making" Compost

1. Making compost begins by individuals and families collecting their green food scraps at home. Fresh vegetable and fruit scrap, i.e., carrot tops, browned lettuce, apple cores, oranges, peach skins, strawberry tops; used ground coffee in filters, tea bags (no staples), egg shells, avocado skins and pits, corn cobs, etc. can be collected and stored in a closed container. This collection container should be monitored closely before rotting begins and produces unwanted odors and insects.



- a. Families and individuals are also encouraged to bring items for the "carbon" mixture. These include shredded newspaper, fall leaves, untreated straw, plant stalks and small twigs. Remove staples and metal objects. These are to be placed in the open pallet area, not in the black bin!
- 2. The next step is for the individual/family member to bring these scraps to the WPC compost area. Additionally, the food pantry vegetative waste is also added to the composting area.
- 3. These scraps need to be deposited into the compost bin #1A and #1B. After scraps are put in, cover the scraps with "brown" matter.
- 4. If in a hurry, place scraps in the black bin. The contents of the black bin must be added to the "Build (1A and 1B)" compost bins, closest to the food pantry buildings. This step must be performed frequently at least twice a week or more often. This will reduce the potential for odors, flies and rodents.
- 5. Carbon "brown" materials located in the open pallet stall closest to the woods contain the materials to be used to cover the "green" rotting scraps.
- 6. Weekly or more often, as needed, the material in the "Build" piles must be physically moved to the "Mix/Aerate" middle bins. This process will assist in creating a hot mixture which will help break down the materials.
- 7. The Mix/Aerate middle bins must be physically moved to the "Almost Finished" End bins. This process of movement will again aerate the mixture.
- 8. This mixture in the end bins is not completed until it reaches a certain temperature. At that point, it must be sieved through a screen to isolate large pieces that have not completely broken down. The "Finished" compost can then be moved to the area in the open pallet area to the left of the carbon materials.

NOTE: "Finished" compost will be blackish in color without noticeable items. It should look very similar to garden soil. Finished compost can be used by garden members to refresh and provide nutrients to garden plots. It can also be used for common area plantings.

#### Exclusions



Items that must not be added for composting include cooked foods, and dairy, meats and bones, pet waste, used tissues and dirty paper towels, produce stickers, oils and greases and treated or painted wood. Other items excluded include diseased and pest-infested plants, weeds, large branches, etc. must not be used to make compost for obvious reasons. These items must be taken to the burn barrel site.

#### **Burn Barrels**

Three barrels have been added to the WPC site. These barrels are managed by the WPC. WPC must obtain permission during specific times to use the burn barrels. Do **not** start fires in the burn barrels.

#### **Hurricane and Inclement Weather Preparedness**

#### <u>Pre-Hurricane Season Preparation</u>

Cut back all trees and weak branches

Thin foliage so wind can flow freely through branches, decreasing the chance that trees/plants will be uprooted

Secure the parts of a fence that appear weakened or loose. Hurricane-force winds can easily dislodge boards and pieces from a fence creating flying debris

#### Approaching Hurricane

If a hurricane is approaching, contact garden members so they can take action to secure their own plots. If you have time, help your neighbors. Items left in their plots may cause damage elsewhere.

#### All members should:

- Collect vegetative debris and place trimmings in designated receptacles for pick up (do not leave them loose or on the ground).
- Place any items that could become missiles in the shed in a storm such as lawn furniture, birdbaths, tools, decorative items, containers and pots, trellis'/support structures, hoses, trash cans, wind-chimes, and signs.
- Anchor heavier objects deep into the ground. Items that cannot be removed must be tied down securely.
- Take items from sheds that may be damaged by water home and store them in high areas away from windows (e.g., power tools, paperwork).
- Close and lock shed doors and greenhouse. Open roof vents in the greenhouse.



Once a storm has been named, or a hurricane watch or warning has been issued, do not create massive amounts of vegetative debris or trim trees since normal collection routes may be suspended. Materials should not be placed at the curb or taken to the landfill during this time. High winds can quickly pick up any yard object that isn't well anchored or heavy enough to resist the uplift forces. These objects have the potential to cause significant damage to anything in the surrounding areas!

#### After the Storm has Passed

Be patient while waiting for vegetation and storm debris to be picked up. The collection of household garbage, which could attract pests, is the priority.

If flooding has occurred, food safety may be a concern. Vegetables may decompose rapidly and be susceptible to diseases. Check with the Garden Manager/ Leadership Team before consuming any produce that may have been contaminated by flooding.

Water sources may be contaminated.

The Garden Manager will notify garden members when it is safe to water plants. Inspect the garden and shed for damage and notify staff of any concerns. Use caution during clean up. The use of Power Tools is not allowed. If you have questions, contact the Garden Manager for further guidance. See Resources for additional websites.



# **Garden of Eatin' Community Garden Checklist**

e:_	
k-	Through Participants:
	General Upkeep. Please check ALL that apply.
	☐ Is there litter, trash or dumping inside the garden perimeter
	(not in receptacle)? $\square$ Is there litter, trash or dumping near the garde
	(not in receptacle)? □Are all the beds planted or properly covered? □
	Are any general repairs needed? If so, please list below.
	Borders and Pathways. Please check ALL that apply.
	☐ Are vines or other vegetation limiting visibility and accessibility into
	the garden? □Are there weeds along borders/pathways? □Is there
	any evidence of spraying or chemical edging along borders/pathways
	☐ What is the condition of the perimeter borders. If repairs are
	needed, please list below.
	○Good ○ Fair ○Poor ○N eeds R epair

**Integrated Pest Management Scouting.** Please check ALL that apply and list details in the table below.

☐ Are there diseased or pest infested plants in garden plots or around



the garden area? Identify Garden Plot number/member.   Is treatment of disease or pest needed?   Is the garden relatively free of weeds?   Are any problematic/invasive (IFAS- or FLEPPC-listed) plants present?
Pest Location Recommended action:
Requested supplies:
Shed and Greenhouse and Common Areas. Please check ALL that apply. □ Are tools stored in a neat and orderly manner? □ Are prohibited or unlabeled products present? □ What is the condition of the shed? □ Are there overgrown plants in the greenhouse? □ Has a specific gardener used too much space or kept plants in the greenhouse beyond a reasonable time? □ If repairs are needed, please list below.  ○Good ○Fair ○ Poor ○N eeds Repair
Community Accessibility. Please check ALL that apply.  □ Is there an orderly gathering area? □ Is the free of hazards? □ Is there standard signage in place? If so, please assess the condition. □ If repairs are needed, please list below.  ○ Good ○ Fair ○ Poor ○ Needs Repair
Hazards  □ Is the garden free from safety concerns, such as trip hazards and loose projectiles, uncoiled hoses, etc? If not, describe hazard:



ther notes:		
Required Follow-Up	Responsible Entity	Date Completed
THER COMMENTS		
THER COMMENTS		



Items Needing Resolution:	
	-
Signature of Walkthrough Representative:	
Date:	

If all is resolved, file in Official File



#### **Garden Program Grievance Form**

# 

Please be aware that our Community Garden Program conflict resolution guidelines require that members first attempt to resolve issues themselves and subsequently with the Garden Manager, prior to submission of this form to the Garden Leadership Team. If you have not already done so, please review the guidelines.

Have you attempted to resolve this matter yourself?  $\square Yes \square No$ 

Have you spoken with your Garden Manager about this issue? ☐Yes ☐No



Briefly describe the conflict (please include names, dates, and other pertinen information). Attach additional pages if needed:
Are additional pages or documents attached? □Yes □No
This procedure/form is not intended to resolve incidents of physical harm or criminal activity. In such cases, the police should be contacted and staff notified immediately.
Provide this form to the Garden Manager or Leadership team member. Upon receipt and review of this form, you will be contacted to discuss next steps in the resolution process.
Complainant's Signature
Date:
Printed Name
Garden Manager or Garden Leadership team Member
Printed Name
Date



# **COMPOST BINS SITE**

	Harvest Ready to Use (Screened)  Dried Leaves or Carbon Mulch for Use in Covering Rotting Materials
T O O L S H E D	STEP 3 FINISHING no new inputs of nitrogen or carbon until breakdown complete  STEP 2 AERATE & MIX no new inputs- partially composted  STEP 3 FINISHING no new inputs of nitrogen or carbon until breakdown complete  STEP 2 AERATE & MIX no new inputs- partially composted
	STEP 1 BUILD first stage raw compost in progress  STEP 1 BUILD first stage raw compost in progress
	Pepogit Perogit Refe

Procedures Enclosure 3

44



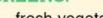
# Composting Do's and Don'ts

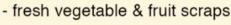
Provided for public consumption by the Institute for Local Self-Reliance

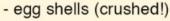
# YES!

# COMPOST .

# GREENS:







- cut flowers & green plants
- most garden & grass clippings
- coffee grounds & filters
- tea bags (no staples!)

# BROWNS:

- fall leaves
- untreated straw
- shredded newspaper
- plant stalks, twigs, & branches
- untreated wood chips & shavings

# DO NOT COMPOST . . .

# ANY OF THE FOLLOWING:

- cooked foods
- cheese & dairy
- meat & bones
- pet waste
- used tissues & paper towels
- produce stickers
- oils & greases
- glossy or coated paper
- treated or painted wood
- aggressive weeds & grasses
- poisonous or diseased plants





# **Garden Management and Practices**

#### General

This section covers 'best practices' and guidance for the gardener in the 'Garden of Eatin.' The main objective is to provide each gardener with the life cycle of gardening.

Planning	Irrigation	Weeding
Planting Strategies	Planting	Fertilization
Diseases and Integrated Pest Management	Mulching	Pruning
Inactive Gardening Management	Journaling	Seasonal Guide

According to the US Department of Agriculture, the Hardiness Zone is the standard by which gardeners and growers can determine which plants are most likely to thrive at a location. This zone is based on the average annual minimum winter temperature divided into 10-degree freeze zones.

Our Hardiness zone has changed in the past few years and we are experiencing less freezes and more warm temperatures. So, our zone is now 10a. We know however that Sarasota and Fort Myers have different climates and their plantings may differ from ours.

Knowing what works is many times by trial and error! Journalling is a great way to define successes as well as failures. Extending your harvest by staggering plantings of crops is an efficient way to garden. Journal options are available for families for capturing data and harvesting cycles for the garden year. See Journalling and Planting Strategies for more information.

Each gardening area has unique advantages and disadvantages. In the tropics and subtropics, typical advantages include lots of sunlight and warm temperatures for year-round production and a wide diversity of crops that can be grown. In temperate



climates, typical advantages include the ability to grow plants that require colder temperatures and a winter to periodically kill many insects and disease organisms. One of the keys to success is matching the right crop to the right season. In this section are some general challenges along with ideas for success. The chart below provides challenges and solutions for areas of concern to our gardeners.

Common challenges and problems to gardening in the arid and semi-arid tropics:	Solutions for success in the arid and semi-arid tropics:			
Poor soil fertility Low soil organic matter content Extreme temperatures Drought and water stress High winds	Covering the soil with mulch Utilizing amendments like compost, manures, or fertilizers Increasing soil organic matter and "life in the soil" Utilizing sunken beds and planting stations Controlling weeds Consistent watering Choosing the right crops Take advantage of perennials in the garden Using cover crops			

Common challenges and problems to gardening in the humid tropics and sub-tropics:				
Poor soil fertility Low soil organic matter content Seasonal flooding/high water table Nematodes	Improved raised beds Covering the soil with mulch Utilizing amendments like compost, manures, or fertilizers Controlling weeds (one weed going to seed can result in thousands) Consistent watering			



Importance of increasing organic matter in the soil and "life in the soil" No hard prolonged freezes to kill off insects and insect eggs
Weed pressure during the rainy season

Matching crops to the seasons
Take advantage of edible perennials in

Take advantage of edible perennials in the garden

Using cover crops and crop rotation

## **Planning**

#### Know the Season

Plan gardening events according to our local seasons—rainy season, dry season, hot season, or cool season. Research local weather data or talk to other gardeners or local farmers to get a good idea of rain patterns, temperature patterns and flooding or drainage information for the area you are going to use for the garden. Check the Seasonal Guide Enclosure for guidance on the four seasons.

#### Know the Crop

Enjoy researching plants and getting to know their characteristics. Match crop to season; try to categorize plants by warm season, cool season, rainy season, and dry season. Journaling is a great way to keep track of what plants succeed. If a planting has good characteristics that you want to utilize in the future, harvest the seeds and save for the next planting. A month-by-month guide with an area after each month for note-taking is enclosed and can be downloaded and printed for use.

#### Designing a Plan

Think about when to sow and harvest, labor requirements, water requirements, pest potential, market potential and other factors. Where will each crop be planted? Consider crop rotations, proximity to walkways, need for a trellis, etc. What preparation must take place—e.g. reforming beds, trellis construction, adding soil amendments, labelling crops, need for mulch? Develop a plan for adding manures or other organic fertilizers. Develop a plan for controlling weeds, pests and diseases.



#### **Planting Strategies**

Succession planting, also known as interval planting, is a way to extend your harvest by staggering plantings of crops or planting varieties with staggered maturing dates. There are four methods of succession planting.

# Same Vegetable, Staggered Plantings

Space out plantings of the same vegetable every at intervals of 7, 10, 14, 21 or 28 days. Many vegetables fade after producing their initial crop, setting a heavy yield initially, then smaller and smaller yields throughout the summer. Rather than planting your entire row of beans all at once and having feast or famine, you can plant part of the row at the beginning of the season and then plant more in about two to four weeks. A new crop will be continually coming in. As the first plants start to flag, you can replant that area with beans or use it for a different crop. Review the sample chart of how to chart and track different crops. There is also a chart to download for use.

#### Different Vegetables in Succession

Some crops, such as peas, have short growing seasons and the space they were using can be replanted with a later season crop, like eggplant. The best vegetables for succession plantings include: arugula, basil, beans (pole), beets, broccoli raab, carrots, chicory, cilantro, corn salad (mache), dill, endive, green onions, kale, kohlrabi, lettuce, mizuna, mustard, bok choy, radish, rutabaga, spinach, swiss chard, tatsoi, and turnips.

#### Paired Vegetables in the Same Spot

Often you can seed the early season vegetable at the same time you are planting. Intercropping, or pairing up plants, is an excellent way to squeeze even more productivity from your vegetable garden.

#### Same Vegetable, Different Maturity Rates

An easy way to keep your harvest coming in is to choose more than one variety of a crop and make them early-, mid-, and late-season varieties. Sometimes the seed packet will be labeled as such, and sometimes you will just have to read the "days to maturity" number, but tomatoes, corn, summer squash, and several other vegetables can be staggered throughout the growing season this way. Vegetables



to sow with different maturity dates include beans (pole), broccoli, Brussels sprouts, cabbage, carrots, cauliflower, celeriac/celery, collards, corn, eggplant, kale, melon, peas, summer squash, and tomatoes.

For new gardeners and seasoned gardeners alike, there are several things to consider in making the most of the garden plot.

#### **General Tips**

- Have enough seed to get through the season. Some seed lasts several years;
   others need to be fresh for good germination. Read the seed labels
- Add some compost or leaf mold to the beds, between plantings, to keep the soil rich.
- Experiment with different planting strategies. Stagger plantings of crops or planting varieties with staggered mature dates. For example, planting one row of radish seed then another row one-two weeks later ensures not all radishes will be ready to harvest at once. There is a sample chart showing
- Don't hesitate to pull out vegetables past their prime. Use them while they are at their best and then use the space for something else.

#### **Planting**

Decide whether to Direct Seed (DS) or Transplant (TP) each of the crops chosen to grow in the garden. Researching each plant will help make an informed decision. In general, transplanting most vegetables except for beans, carrots, pumpkins, squash, cucumbers, melons, okra and other large seeded crops are encouraged. Transplanting may be accomplished by purchasing potted plants, such as tomatoes, or starting the plant using seed beds or containers. Direct seed is planting seed directly in the garden plot. Understanding plant spacing reduces crowded plots. Utilizing planting strategies ensures the most effective use of the space.

#### **Starting Transplants**

Germinating seeds should be started before preparing the garden bed. Choose appropriate container or seedbed; guidelines for commercial seed trays:

- 1 ¾" X 2 ¼" cells; excellent for lettuce, cabbage, and broccoli
- 1 ¾" X 4 ¼" cells; all-purpose tray for tomatoes, peppers, can also be cabbage and broccoli, rhubarb.
- Tray without cells filled with soil (around 2") for thickly sowing onions. Make sure to properly label containers; include plant name and date seeded. Make sure potting soil is moistened in advance of seeding. Properly pack soil to reduce

settling. Plant seed at proper depth (1 cm for most seeds or twice as deep as the seed is wide). Cover seed and pack firmly. Water gently.



Place trays in an area that gets enough sun but not so much it dries out in a day. Water daily. Thin seedlings to one plant per cell at appropriate time (i.e. young enough not to damage adjacent plants).

Seeds can be germinated in a greenhouse or in a sunny window.

#### **Direct Seeding**

Prepare planting area first—irrigate planting area in advance (never seed into dry soil). Over-seeding is important in the field, especially in small plots where thinning is manageable. Seed deeper in the field than you would in transplant trays, except for small seeds. Pack the ground firmly. Water seeded area thoroughly. Protect if necessary from wildlife. Always have field plantings labeled and recorded in a notebook—map, plant, and date planted.

#### Spacing

You can use different planting guides such as the UF/IFAS or Educational Concerns for Hunger Organization (ECHO) recommendations. See Resources for links. Spacing recommendations from planting guides on the seed label are often further apart than necessary for small gardens; if anything plant slightly closer. Tight spacing reduces weed pressure. Wider spacing can reduce diseases in humid climates or during the rainy season. But overcrowding reduces full growth of plants that cannot get enough nutrients from the soil, air and moisture.

#### Transplanting

Ensure moistened soil in advance of planting. If possible, add a small amount of subsurface manure/compost/fertilizer in the bottom of the planting hole. This can be done in advance if you know where the plant is going or can be done at the same time as transplanting—better in advance, but harder to coordinate. Prevent air gaps just below transplant. No mulch or coarse organic matter in the transplant hole, only fine organic matter like cow manure or fine screened compost. No horse manure or wood chips in the bottom of the holes. Plant to proper depth.

- Solanaceae (or nightshade) crops (e.g. tomato, pepper, eggplant) to first true leaf on the stem (right above the soil level).
- Crops with a crown (lettuce, cabbage, strawberries) should be planted with the crown about soil level.
- Most others species to the first leaf on the stem, or one of the first pair of leaves, produced by the seed of a flowering plant.



They may serve as food stores, remaining in the seed at germination, or produce food by photosynthesis or 1-2 centimeters above existing potting soil.

Pack soil around transplant well ensuring the soil is packed well around the roots. Water! Water transplants within an hour of planting to remove air pockets and reduce transplant stress.

# Mulching

Mulching helps stabilize soil temperatures, saves and conserves water, helps control weeds, reduces soil borne diseases, protects against erosion, encourages root growth, encourages soil life, and can add nutrients to the soil. Mulch options: hay is excellent for vegetable beds; leaf/wood chip mulch, leftover crop residues, rice straw, pine needles, wood shavings, pine needles (sold as pine straw). It is usually easier to mulch after planting than before. A tip: Place pots or containers over new transplants to make mulch application easier; then pull pots off top of plants after placing mulch. Mulch should not touch the vegetable stems as this may encourage rotting.

# Irrigation

Be attentive to weather conditions—clear, hot days; overcast; humid and still; windy and dry; heavy dews; rain and how much. Know the seasons; know which 'months have the highest evapotranspiration (the return of moisture to the air through both evaporation from the soil and transpiration by plants) rates. Check the moisture level of the soil by hand. Match it to the stage of the crop(s)—small plants have shallow roots needing more frequent watering while old plants ready for harvest have deeper roots with less moisture needs.

#### **Fertilization**

Plants need the nutrients in the soil to help them grow strong and healthy. Since this process drains the soil of nutrients, adding fertilizers improves the soil for future crops.

Organic fertilizers contain only plant- or animal-based materials that are either a byproduct or end product of naturally occurring processes, such as manures, leaves, and compost. Manure-based fertilizers contain primary nutrients like nitrogen, phosphorus or potassium, also known as NPK.

Inorganic fertilizer, also referred to as chemical or synthetic fertilizer, is manufactured artificially and contains minerals or synthetic chemicals. Read the label closely for uses and amounts needed to properly fertilize an area.



There are advantages and disadvantages of using one type over the other. For more information, see the article on the definition, differences and uses of these types. <a href="https://extension.oregonstate.edu/news/heres-scoop-chemical-organic-fertilizers">https://extension.oregonstate.edu/news/heres-scoop-chemical-organic-fertilizers</a>

Over-fertilization (i.e., the application of fertilizer nitrogen (N) in excess of the need to use it for optimum productivity) is associated with high levels of residual nitrate in the soil, which potentially contribute to groundwater and atmospheric pollution as a result of leaching, denitrification, etc. Be sure to read the label closely before purchasing to determine suitability.

## Fertilizing Garden Vegetables (Annuals)

Pre-plant and early applications are critical for success. Subsurface application is preferred, but is more work. When combining manure with fertilizer, always place fertilizer in below the manure or compost to protect the microorganisms from high salt concentrations. General recommendation is ½ to 1 qt. per planting hole/station of manure and/or compost. Consider side-dressing with fertilizer according to the appropriate rate or side dress early with good quality cow manure, i.e., "Black Kow" depending on crop (use sparingly on lettuce or crops you plan to eat raw).

#### Fertilizing Perennials

Apply a 6 month-controlled release fertilizer, two times per year. Fertilize bananas and papayas more frequently (every 2 months recommended). Commercial and organic fertilizers may be used. Application rates will vary according to species and size and type of product used and timing of year. Be sure to be aware of any ordinances regarding the restricted use of particular fertilizers in our area.

## **Pruning**

- Remove dead, diseased, cross-branched or undesirable stems/branches.
- Shape the plant or control its size.
- Prepare the plant for the next fruiting season. Each plant needs to be pruned in its season.
- Perennial vegetables can be pruned almost anytime of the year, except for drastic pruning before the cold season or the hot dry season.
- In general, prune fruit trees as soon as the fruit harvest is finished.



## Weeding

Hoeing or pulling weeds on a weekly basis is the best management practice. Get weeds out before they produce seed. Regular weeding reduces the chance of overcrowding crops and reduces the chance that other garden plots may be affected. Weeds should be moved to the burn pit but not thrown into the common areas within the garden. Use cover crops for fallow (areas not planted with crops) areas.

# IPM (Integrated Pest Management) to control Insects and Plant Diseases

#### IPM

There are a number of Integrated Pest Management systems, often tailor-made according to the pest issue. The Institute of Food and Agricultural Sciences at the University of Florida (UF/IFAS) has developed a number of publications on IPM statewide.

IPM first involves positive identification of the pest – is it a pest? To complicate matters, not all insects are harmful, so applying insecticides indiscriminately especially harsh pesticides that affect even the beneficial insects can have a detrimental effect on the local garden ecosystem. Insects like dragonflies, praying mantis and pollinators are helpful to the natural environment.

If it appears that the pest seems to be destroying the plant, the next step is to determine if there are sufficient numbers to warrant treatment. Monitor the plant to decide what the threshold limit is that would trigger an action. Once an action is warranted, the least toxic remedies should be used first: cultural, mechanical and biological tools.

Sometimes, removing the pest by hand works. Or, if the pest is limited to one plant, removal of the plant might make sense to avoid contaminating all other plants.

If you determine the pest seems to be destroying the plants, and other methods have not worked, try homemade horticultural oils, insecticidal soaps. These are generally more safe and effective than relying on "quick" yet potentially harmful solutions such as herbicides, pesticides and conventional "ready to use" chemicals.

Recipes for homemade oil, soap, neem oil insecticides, diatomaceous earth, garlic and chili pepper insecticide sprays can be found at the following site:



https://www.treehugger.com/lawn-garden/8-natural-homemade-insecticides-save-your-garden-without-killing-earth.html

Additionally, good crop rotation can help control pests and diseases. As a general rule pests and diseases are most active during hot, humid weather so plants that can resist or withstand attack should be planted during these times. Planting at suitable times can control some pests and diseases; Removing weeds and plant residues can control some insects by breaking their life cycle or removing places for them to lay their eggs.

Pesticides can be harmful to people, pets and beneficial insects such as pollinators, and the natural environment and should be used only after all other pest-management steps have been taken. If a more strong remedy seems warranted, check with the Garden Manager to ensure the stronger method is approved.

The following publications provide information relative to IPM programs:

<u>Integrated Pest Management</u> - Integrated Pest Management

https://ipm.ifas.ufl.edu/ - IPM Florida

https://edis.ifas.ufl.edu/pdffiles/IN/IN10900.pdf - Landscape Integrated Pest Management

#### Diseases

- The most common plant pathogens include fungi, bacteria and viruses.
- Disease occurs when a pathogen infects a plant and disrupts growth and appearance. This could potentially kill the plant over time.
- Other reasons for plant death that mimic disease include nutritional deficiencies and drought and other environmental factors.

The following publication is helpful in determining whether a disease is evident and the remediation steps to take. The county extension office is also a helpful resource.

#### https://edis.ifas.ufl.edu/pp154

If the last recourse is to use a pesticide, document usage in "Pesticide Application Record Book" to inform the Garden Manager and all gardeners.



# **Inactive Gardening Management**

When the garden plot is not being actively used, continue to care for the garden plot by:

- Removing weeds, especially those in flower or setting seed
- Removing dead and dying plants, especially if they are diseased or covered in pests
- Neatly storing seasonal structures like tomato cages, stakes, trellis material and wood when not in use
- Covering the plot with an off-season crop, burlap or straw or a "green manure" suppresses erosion and weeds, protects the soil from high temperatures, conserves soil moisture, and produces mulch on site.

When a cover crop is turned into the soil, the decaying organic matter becomes a "green manure" that supplies organic matter and nutrients. Some cover crops can also suppress nematodes.

The off-season (extreme heat, extreme rain, cold, etc) is an excellent time to sow a cover crop or green manure to protect and improve the vegetable beds for the next intensive growing season.

Many legumes have a unique association with specialized bacteria that convert atmospheric nitrogen into plant available forms of nitrogen. These bacteria live in the soil and colonize the root systems of legumes. Therefore, green manures & cover crops can have a great ability to enhance soil fertility by adding more nitrogen to the soil. A cover crop can be sown on top of the garden beds once the produce has been harvested.

Before the next planning season, the cover crop can be killed by cutting the base of the plant near ground level. The green matter dries down in place and the vines over the walkways can be cut back and placed on top of beds as well. Over the next couple months, the cover crop will break down, adding organic matter to the soil while protecting the ground from the sun and reducing the evaporation rate from the soil. Vegetable transplants can be planted directly into the mulch cover and less labor is needed to cover the soil to prevent weeds.

The following cover crops are recommended for Florida gardens:

Summer: cowpea, velvet bean, soybean, and sunflower

Winter: cereal rye (FL 401), crimson clover, and Austrian winter pea



Some additional common cover crops and green manures include:

- Velvet bean (Mucuna pruriens) is a great cover crop that will out-compete
  weeds once the rains start and the heat arrives; it can be directly seeded.
  A bush velvet bean or vining type can be used. The bush type will stay on the
  bed and is easier to manage, but less smothering. Sow the bush velvet bean at
  6" X 12".
  - The vining type is best for smothering weeds, but can be very aggressive; check periodically to make sure it is not taking over walkways or other plants. Sow at 12"x12".
- Jack bean (Canavalia ensiformis) is a more arid tolerant green manure/cover crop; sow at 6" X 12". Lablab bean is a very good green manure cover crop that covers the ground well and is fairly tolerant of dry or wet conditions; sow at 6"x12".

One section of green manure cover crops can be saved from cutting to allow plants to produce seeds to harvest and store for next year's cover crop.

#### **Journaling**

Quite simply, a journal is a place to keep records, observations, plans, and anything that relates to the garden. A garden journal can become a unique history of what grows where and when. Documenting successes and failures is the most valuable reference guide to refer to in the coming year. There are no rules! It can be electronic, in book or notebook form, by using a simple chart or a downloaded app.

In an electronic journal pictures can be added; in a book, drawings, notes! Here are

- Keep notes on new plants. Organize this information by making a page for new plant. Get detailed by listing the plant species and any specific from the plant tag.
- Keep important garden milestones. By recording these dates, patterns emerge for tracking future gardening.
- Keep detailed planting notes and crop rotation schedules. This is a technique to keep track of how the plot operates best.
- Journal new techniques to try next season. Keep an information page for all new ideas while researching gardening. These might include greenhouse or natural pest control methods. It could also be a reminder about a specific reference to go back and look at.
- Keep notes about the specific seeds; manufacturer, specific seed name where purchased.



- Keep a fertilizing schedule for individual plant groupings and vegetable then keep track of the results and when you need to schedule the next fertilizing date.
- Keep track of successes and failures. Was there too much fertilizer? Was the planted in the wrong place? Was the spacing wrong? Was the vegetable planted the wrong season? Whatever the failure was, be sure to list it.

One of the most important benefits of a garden journal is obtaining knowledge and learning more about gardening. A simple version on pages 59-68 can be downloaded and printed for use.



Plant or Site treated	Date	Time of day	Pesticide Active Ingredients	Amount Applied	Additional Notes



# Seasonal Guide/Planning Calendar & Overview of Monthly Gardening

This enclosure has been extracted (and tailored to fit the Garden of Eatin' Community Garden) from the ECHO (Educational Concerns for Hunger Organization) Community Garden Toolkit publication. See Acknowledgements.

#### **Fall (September through November)**

Fall is the start of the "traditional" vegetable season in Florida. Though commercial growers begin in August, success is most likely when starting in September. Sow warm season crops beginning in Sept. Sow cool season crops beginning in Oct. Sow winter season crops at the end of Oct. or beginning of Nov. (these are especially cool season crops like spinach, carrots, and peas)

#### Winter (December and January)

Cool and winter season vegetables thrive (e.g. cabbage, cauliflower, spinach, carrots, peas, lettuce). There is a risk of freeze damage on warm season crops like tomato, but can still succeed with these. Sow more cool season crops in December and January like broccoli, cabbage, and lettuce. Fall tomatoes and peppers may be finishing but still grow well Risk of freezing temperatures may necessitate protecting plants. See January section in Calendar section for cold protection ideas.

## **Spring (February through May)**

Spring is early in Florida Last sowing of cool season crops like broccoli and lettuce usually occurs in February Spring planting of warm season crops occurs in February and March. April and May are usually the hottest and driest months during the year. Mulch and irrigation are especially important due to frequent dry spring weather Sow fallow crops on vegetable beds in May or June.

#### Summer (June-August)

Garden focus becomes perennials and tropical based crops like the perennial greens: chaya, Moringa, katuk and longevity spinach; also plants like pigeon pea, papaya, sweet potato. Weed pressure can be enormous. Unused vegetable beds can be planted to green manure/cover crops.



# FLORIDA MONTHLY GARDEN GUIDE (SEP TO AUG) (Note: Fall is the traditional "vegetable" season in Florida)

This enclosure has been extracted and revised for WPC use from the from the ECHO (Educational Concerns for Hunger Organization) Community Garden Toolkit publication.

#### September

September is usually the last month of the rainy season, though a few rains can be expected early in October. This is the time of year when we begin annual gardening. The focus is on warm season vegetables like tomatoes, peppers, and green beans. Garden bed preparation—essentially weeding the summer weeds and reforming and re-mulching beds—and planting seeds for later transplanting into the garden are the main activities. Plant seeds of selected warm season vegetables in trays for transplanting later. Refer to the planting guide for a list of warm season vegetables and which ones are normally transplanted and which ones can be sown directly later. Cut down any cover crop vines that cover the vegetable beds and let them die in place for mulch. Remove weeds from all gardens. Reform garden beds as necessary.

Irrigate gardens if needed. Prune perennial vegetable hedgerow around garden beds to allow new growth to occur before cooler winter weather when growth slows or stops.

GARDEN JOURNAL Notes:						

**October** Plant! Plant! This month is characterized by planting vegetables. Hopefully you have transplants ready to go in this month or you can direct seed plants like squash, melons, beans, and carrots. First week of October, fertilize all in-ground perennials with either cow manure or fertilizer. Transplant warm season crops like



tomatoes, eggplants, and peppers into garden beds. Use additional mulch for vegetable beds. In early October, start seeds for cooler season vegetables like broccoli, cabbage, and lettuce. Direct seed cooler season plants into garden beds that require direct seeding such as carrots and peas ('Mammoth Melting Pod' excellent variety, but remember to build trellis). Keep gardens well-weeded, watered, fertilized and covered with mulch.

GARDEN JOURNAL Notes:
<b>November</b> This is usually a pleasant month to tend the garden. The summer weeds should all be gone. The warm season vegetables should be growing well and the cool season vegetables that were seeded in trays earlier are now ready to transplant into the garden. Monitor all garden plants for nutrient deficiencies, disease, or insect problems. Transplant cool season vegetables that were sown in trays. Fertilize annual vegetables. Keep gardens well-weeded, watered, and mulched.
GARDEN JOURNAL Notes:



**December** This month marks the beginning of winter. It is also the time of year that you begin to see the fruits of your labor from the vegetable garden. Tomatoes, eggplants, peppers, squash, zucchini, green beans, and lettuce are often ready for harvest. Begin to make a succession plan for the vegetable beds for spring season. Cool season vegetables such as lettuce, broccoli, and kale grow well. Be careful not to over water perennials during cool weather. Keep up with fertilization of vegetables. Remember that a frost or freeze can occur this month.

GARDEN JOURNAL Notes:		

January January is the month where we normally get our coldest temperatures. Plants may be damaged or killed by a freeze (air temperature is at or below 32 degrees) or frost (leaves of plants fall below 32 even though the air is warmer and ice crystals form. Irrigate the garden heavily two days before a predicted frost/freeze event. If the weather forecast says a frost or freeze is possible, the gardens may need to be covered with frost cloth or thick covers while plants are young. Watering the soil to build up a reservoir of heat in advance of the cold weather is the easiest and best protective measure, but may not be enough if it is a hard freeze or frost. Seed the spring vegetables in trays (tomatoes, peppers, eggplants, cabbage, broccoli, zucchini, squash, lettuce, etc.) Keep up with fertilization of annuals. Direct seed green beans if desired. Be careful not to over water perennials during cool weather.

GARDEN JOURNAL Notes:
<b>February</b> Spring is coming. The first week of February we recommend fertilizing all in-ground perennials with fertilizer and/or manure. February is usually an ideal month for planting more vegetables, both warm and cool season vegetables. Fertilize all perennials and vegetables as needed. Plant vegetables as they are ready for transplanting into the garden. If sowing more vegetables especially at the end of the month, focus on warm-season crops like tomato, pepper, eggplant, okra, watermelon, and green beans. Keep gardens well-weeded, watered, and mulched.
GARDEN JOURNAL Notes:



**March** March is the time to prepare for our dry season. Mulch! Mulch! Mulch! This is the best time of year to re-mulch all the perennials in the garden in preparation for the two hottest and driest months of the year. In addition to mulching, because the gardens are irrigated, replace any dead or dying perennial trees or shrubs now that the danger of cold weather is past. Continue to tend the vegetable gardens and adjust watering and fertilizer rates as necessary for growing tomatoes, beans, etc.

Mulch! Mulch! Reapply 1-2" of wood chip mulch around all perennials in the gardens. Continue to use pine "straw" or mulch for annual vegetables as well as perennials. Irrigation length and frequency usually increases during this month. Insects and disease problems can become issues as the temperatures and humidity increase. This is the month for direct sowing pigeon peas in raised beds. Sow seeds 6" X 12". This makes a great intercrop with sweet potatoes. This is usually one of the last months for planting annual vegetables as the temperatures start to be too warm. At this point, only warm season crops like tomato, pepper, okra, eggplant, tropical pumpkin, and sweet potato should be transplanted into gardens. Continue to add manure to fast-growing and nutrient demanding plants like bananas and papayas. Replant any missing perennials in the hedgerows or dead or unhealthy plants in the gardens (e.g. replant papayas, pineapples, cranberry hibiscus, Longevity spinach, Malabar spinach, etc.). Add new trees/shrubs as desired (this is best done March-July because of irrigation and long warm season to help in establishment and growth before next winter). Continue with fertilization of annual vegetables. Keep gardens well-weeded, watered, and mulched.

GARDEN JOURNAL Notes	:		
			_

**April** This can be a very hard month on plants due to the clear skies, lower humidity, and very warm and sometimes breezy days. Our three critical months for irrigation are April, May, and often June (or until the rainy season is underway). The



evapotranspiration rate is highest in our area during the months of April and May. This means that plants and soil are losing a great deal of water, often much more than is being replenished through irrigation and the occasional light rain. Mulching and consistent irrigation go a very long way in conserving soil moisture, reducing plant stress, and improving the overall health of plants and soils. Irrigate! Irrigate! Irrigate! Some Aprils do provide significant and needed rain, but in general this is a very hot and dry month. The vegetable garden should be yielding lots of produce. New growth should be evidenced on perennials from the increased temperatures, response to February fertilizer, and the irrigated or rain-fed soils. Cool season crops will begin to wrap up and suffer from the hotter days. This is normal as the season transitions. If looking for options, you can plant summer annuals like okra, eggplant, sweet potato, cowpea, Lagos spinach, Malabar spinach, tropical pumpkin, etc. Perennials should by now have plenty of new growth and be harvested for food and to control size. Keep gardens well-watered and weeded.

GARDEN JOURNA	AL Notes:			

May Summer begins early in SW Florida. This month marks the transition into summer-like conditions where daytime and evening temperatures now make it very difficult for cool season vegetables to thrive. The focus of the garden moves more toward the perennials which flourish under these more tropical-like conditions. Fertilizer is usually applied to all perennials before the end of the month to be in compliance with our county codes.. It is very important to not get behind on irrigation as this month and April are usually the two hardest months on the Florida landscape. Depending upon your desire, it is also the month where you might begin sowing a cover crop for vegetable beds for the summer. Irrigate as necessary! Continue with summer planting. Plant cover crops (velvet bean, jack bean, lablab bean) on raised beds. It is very important that garden beds don't remain unplanted. Weeds



will become a difficult challenge if beds are uncovered in the summer. Continue to harvest leaves from perennial greens. Prune as necessary to control the size of plants. This is the last time perennials can and should be fertilized until October 1, in compliance with our local codes. Keep gardens well-watered and weeded. If weeds are difficult to control consider using a herbicide.

July The growth of plants is intense during the next three months. Keeping up with weed pressure and harvesting from perennials are the main activities during July, August, and September. Monitor cover crops in backyard garden raised beds. This is one of the easiest months to succeed with planting new trees due to the hot and humid weather. Monitor cover crops. Continue to harvest perennial greens. Many of the fruit trees will begin to bear fruit during this month—jackfruit, mango, Barbados cherry, etc. Enjoy! Usually irrigation systems can be turned off until September. Weed. Weed. Weed.
GARDEN JOURNAL Notes:

**August** This is a maintenance month in terms of keeping up with weeds and a "watch-it-grow" month. If the gardens are well-fertilized, mulched, and weeded, they should be flourishing. If plants are not flourishing during this month, there is likely a problem. This month, plants produce enormous biomass—generating plentiful new shoots, leaves, and stems. The subtropical and tropical fruit trees continue to bear fruit. Keep up and enjoy the harvest. Weed pressure is significant. There is usually ample soil moisture, especially with mulched beds, eliminating the need for irrigation. Cover crops should be out-competing weeds; make sure they do not take over walkways or other plants. Continue harvesting leaves from perennials.

GARDEN JOURNAL Notes:	

American Community Gardening Association (ACGA) <a href="https://www.communitygardening.org">www.communitygardening.org</a>

ECHO (Educational Concerns for Hunger Organization) <a href="https://www.echonet.org">www.echonet.org</a>

Florida Vegetable Gardening Guide IFAS Publication SP 103 http://edis.ifas.ufl.edu/vh021

Insect Management in the Home Garden Publication #ENY-476 <a href="http://edis.ifas.ufl.edu/vh036">http://edis.ifas.ufl.edu/vh036</a>

Organic Vegetable Gardening Publication #CIR375 <a href="http://edis.ifas.ufl.edu/vh019">http://edis.ifas.ufl.edu/vh019</a>

Starting the Garden With Transplants HS507 http://edis.ifas.ufl.edu/pdffiles/VH/VH02700.pdf

Vegetables for SW Florida in the Summer Months <a href="http://www.echonet.org/content/agriculturalResources/611">http://www.echonet.org/content/agriculturalResources/611</a>



# ROUBLES TO SANUARY North Central Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive/Escarole, Kale, Kohirabi, Lettuce, Swiss Chard, Tomatoes North Central Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive/Escarole, Kale, Kohirabi, Lettuce, Pepper, Sweet Potatoes, Swiss Chard, Tomatoes



Carrots, Celery, Mustard, Potatoes, Spinach

Onion (bunching, shallots), Peas (English), Radish, Turnip Carrots, Celery,Mustard, Potatoes, Spinach

cantaloupes, Corn, Cucumbers, Onion (bunching, shallot), Peas (English), Radish, Squash (summer, winter), Turnip, Watermelon Carrots, Celery, Mustard, Potatoes, Spinach

Beans (bush, pole, lima), Cantaloupes, Corn, Cucumbers, Okra, Onion (bunching, shallot), Peas (English, southern), Radish, Squash (summer, winter), Turnip, Watermelon







### EDIBLES TO PLANT IN FEBRUARY North Central South Arugula, Beets, Broccoli, Brussels Arugula, Chinese Cabbage, Eggplant, Endive/Escarole, Sprouts, Cabbage, Cauliflo Kohlrabi, Lettuce, Pepper, Sweet Potatoes, hlrabi, Lettuce, Pepper, Swee Swiss Chard, Tomatoes atoes, Swiss Chard, Tomato Carrots, Celery, Spinach Carrots, Celery, Mustard, Potatoes, Spinach Beans (bush, pole, lima), Beans (bush, pole, lima), Cantaloupes, Corn, cumbers, Okra, Onion (bunching, shallo)t, as (English, southern), Cantaloupes, Corn, Cucumbers, Okra, Onion (bunching, shallot), Peas (English, southern),

















For more information, please visit GardeningSolutions.ifas.ufl.edu









For more information, please visit GardeningSolutions.ifas.ufl.edu



# EDIBLES TO LIN MAY PLANT IN THE PLANT IN THE

	North	Central	South
Survives tinds Transplantinds	Sweet Potatoes Swiss Chard	Sweet Potatoes Swiss Chard	Sweet Potatoes
The late of the la			
Jeggs	Okra Peas (southern)	Okra Peas (southern)	









For more information, please visit GardeningSolutions.ifas.ufl.edu

# EDIBLES TO INJUNE PLANT IN JUNE

	North	Central	South
Surjue titus Translatitus	Sweet Potatoes	Sweet Potatoes	Sweet Potatoes
Talkity are			
758	Okra Peas (southern)	Okra Peas (southern)	







For more information, please visit GardeningSolutions.ifas.ufl.edu





Surjugating Peppers Tomatoes		Sweet Potatoes
Tighth die		
Cucumbers Okra Peas (southern) Pumpkin	Okra Peas (southern) Pumpkin	









For more information, please visit GardeningSolutions.ifas.ufl.edu



	North	Central	South
	Beets, Broccoli, Brussels Sprouts, Surficient Chinese Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive/Escarole, Kale, Peppers, Tomatoes	Eggplant, Endive/Escarole, Peppers, Tomatoes	Eggplant, Peppers, Tomatoes
N.	Survive state of Carrots, Cetery, Mustard	Carrots	
S. S	Beans (bush, pole, lima), Cucumbers, Onions (green, shallot), Squash (summer, winter,) Turnips	Beans (bush, pole, lima), Okra, Onions (greens, shallot), Peas (southern), Squash (summer, winter)	Okra, Pumpkin, Squash (summer, winter)









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# EDIBLES TO SEPTEMBER North Central Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Cauliflower, Chinese Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive/Escarole, Kale, Lettuce, Peppers, Strawberry, Swiss Chard Carrots, Celery, Mustard, Spinach Carrots, Celery, Mustard, Spinach Carrots, Celery, Mustard, Spinach Carrots, Celery, Mustard, Spinach







For more information, please visit GardeningSolutions.ifas.ufl.edu



1	Sout	Central	North
	Beets, Broccoli, Cabbage Cauliflower, Chinesi Cabbage, Collards, Eggpland Endive/Escarole, Kale Kohlrabi, Lettuce, Peppers Strawberry, Tomatoe		Cabbage, Collards, Kale, Kohlrabi, Lettuce, Strawberry
	Carrots, Celery, Mustard Potatoes, Spinacl		Tighthin Are Carrots, Mustard, Spinach
	Beans (bush, pole, lima) Corn (sweet), Cucumbers Onions Peas (english southern), Radish, Squasl (summer), Turnip		Jeeds Onions, Radish, Turnips







For more information, please visit GardeningSolutions.ifas.ufl.edu



# EDIBLES TO PLANT IN NOVEMBER

		North	Central	South
<b>Y</b>	Editive Rill Bru Caulifle Collards	rugula, Beets, Broccoli, ssels Sprouts, Cabbage, ower, Chinese Cabbage, t, Endive/Escarole, Kale, Kohlrabi, Swiss Chard	Arugula, Beets, Broccoli, Brusselis Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Endive/Escarole, Kale, Kohlrabi, Lettuce, Swiss Chard	Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cavifilower, Chinese Cabbage, Collards, Eggglant, EndiverEscarole, Nale, Kohlrabl, Lettuce, Peppers, Strawberry, Swiss Chard, Tornatoes
T	Survive sulting	Carrots, Celery, Mustard, Spinach	Carrots, Celery, Mustard, Potatoes, Spinach	Carrots, Celery, Mustard, Potatoes, Spinach
The state of the s	726 92	Onions (bulb, green, shallots), Radish, Turnips	Onions (greens, shallots), Peas (English), Radish, Turnips	Beans (bush, pole, lima), Corn Isweet, Cucumbers, Onions (greens, shallots). Peas (English, southern), Radish, Squash (summer, winter). Turnips



















## **Plant These Herbs**



## **Plant These Herbs**

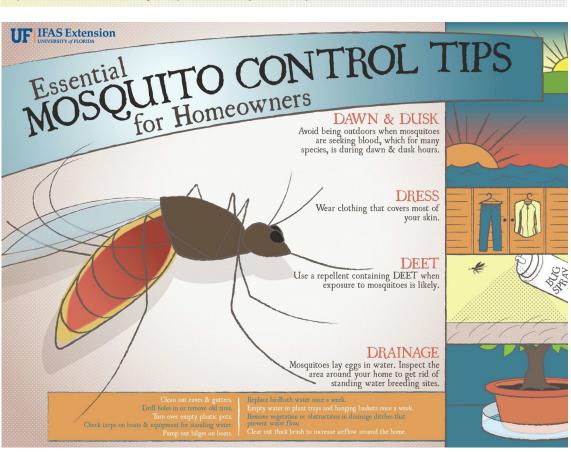


# **Plant These Herbs**



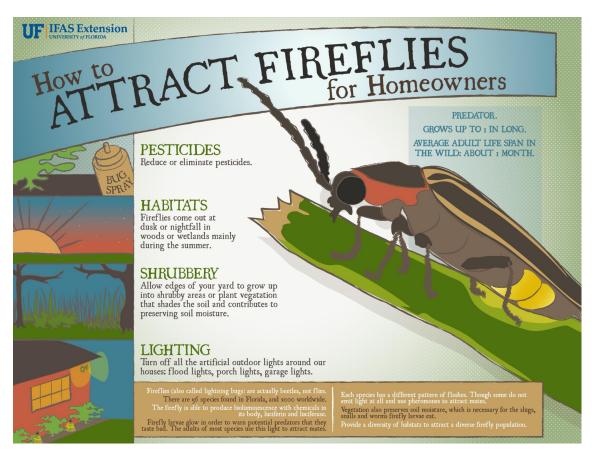


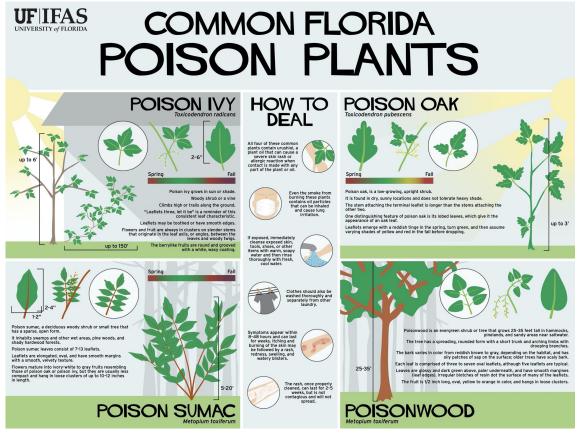




# W

### INFOGRAPHICS PLANTING CHARTS







### Succession (Interval) Planting Chart - 2020

\*Note: Days to Maturity may be unrealistic - 'Days to Maturity' are samples. Read seed or pot labels for days to maturity. To calculate use notes at bottom of spreadsheet. Use a Julian calendar chart for ease in calculating successive plantings and planting times. Be sure to use the Regular or Leap Year chart depending on the year!

Julian Calendar Charts: https://docs.oracle.com/cd/E26228\_01/doc.93/e21961/julian\_date\_conv.htm#WEAWX263

			, ,		/	,,,		
А	В	С	D	E	F	G	Н	I
Variety	*Days to	Interval Between Plantings (days)	1st Planting	Projected Harvest Date	2nd Planting	Projected Harvest Date	3rd Planting	Projected Harvest Date
Beans	55	10		10/26/20			_	
Beets	50	14			09/15/20			11/18/20
Kale/Collard	60	21			09/22/20			12/12/20
Lettuce, Full-size	55	14			09/15/20		09/29/20	11/23/20
Spinach	40	7	09/01/20	10/11/20	09/08/20	10/18/20	09/15/20	10/25/20
Summer Squash	48	42			10/13/20		11/24/20	
		.=						
1	1				l	L	L	

<sup>1.</sup> Enter the crop you're planting in Column A; enter Days to Maturity (from the seed packet/plant label or your own records) in Column B.

<sup>2.</sup> Enter the Interval Between Successions, i.e., the number of days you want to wait between succession plantings, in Column C

<sup>3.</sup> Enter the actual date of your first, second and third plantings for each crop in Columns D, F or H.

<sup>4.</sup> Enter the projected harvest date (planting date in Columns D, F or H + number of days to maturity from Column B) in Columns E, G or I



### **Food Forest**

### **Definition of a Food Forest**

Urban food forests establish wildlife habitats, shade to counteract global warming and create an abundant food supply. They are the ultimate in organic and sustainable gardening. Once established, they are low-maintenance, bountiful plant-based food-producing gardens that are inspired by forest ecosystems and provide useful and medicinal benefits to humans.

Food forests incorporate a wide array of plant types. Fruit trees, herbs, bushes and perennial fruits and vegetable favorites are laid out in a manner in which the variety of plants help each other to thrive and produce a robust supply of fruits and vegetables with very little work.

Creating a food forest mimics the growth sequences that naturally occur in woodlands. A food forest provides a continuous rotation of food supply for humans, much as a natural forest provides continuous rotation of food and habitat for wildlife.

### **Layered Forests**

A mature forest has several layers of plants in it. The forest creates diversity, protection and yield. The canopy provides protection for other plants and additional benefits. Nitrogen-rich or fruit-producing trees are good canopies. Other trees such as oak, camphor, beech, cottonwood, pine, or ash canopies work, as well. Adding taller and smaller trees, bushes, vines, herbs, ground cover, root crops and fungi fill the space to create the forest. It is important to have sunny and shady spots. See the enclosure for a sample picture of "layering."

### **Land Preparation**

By pulling invasive vines and shrubs and spreading a thick layer of mulch, such as wood chips, leaves, pine needles in one season, the mulch will break down naturally into the soil and enrich it with essential nutrients. By the following season, the food forest landscape has been enriched with nutrients and will be ready for planting.



### **Our Wintergarden Campus Food Forests**

At this writing, the Wintergarden Presbyterian Church has two areas of foresting.

The natural area to establish a food forest was behind the garages which are now the food pantry. The tall pine trees serve as the canopy. Trees and shrubs include Neem, Katuk, Peanut Butter Fruit Tree, Chaya, Seminole Pumpkin, Sweet Potato. The land was cleared and mulched naturally with pine needles and by volunteers with oak wood chips around the garden beds. We have planted trees and shrubs surrounding our raised garden beds where annual vegetables have been planted.

The second area was planted in the early spring 2020 under the canopy of two oak trees on a large strip of ground between parking areas. Several fruit trees were added to this area. The fruit trees added are: Citrus, Papaya, Spanish Lime (Genip), Avocados, Mango, Jackfruit, and Bananas. This area can be expanded over the years with additional layering of plants.

### **Plant Selection**

Plant selection is important - each layer should complement rather than compete with one another for maximum yield. There are several layers to vegetation in a woodland ecosystem: from tall trees to shorter trees to bushes, herbs and groundcovers. To mimic nature effectively, choose several varieties from each of these categories. There are many considerations to choose from when selecting plants and many resources that provide information on plants that complement each other and other useful information. See Resources for websites.



# **Sample Layered Food Forest**



This permaculture design sample creates an incredible, edible ecosystem with nine layers



# Resources On-Line and Hard Copy Sources

### **University of Florida, Institute of Food and Agricultural Sciences**

**(UF/IFAS).** The mission of the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) is to develop knowledge relevant to agricultural, human and natural resources and to make that knowledge available to sustain and enhance the quality of human life. With more than a dozen research facilities, 67 county Extension offices, and award-winning students and faculty in the UF College of Agricultural and Life Sciences, UF/IFAS brings science-based solutions to the state's agricultural and natural resources industries, and all Florida residents. Helpful publications listed are not an all-inclusive list:

Florida Vegetable Gardening Guide UF/IFAS Publication SP 103 – this includes a table with vegetable planting guide. Very helpful! https://edis.ifas.ufl.edu/vh021

Insect Management in the Home Garden Publication #ENY-476 <a href="http://edis.ifas.ufl.edu/vh036">http://edis.ifas.ufl.edu/vh036</a>

Organic Vegetable Gardening Publication #CIR375 http://edis.ifas.ufl.edu/vh019 http://edis.ifas.ufl.edu/vh019

Starting the Garden with Transplants https://edis.ifas.ufl.edu/vh027

Composting http://edis.ifas.ufl.edu/ep323

Disease Management

https://edis.ifas.ufl.edu/pp154

**Tree Hugger** is a website that touts "Making Sustainability Sexy!" This website contains homemade insecticidal soap recipes including oil, soap, neem oil, garlic and chili insecticidal sprays.

https://www.treehugger.com/lawn-garden/8-natural-homemade-insecticides-save-your-garden-without-killing-earth.html



The American Community Gardening Association (ACGA), is a bi-national, nonprofit membership organization of professionals, volunteers, and supporters of community greening in urban and rural communities. ACGA's Web site provides information, tools, links, and resources for starting a community garden and locator tool for finding the nearest community garden. <a href="http://communitygarden.org/">http://communitygarden.org/</a>

<u>Make Soil</u>® is a global movement and online platform. It's purpose is to address the food waste crisis, regenerate the planet, and reconnect with the earth and each other. Redefining composting as making soil, Soil Makers can easily and safely post their Soil Sites to the online map, invite their neighbors and friends, and collaborate in this beautiful, regenerative act. Anyone with food waste, anywhere in the world, can use MakeSoil to find Soil Makers near them or start a Soil Site themselves. WPC is a registered Soil site under this program.

https://www.makesoil.org/

**Educational Concerns for Hunger Organization (ECHO)**, For nearly four decades, ECHO has been equipping and empowering hungry families with knowledge and the life-giving grace of God. They've impacted millions of lives by teaching small-scale, sustainable farming methods so families can provide for themselves and their communities. By tackling hunger at the source, we're growing hope from the ground up.

Vegetables for SW Florida in the Summer Months <a href="http://www.echonet.org/content/agriculturalResources/611">http://www.echonet.org/content/agriculturalResources/611</a>

<u>Institute for Local Self Reliance (ISLR)</u> believes that communities are healthiest when they possess the authority, capacity, and responsibility to chart their own course. We call this vision local self-reliance. ILSR's initiatives work toward this vision in different sectors. The sector that can provide resources for the community garden are the 'Waste to Wealth' and 'Composting for Community' programs.that foster neighborhood-led recycling, reuse, and composting enterprises.

www.ilsr.org



**Mother Earth News**: has been educating folks about the benefits of self-reliance for 50 years. That includes researching and sourcing the best books and products to help individuals master the skills they need in times like these and beyond. Information at this website provides food forest assistance.

https://www.motherearthnews.com/organic-gardening/plant-an-edible-forest-garden-zmaz07aszgoe

**Happy DIY Home** should prove immensely useful to anyone thinking about or in the midst of a home renovation project. Food Forest information can be found at: https://happydiyhome.com/forest-garden/

<u>The Julian Calendar</u> link provided here is a resource for calculating Succession (or interval) plantings

https://docs.oracle.com/cd/E26228\_01/doc.93/e21961/julian\_date\_conv.htm#WEA WX263

### **Hurricane Preparedness Links**

http://fwb.org/sanitation/hurricane-preparedness-for-your-yard/;

http://www.hurricane.com;

http://www.disastersafety.org/disastersafety/hurricane-preparedness-resources/ #prepsurroundings

### Seed Companies

Park Seed

https://parkseed.com/seeds/c/seeds/?gclid=CjwKCAjwqJ\_1BRBZEiwAv73uwC9kdADN6afCH8UV5Lh\_6ZLDsjwdupDR0XDF2Lpz75xCfx9gMZK6oxoCkyUQAvD\_BwE&ef\_id=CjwKCAjwqJ\_1BRBZEiwAv73uwC9kdADN6afCH8UV5Lh\_6ZLDsjwdupDR0XDF2Lpz75xCfx9gMZK6oxoCkyUQAvD\_BwE:G:s

Sow True Seed

https://sowtrueseed.com/

The Living Seed Company

https://www.livingseedcompany.com/

**Eden Brothers** 

https://www.edenbrothers.com/



### **Helpful Books in the Tool Shed**

The Real Dirt, Peter Burkard

Gardening Hints & Tips, Pippa Greenwood

Gardner's Questions Answered, Salamander

<u>Vegetables</u>, The American Horticultural Society Illustrated Encyclopedia of

Gardening

The Organic Garden Book, Geoff Hamilton

Menu for the Future, NWEI

<u>The Herb Book</u>, Gallery Books

The Southern Living Garden Book

The Southern Living Landscape Book

The Ortho Home Gardener's Problem Solver

Natural Insect & Disease Control, Yepsen

Garden Insect Disease & Weed, Smith and Carr

### <u>Apps</u>

Plant Dairy – journal for gardeners

Garden Journal – journal for gardeners

Planter - Garden Planner

My Vegetable Garden – journal for gardeners

From Seed to Spoon - Vegetable, Fruit & Herb Garden Planning Guides



