



GNO Gardening Magazine

June 2020



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Cover Photo is of a tomatoes  
harvested from the New Orleans  
Botanical Gardens.

Photo by Chris Dunaway

# Summer Gardening

## How to Survive the Heat

Even though the days are long with plenty of sunlight, gardening in the summer in South Louisiana can be very challenging. The greatest hurdle to overcome is the intense heat. High temperatures can have negative effects on both the plant and the gardener. June has the shortest planting list of the whole year because there are not many vegetables that will thrive in the dog-days of July and August. Furthermore, the intensely high temperatures combined with strenuous physical activity can be extremely dangerous to you the gardener.

Raising temperatures can have different effects on different plants. From the beginning, temperature has an influence on germinating seeds. Some plant seeds, including cool season vegetables like lettuce and broccoli, germinate best in temperatures between 55° and 70° F (13° to 21° C), while warm season plants, such as squash and marigolds, germinate best when temperatures are between 70° and 85° F (21° to 13° C). Cool season plants, for various reasons, will not produce as temperatures rise. Some will bolt to form flowers and seeds while others will just wilt and die. This is why it is important to plant the right crop at the right time.

It may seem obvious that you should not grow cool season plants in the summer but what is the problem with the warm season plants? As I said earlier, most warm season plants perform best in temperatures

between 70 and 85 F (13 to 21 C). As the temperature increases, both photosynthesis and respiration increase which puts greater demand on the plant and requires more input of nutrients and especially water.

As this activity increases the list of plants that can survive the stress decreases. Even some plants that can survive the heat like tomatoes and eggplant will stop setting fruit when temperatures top 95°.

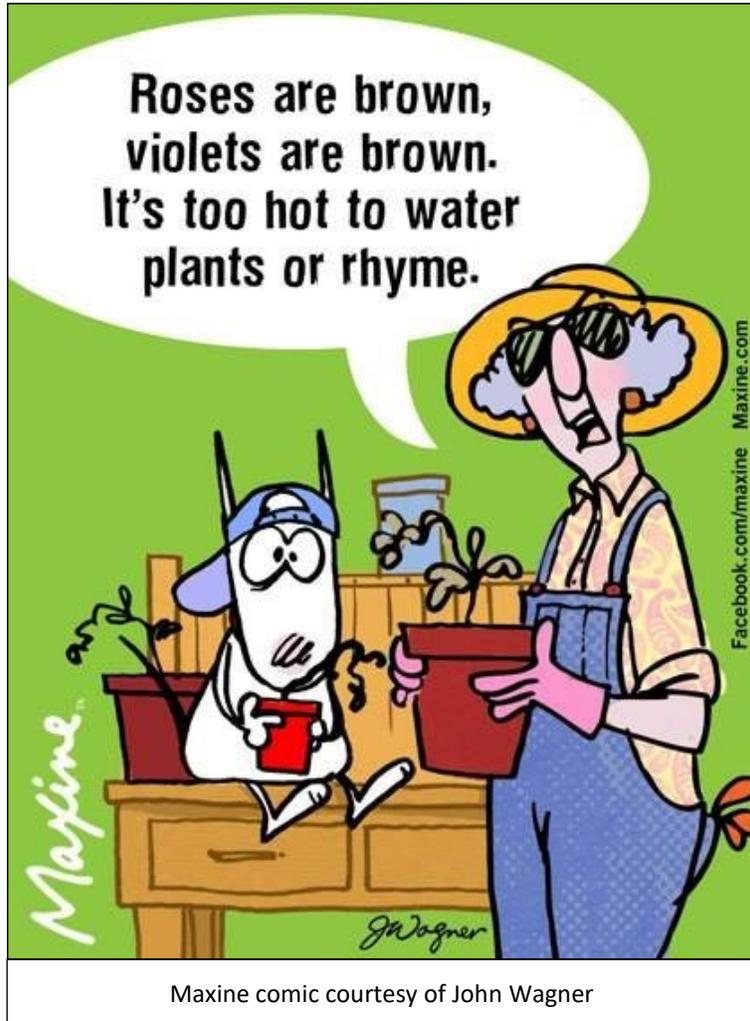
In addition to the affect the heat has on the plants, high temperatures can have devastating effects on the gardener in charge. See the article [Keeping it Cool in the Summer Months](#) in this issue for information on how to keep yourself safe.

But don't be discouraged, there are plenty of things that you can do in the garden now plus more to

do to get ready for the Fall gardening season when the selection of vegetables to plant increases.

First of all, continue to take care of the plants that are already growing in your garden. Here are a few tips to help them survive the heat:

1. Give your plants some shade. Use shade cloth or some other means to provide light shade or filtered sunlight to protect plants from the intense afternoon sun. 50% shade cloth will reduce the incoming sunlight by 50% and heat by 25%.
2. Mulch. Adding a 3-4 inch layer of mulch around the base of your plants will help insulate the ground and reduce water evaporation. Mulch can



Maxine comic courtesy of John Wagner

# June Vegetable Planting Guide

Crop	Recommended Variety
Cantaloupe	Ambrosia, Aphrodite, Athena, Primo, Vienna
Collards	Champion, Flash, Georgia, Top Bunch, Yates
Cucuzza	None Given
Eggplant	Dusky, Night Shadow, Epic, Santana, Calliope
Hot Peppers (transplant)	Grande, Tula, Mariachi, Mitla,
Luffa Gourd	None Given
Okra	Annie Oakley, Cajun Delight, Clemson Spineless
Peanuts	None Given
Pumpkins	Atlantic Giant, Baby Bear, Prankster, Sorcerer
Southern Peas	Queen Anne, California #5, Quickpick, Colusus
Sweet Potato	Beauregard, Evangeline, Hernandez, Jewel
Swiss Chard	None Given
Watermelon	Seedless: Cooperstown, Gypsy, Matrix, Millennium Seeded: Mickey Lee, Sugar Baby, Amarillo

# July Vegetable Planting Guide

Start Seeds for Transplant		Direct Seed or Transplant		
Broccoli	Cauliflower	Cantaloupe	Okra	Peas
Brussels Sprouts	Bell Peppers	Collards	Pumpkins	Squash
Cabbage	Tomatoes	Cucumbers	Shallots	Watermelon
		Luffa Gourd	Southern	

# August Vegetable Planting Guide

Bell Peppers	Cauliflower	Irish Potatoes	Mustard	Snap Beans
Broccoli	Chinese Cabbage	Kale	Pumpkins	Squash
Brussels Sprouts	Collards	Lima Beans	Rutabaga	Tomatoes
Cabbage	Cucumbers	Luffa Gourd	Shallots	Turnips

# Summer Gardening

## How to Survive the Heat

also help block weed growth and reduce plant disease.

3. Water, water, water. Higher temperatures increase plant respiration meaning that more moisture is being released from the leaves. It is important to irrigate the plants to ensure there is enough water for their needs. See the article [Watering Tips for Summer](#) in this issue of GNO Gardening for more information on irrigation.

In addition to taking care of your current crops, there are still things that you can plant in the garden now that, with proper care, will thrive and produce during the summer months ahead. Take a look at the planting guide on page 3 of this publication for the list of the most common vegetables to plant in June in South Louisiana.

Whether you are growing something now or not, the summer is a good time to get the garden ready for next season.

The first place to start is with the soil. Take a soil test and add amendments to adjust pH. It can take several months for sulfur or lime to change the soil pH, so the sooner you apply it the better.

For good soil health, you should never leave bare ground exposed to the elements. The heat and dry conditions will kill off populations of beneficial bacteria and fungi as well as rain and wind leading to erosion and nutrient loss. If you are not growing anything in your garden, you should also cover the soil with a thick layer of mulch or you can grow a cover crop. Both of these options will help protect and insulate the soil and prevent some weeds from growing.

Cover crops are essentially plants that you grow specifically to improve the health of the soil. In addition to the properties already mentioned, cover crops can also add organic matter and nitrogen to the soil as well as improve soil structure. Cover crops are not grown for harvesting but instead, the plants are

cut down and incorporated into the soil. The trick to getting the maximum benefit of cover crops is to allow the crop to get as mature as possible without making seeds. If the plants are allowed to set seed, the unwanted offspring will be weeds in your fall garden. Buckwheat, for example, should be cut when the flowers start to open. Some cover crops that will work in our area include: Buckwheat, millet, cowpeas, sorghum-sudangrass or soybeans.

With cover crops or mulching you should maintain your watering regime. Although soil with mulch alone will need less water, you should not allow it to dry completely. Providing water is also critical to breaking down un-composted components in the soil. This is important to those of you that purchased “garden soil” only to find that it is mostly wood chips and bark.

If you cannot provide water for long periods of time then you may water deeply then cover the soil with plastic sheeting. Be sure to bury the edges to form a seal with the earth. This will hold the moisture and have the added benefit of destroying weed seeds, pathogens and nematodes. Look up soil solarization for more information.

The summer is a good time to plan for your fall garden and even get some seeds started. In addition to the June Planting Guide, I included the planting list for the next two months in this month's issue. Take a look and see what you may like then purchase, scrounge, or beg seeds from friends so that you have them on hand when it is time to plant.

And finally, the summer would be a fantastic time to read a book or two on gardening. You can also sign up for the LSU AgCenter GNO online gardening class scheduled to begin June 5th. See the announcement on the following page for more information.

Remember, “Never stop learning; for when we stop learning, we stop growing.”

~Chris Dunaway

# Coming Events

## Home Gardening Certificate Course

Free online course from the LSU AgCenter Horticulture Agents in the New Orleans area.

Class begins June 5th 2020.

[Click here](#)

or go to [https://www.eventbrite.com/e/home](https://www.eventbrite.com/e/home-gardening-certificate-course-tickets-105988584710)

[-gardening-certificate-course-tickets-](https://www.eventbrite.com/e/home-gardening-certificate-course-tickets-105988584710)

[105988584710](https://www.eventbrite.com/e/home-gardening-certificate-course-tickets-105988584710)

[to register.](https://www.eventbrite.com/e/home-gardening-certificate-course-tickets-105988584710)



### About this Event

This is a free online home gardening class for new and experienced gardeners. One of the silver linings of the quarantine is that many people are planting gardens for the first time or are now able to expand and develop existing gardens. Similar to the WWII Victory Gardening movement, gardening is a great activity for the whole family and a way to produce food at home. You can complete this course weekly on your own schedule!

We are unable to offer the Louisiana Master Gardener course this summer, however this online class will draw heavily from the Master Gardener curriculum. Gardeners who earn their certificate may choose to apply for the Louisiana Master Gardener full course when it is available in the future. They will be well prepared! Gardeners with an acre or just a few flower pots will benefit. Lapsed/inactive Louisiana Master Gardeners- this course counts if you would like to become an active member again! Email [atimmerman@agcenter.lsu.edu](mailto:atimmerman@agcenter.lsu.edu) to notify us that you would like to become active (Please only email me if you are a Master Gardener returning, all other students do not need to email to become active!).

Video modules will be posted weekly and a pre/post test will be required to help us gauge student learning objectives, however these grades will not factor into earning the certificate. You may complete the course at your own pace. Online publications and resources will be posted for each topic as well to support video lesson content for further reading on your time if desired. A discussion board and some web-based Q&A live events will also be available. Several "DIY" assignments will also be posted and not graded, but will support content taught by the Horticulture Agents. A link to the online classroom will be emailed out to registered students on June 5th.

### Class Schedule

Week 1:

1. What is soil – It's not just dirt!
2. Soil testing and interpreting results

Week 2:

3. Garden planning
4. Botany every gardener should know

Week 3:

5. Plant propagation – Seeds and seed saving
6. Plant propagation – Cuttings

Week 4:

7. Plant Nutrition – Fertilizers, Soil pH, Organics
8. Pesticides- What to know

Week 5:

9. Insects and other garden pests
10. Beneficial insects and pollinator protection

Week 6:

11. Plant Disease – The Triangle and Control
12. Plant Disease – Virus, Bacteria and Fungi, Oh My!

Week 7:

13. Weeds – What and why
14. Native plants and their uses

Week 8:

15. Vegetables – Crucifers
16. Vegetables – Solanaceous

Week 9:

17. Vegetables – Legumes
18. Vegetables – What's left

Week 10:

19. Herbs
20. Home Fruit Production

**Participants will earn a certificate for completing.**

# Watering Tips for the Summer

The summer is upon us with months of hot, muggy days ahead. We have been enjoying a cool spring, but once the temperatures climb, watering your garden smartly can help to save not only your plants, but also will help with your water bill, and your health as a gardener! Here are some tips for watering smart in the summer heat:

Monitor the local weather forecast. Plan to water less or not at all if we receive a minimum of ½" of rain on any given day. If 1" or more falls, skip watering altogether for a day or two until the soil is dry to the touch when you stick a finger into the soil. I keep a rain gauge in my garden and look at it in the mornings when I drink my coffee. This way I know exactly how much rain we have gotten overnight at my specific location. This informs my watering decisions for the day.

Many automatic irrigation systems have a rain sensor or have a port where one can be easily installed. Contact your irrigation company and see if they can install a rain sensor for your system. The rain sensor will shut off any scheduled irrigation watering if adequate rainfall has occurred. A recent study showed that a rain sensor attached to an irrigation system can reduce water use by 45%. This can add up and save you a lot of money on the water bill and help to prevent issues common to overwatering.

Watering in the mornings is best. This prepares plants for the long sunny day ahead. Avoid splashing water and soil onto foliage, this is a vector for many fungal pathogens that attack plants.

Trays or saucers underneath your smaller containers can help to keep them from drying out too fast in the summer sun. Be sure to monitor them frequently for

mosquito larvae. Dump them and refill as needed. Porous material pots made of terra-cotta, hypertufa, or fabric tend to dry out quickly when in direct sun. Consider moving these pots to an area of the garden that receives afternoon shade. You may also line these containers with a non porous material prior to

planting. Just make sure no to block the drain holes.

Larger pots and containers retain moisture longer because they hold a greater volume of soil. The soil is a sponge. Consider using larger pots for your plants to keep them from drying out quickly.

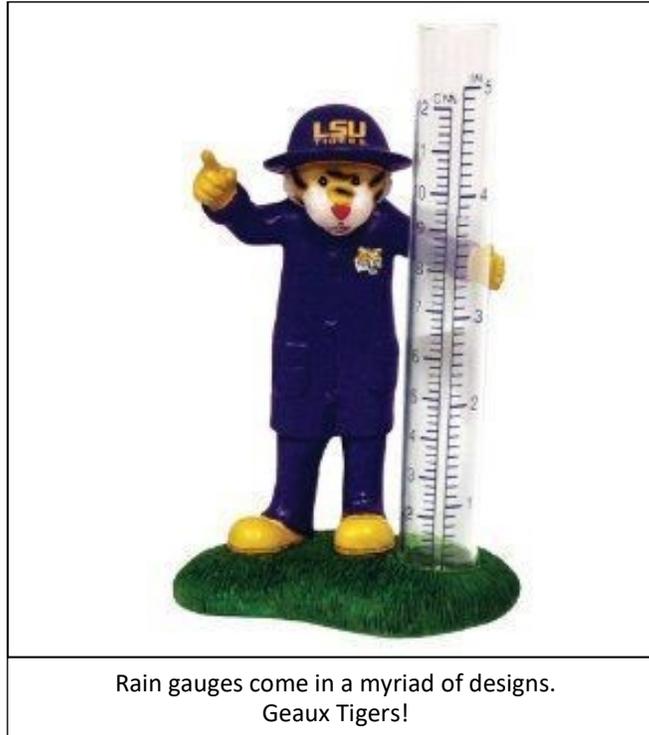
Black or metal pots tend to heat up when they are in the direct sunlight of the afternoons. This can actually cook root hairs and make it harder for the plants to take up enough water. Consider moving pots that absorb heat

to a location that has afternoon shade and morning sunlight. Painting pots with a reflective white paint is an old school strategy to help manage this also.

Shade cloth can help to protect those plants from afternoon direct sunlight and may be a good tool for use on other plants in your garden. A 30-50% shade cloth will allow enough light through for good plant growth but block out the direct sunlight. Place the shade cloth to only block the afternoon sun.

Seedling trays or very small nursery pots may require an additional afternoon application of water. Do so a few hours before the sun goes down so that the leaves have ample time to dry before evening, this helps with issues like damping off and mildews on your seedlings and cuttings.

With in-ground plants and larger raised beds, it is better to water deeply and less frequently, than to



Rain gauges come in a myriad of designs.  
Geaux Tigers!

# Watering Tips for the Summer

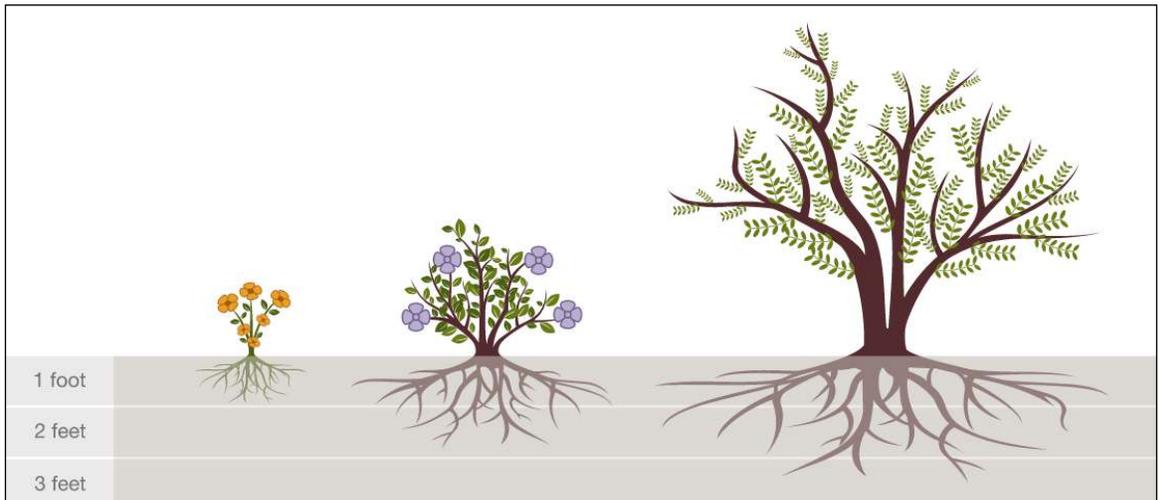
sprinkle or lightly water gardens daily. Deep watering encourages roots to grow downward into the soil profile, making them hardier during dry conditions. Two deep watering days per week is better than daily light watering. Deep watering is a must for fruit trees for proper fruit development.

If you notice wilting plants in the afternoons, you can target those specific plants with an additional deep watering. Once deeper, healthy roots establish, the need for a second watering per day should diminish.

Mulching the tops of pots and in garden beds helps to keep the soil moisture consistent. The mulch will help keep water from evaporating out of the top layers of soil. 3-4" of pine straw, hay, dry leaves or wood mulch will accomplish this by protecting the soil moisture from the sun. A layer of mulch can also reduce splashing of the soil onto the leaves and reduce the spread of disease.

By watering strategically and paying attention to rainfall, you can save a lot of money on your water bill as well as provide your plants with optimum growing

conditions. New Orleans receives an average of 60-65 inches of rainfall annually, making us one of the rainiest metro areas in the country. Take advantage of this free water! Consider installing a rain barrel or two on your downspouts, or channeling runoff from the roof towards slightly sunken garden beds. Many of



The illustration above depicts how deeply we should water plants based on their size and root depth. Small plants should be watered to a depth of 1', shrubs 2' and trees 3'. Courtesy of wateruseitwisely.com

our beautiful native plants like Louisiana Irises thrive in these growing conditions. Rainwater is ideal for watering fussy ornamental plants such as orchids, African violets, and newly made cuttings since it is soft and untreated, and typically has a slightly acidic pH. I hope these tips will help everyone's garden to thrive in the long summer ahead!

~ Anna Timmerman

Plant Canopy Diameter in Feet

	1'	2'	3'	4'	5'	6'	8'	10'	12'	14'	16'	18'	20'
trees	1.5	5	11	16	22	26	38	59	85	115	150	190	235
shrubs	1	4	8	12	17	20							
groundcover / cacti	.5	2	3.5	5	7	9							

Gallons of Water Required to Wet Root Zone

The table above shows how much water is needed to properly irrigate trees, shrubs and bedding plants based on the spread of the plants and depth of roots. Courtesy of wateruseitwisely.com.

# Copper

During this series of articles, we have been highlighting soft alternatives for weed and pest control.

One that is recommended a lot for fungal and bacterial disease control is copper. Copper has been used as a commercial crop protectant since the 1800s when copper sulfate pentahydrate was formulated with lime into Bordeaux mixture to protect and save the French wine industry.

Copper is usually applied as fixed copper compounds which have low water

solubility. Fixed coppers include basic copper sulfate, copper oxide, copper hydroxide, copper oxychloride sulfate, and copper

ions linked to fatty acids or other organic molecules.

The spray solution is a suspension of copper particles, and those particles persist on plant surfaces after the spray dries. Copper ions are slowly released from these copper deposits every time the plant surface becomes wet. The gradual release of copper ions from the copper deposits provides residual

protection against plant pathogens. The slow release of copper ions also reduces the risk of phytotoxicity.



A magnified image of copper sulfate crystals.

Copper ions kill living cells by denaturing enzymes that are critical for cell function. These copper products kill pathogen cells on plant surfaces only.

Copper sprays act as protectants but have no curative activity meaning that disease damaged tissue remains damaged. These copper products are not systemic so reapplication may be required as new plant tissue develops. The rate of release of copper ions is highly affected by pH. These copper products should never be applied using water with a pH lower than 6.5 and should not be tank-mixed with products that lower the solution pH. If these guidelines are ignored, rapid release of high amounts of copper ions will often result in phytotoxicity. Individual product labels give detailed instructions on use and application of the product as well as precautions that should be followed. Some



Fungicides are available in different containers for different applications. In the photo Bonide offers 3 choices. On the left is a ready mix product in a hand sprayer which is good for small jobs. The center is a hose end applicator which is good for larger jobs including taller trees. On the right is a concentrate for use with your own application equipment.

# Copper

brands available for homeowners are: TennCop, Bonide Copper Fungicide, SouthernAg Liquid Copper Fungicide, Monterey Liqui-Cop, Miracle Gro Nature's Care Garden Disease Control, Natural Guard Copper Soap Fungicide Concentrate, Ferti-lome Natural Guard Copper Soap Fungicide.

Because of the mode of action of copper, it is often stated and long believed that development of resistance by target organisms is unlikely. However, there have been a number of studies and field surveys indicating resistance development in bacterial populations. There are several copper formulations that are OMRI-approved for use on organic crops.

Recent studies using copper sulfate pentahydrate as the active ingredient have shown systemic movement of copper both up (acropetal) and down (basipetal) the plant as well as lateral movement. These products use lower amounts of copper, are rain fast, go easily into solution (not suspension), have reduced phytotoxic potential and can be mixed in lower pH solutions. These products are labeled for vegetable and fruit tree use and OMRI recognized. Instill and Phyton 27 both have copper sulfate pentahydrate as their active ingredient.

This time of year is environmentally conducive to a number of diseases that copper is labelled for such as powdery mildew, anthracnose, rusts, bacterial spot, bacterial blight, black spot and Cercospora leaf spot. You can easily purchase copper fungicides/bactericides from our local garden centers, big box stores and even online. Another tool for your IPM protocol.

~ Dr. Joe Willis

For more information about plant diseases and treatments, check out the 2020 Louisiana Plant Disease Management Guide. [Click here to see the guide or enter "Plant Disease LSU" into your favorite search engine.](#)



Powdery mildew on squash leaves.



Cercospora leaf spot on roses. Photo by Allen Owings



Anthracnose disease in cucumber.

# Protecting Yourself in the Summer Sun

While you are worrying about your plants, don't forget to take care of the gardener. According to the Mayo Clinic, working

in hot weather puts extra stress on the body and if

you do not take care,

you risk serious

illness. Physical

exertion combined

with the increased

temperature and

humidity can

increase your core

temperature. To help

cool itself, your body

sends more blood to

circulate through

your skin. This leaves

less blood for your

muscles, which in

turn increases your

heart rate. When the

humidity is also high,

your body faces

added stress because

sweat doesn't readily

evaporate from your

skin which pushes

your body

temperature even

higher. Some of the

conditions associated

with overheating include heat cramps, heat syncope,

heat exhaustion and heatstroke. With heatstroke, You

may develop confusion, irritability, headache, heart

rhythm problems, dizziness, fainting, nausea,

vomiting, visual problems and fatigue. You should

seek immediate medical attention to prevent brain

damage, organ failure or even death.

Anytime that you are working or exercising in high

heat pay attention to your body's signs of distress.

These signs and symptoms may include:

- Muscle cramps
- Nausea or vomiting
- Weakness

HEAT EXHAUSTION	OR	HEAT STROKE
Faint or dizzy		Throbbing headache
Excessive sweating		No sweating
Cool, pale, clammy skin		Body temperature above 103° Red, hot, dry skin
Nausea or vomiting		Nausea or vomiting
Rapid, weak pulse		Rapid, strong pulse
Muscle cramps		May lose consciousness
<ul style="list-style-type: none"> <li>• Get to a cooler, air conditioned place</li> <li>• Drink water if fully conscious</li> <li>• Take a cool shower or use cold compresses</li> </ul>		<p style="font-size: 2em; font-weight: bold; text-align: center;">CALL 9-1-1</p> <ul style="list-style-type: none"> <li>• Take immediate action to cool the person until help arrives</li> </ul>
<p>The graphic above was developed by the National Weather Service to help advise the public on signs of heat exhaustion and heat stroke.</p>		

- Fatigue
- Headache
- Excessive sweating

- Dizziness or lightheadedness
- Confusion
- Irritability
- Low blood pressure

- Increased heart rate

- Visual problems

If you develop any of these symptoms, you must lower your body temperature and get hydrated right away. Stop exercising immediately and get

out of the heat. If possible, have someone stay with you who can help

monitor your condition. Seek immediate medical

attention if you have signs of heat stroke.

Now that I have frightened and discouraged you from your gardening aspirations, please allow me to offer some comfort and advice for dealing with your garden in the summer.

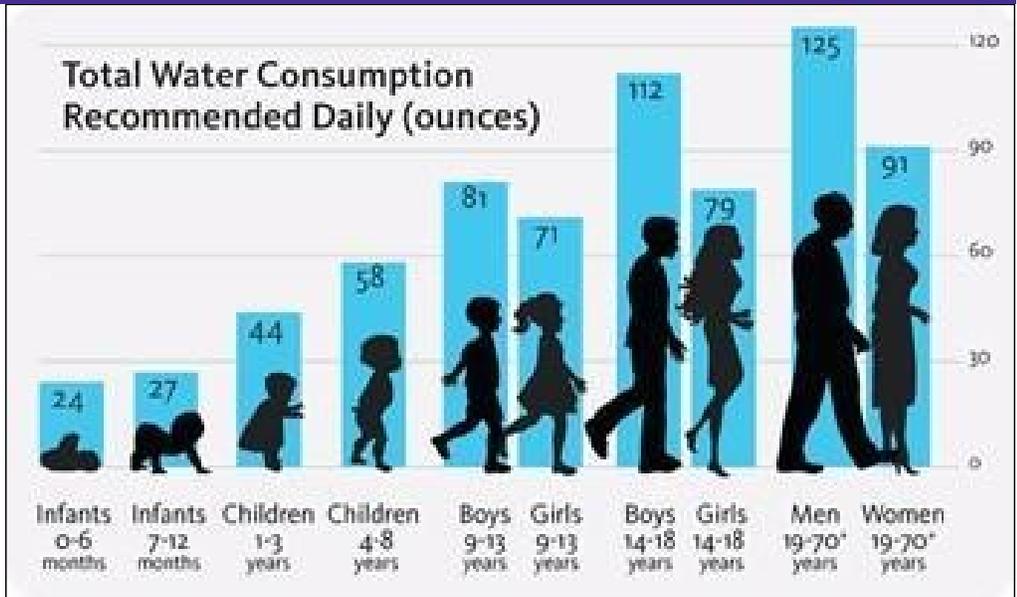
First. Go slow. Take your time and do not overexert yourself. This is especially critical if you are not accustomed to working in the heat. It can take at least one to two weeks to adapt to high temperatures. As

# Protecting Yourself in the Summer Sun

your body adapts to the heat you may gradually increase the length of time you spend working in the garden. Also, take periodic breaks to cool while working.

Second, Dress appropriately. Lightweight, loose-fitting clothing helps sweat evaporate and keeps you cooler. Avoid dark colors, which can absorb heat. If possible, wear a light-colored, wide-brimmed hat.

Third, Avoid the midday sun. If possible, do your gardening sometime between late afternoon to mid-morning when the sun is not so intense. With good lights or a full moon, you can even garden at night.



The above graphic illustrates the daily water of individuals based on age and sex. More water may be necessary with increased temperatures and physical exertion.

Fourth, Wear sunscreen. A sunburn decreases your body's ability to cool itself and increases the risk of skin cancer.

And finally, Drink plenty of fluids.

Dehydration is a key factor in heat illness. Help your body sweat and cool down by staying well-hydrated with water. Don't wait until you're thirsty to drink fluids. The color of your urine can be a good indicator of your hydration level. Table 1 illustrates the change in the color of urine from a person with increasing levels of dehydration. The body produces a chemical called urochrome which give urine its yellow pigment. Drinking water will dilute the urochrome causing the urine in a hydrated person to be nearly clear to very pale yellow. Dehydrated individuals do not have enough water to dilute the color so urine will be increasingly dark as the condition worsens. Charts like these are frequently seen in the restrooms of industrial facilities to help safeguard employees.

Enjoy your garden this summer just be sure to take it slow, listen to your body and drink plenty of fluids.  
~ Chris Dunaway

## How dehydrated are you?

A quick way to test how well you're hydrated is to check the colour of your urine.



The above graphic depicts the color of urine at varying levels of hydration. The more dehydrated a person is, the darker their urine will be.

# What's Bugging You – Whitefly

If you brush by your plants and a white cloud of insects suddenly arises, then whiteflies have set up housekeeping.

Whiteflies are not really flies (Diptera Order) but more closely related to aphids, mealybugs and scales (Hemiptera Order). There are over 1200 species of whiteflies worldwide. Most species are pretty plant specific in their feeding habits.

Whiteflies are tiny, sap-sucking insects whose population can really explode, especially as the weather warms. They feed on the leaf underside and on fruits. Leaf undersides may appear pale or mottled. As they feed, they excrete honeydew which can also lead to sooty mold. High populations and heavy feeding cause yellowing or death of leaves. Management is difficult once populations are high.

Even though there are so many whitefly species, there are only two that you are likely to run into in your garden – the Greenhouse Whitefly (*Trialeurodes vaporariorum*) and the Sweetpotato Whitefly (*Bemisia tabaci*). The Greenhouse Whitefly has a very broad host range including most vegetables and herbaceous ornamentals. Fourth-instar nymphs have very long waxy filaments and a marginal fringe.

Adults have white wings and a yellow body. The Sweetpotato Whitefly also has a very broad host range including many herbaceous and some woody

plants including cole crops, cotton, cucurbits, tomatoes, peppers, crape myrtle, lantana, roses, and hibiscus. Fourth-instar nymphs have no waxy filaments or marginal fringe. Adults have white wings and yellow body and they hold their wings slightly tilted to the surface. In actuality, they are difficult to



Greenhouse Whitefly



Sweetpotato Whitefly

distinguish.

Additionally, there are several biotypes of the Sweetpotato Whitefly that have been detected in the U.S. An insect biotype is a group of organisms have identical or nearly identical genotypes that are distinguished by criteria other than morphology, such as host range or virus vectoring. Virus

vectoring is one of the main detrimental attributes of whitefly feeding. There are over 6 different viruses of vegetables alone that are known to be transmitted by whiteflies. In addition to vectoring viruses, feeding by immature and adult whiteflies may cause seedling death, loss of vigor or production in older plants and multiple physiological disorders of plants.

# What's Bugging You – Whitefly

There are two additional whitefly species that are less common but you might encounter: the Bandedwinged Whitefly (*Trialeurodes abutilonea*) and the Giant Whitefly (*Aleurodicus dugesii*). The Bandedwinged Whitefly has a very broad host range including cotton, cucurbits, other vegetables. Fourth-instar nymphs have short, waxy filaments around their edges. Adults have brownish bands across the wings, and their body is gray. The Giant Whitefly has a broad host range that includes avocado, begonia, hibiscus, giant bird of paradise, orchid tree, banana, mulberry, vegetables, and many ornamentals. Adults are



Bandedwinged Whitefly



Giant Whitefly

beneficial insects and the natural whitefly enemies. In other words, they should not be the first option for whitefly control.

Insecticides labeled for use against whitefly include: insecticidal soaps, horticultural oils, Neem oil and products containing as an active ingredient: bifenthrin, cyfluthrin, imidacloprid, malathion, permethrin, or pyrethrin. Always read pesticide labels completely and follow directions exactly. The label is the law.

~ Dr. Joe Willis

up to 0.19 inch long. They leave spirals of wax on leaves. Nymphs have long filaments of wax that can be up to 2 inches long and give leaves a bearded appearance. Adults sometimes have mottled wings, but not always.

## Control

Whiteflies have a lot of natural enemies including lacewings, big-eyed bugs, minute pirate bugs, lady beetles and parasitic wasps. Reflective mulches have also been shown to repel whiteflies. Chemical control is also an option but should be a thoughtful choice since most will also have a detrimental effect on the



Don't be fooled by the earlier magnified images of the whiteflies. This image of whiteflies on a squash leaf more accurately shows their small size.

# Local Independent Garden Centers

Orleans	Address	Contact
Urban Roots	2375 Tchoupitoulas St., New Orleans	(504) 522-4949
The Plant Gallery	9401 Airline Hwy., New Orleans	(504) 488-8887
Harold's Plants	1135 Press St., New Orleans	(504) 947-7554
We Bite Rare and Unusual Plants	1225 Mandeville St., New Orleans	(504) 380-4628
Hot Plants	1715 Feliciana St., New Orleans	www.hotplantsnursery.com
Delta Floral Native Plants	Pop Up Locations	(504) 224-8682
Pelican Greenhouse Sales	2 Celebration Dr., New Orleans	(504) 483-9437
Grow Wiser Garden Supply	2109 Decatur St., New Orleans	(504) 644-4713
Jefferson Feed Mid-City	309 N. Carrollton Ave., New Orleans	(504) 488-8118
Jefferson Feed Uptown	6047 Magazine St., New Orleans	(504) 218-4220
Jefferson		
Perino's Garden Center	3100 Veterans Memorial Blvd., Metairie	(504) 834-7888
Rose Garden Center	4005 Westbank Expressway, Marrero	(504) 341-5664
Rose Garden Center	5420 Lapalco Blvd., Marrero	(504) 347-8777
Banting's Nursery	3425 River Rd., Bridge City	(504) 436-4343
Jefferson Feed	4421 Jefferson Hwy., Jefferson	(504) 733-8572
Nine Mile Point Plant Nursery	2141 River Rd., Westwego	(504) 436-4915
Palm Garden Depot	351 Hickory Ave., Harahan	(504) 305-6170
Double M Feed Harahan	8400 Jefferson Hwy., Harahan	(504) 738-5007
Double M Feed Metairie	3212 W. Esplanade Ave., Metairie	(504) 835-9800
Double M Feed Terrytown	543 Holmes Blvd., Terrytown	(504) 361-4405
Sunrise Trading Co. Inc.	42 3rd St., Kenner	(504) 469-0077
Laughing Buddha Garden Center	4516 Clearview Pkwy., Metairie	(504) 887-4336
Creative Gardens & Landscape	2309 Manhattan Blvd., Harvey	(504) 367-9099
Plaquemines		
Southern Gateway Garden Center	107 Timber Ridge St., Belle Chasse	(504) 393-9300
St. Charles		
Plant & Palm Tropical Outlet	10018 River Rd., St. Rose	(504) 468-7256
Martin's Nursery & Landscape	320 3rd St., Luling	(985) 785-6165
St. Bernard		
Renaissance Gardens	9123 W. Judge Perez Dr., Chalmette	(504) 682-9911
Soil Vendors		
Schmelly's Dirt Farm (Compost Only)	<a href="https://www.schmellys.com/compost-sales/">https://www.schmellys.com/compost-sales/</a>	
Laughing Buddha Garden Center	4516 Clearview Pkwy., Metairie	(504) 887-4336
Reliable Soil	725 Reverand Richard Wilson Dr., Kenner	(504) 467-1078
Renaissance Gardens	9123 W. Judge Perez Dr., Chalmette	(504) 682-9911
Rock n' Soil NOLA	9119 Airline Hwy., New Orleans	(504) 488-0908

We recommend that you call before visiting to enquire about operating hours or special instructions.

# In the Kitchen with Austin

## Fava Bean Salad

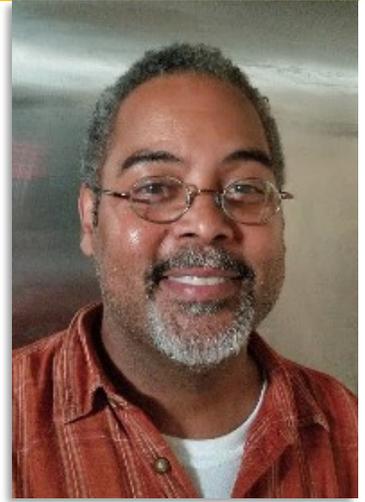
I always try to share recipes that capture the magic of eating with the season, and there is nothing more magical than local tomatoes. Weather home-grown or purchased at the market, creole tomatoes are always the summer's star ingredient. But this recipe has an unexpected co-star; balsamic glaze.

Hope you like it!

### Ingredients:

3 to 4 medium ripe tomatoes  
1 lb. fresh mozzarella cheese  
½ cup fresh basil leaves

Salt and pepper, to taste  
2 Tbs. good olive oil  
2 Tbs. balsamic glaze



### Directions:

Begin by making the balsamic glaze. Place 2 cups of balsamic vinegar in a small saucepan and simmer over medium heat for 20 minutes or so, stirring occasionally. Once the vinegar thickens and coats the back of a spoon, remove it from the fire. Let it cool completely. You will wind up with about ½ cup of glaze. (If all that is too much for you, just buy a bottle at the store. It's easy to find.)

Slice tomatoes and mozzarella into ¼-inch

thick rounds. Arrange slices alternately on a platter. Sprinkle with salt and pepper.

Scatter torn basil leaves over tomatoes and cheese. Drizzle with olive oil and balsamic glaze.

Serve immediately!

*Bon Manger!*



Anna, Dr. Joe and Chris on the first day of shooting the new Gardening Class

# June Checklist/Garden Tips

During dry weather don't forget to keep your compost pile evenly moist. Dry organic matter will not decompose. Do not, however, keep the pile saturated as that can cause bad odors.

Powdery mildew continues to be a problem on many ornamentals (crape myrtles, euonymus, roses) and vegetables (squash, cucumbers). Treat with chlorothalonil or other labeled fungicides.

Apply paint or shade cloth to greenhouses to prevent heat buildup. Fans should run just about constantly.

Prune climbing roses and ramblers that bloom on one year old growth now if needed to shape and train them.

Prepare trees for hurricane season by pruning out all weak, rotting or dead branches. Remove dead or rotten trees that might blow over in high winds.

Remove any flowers that appear on caladiums or coleus to promote continued production of colorful foliage.

When a gladiolus finishes blooming, prune off the faded flower spike but leave the foliage intact. The foliage will produce food that is stored in the newly developing corm ensuring a large, healthy corm that will bloom well next year.

Trim dead flowers from chrysanthemums that bloomed earlier if you have not done so already. Cut plants back about half way and fertilize to encourage vigorous growth. Pinch vigorous shoots over the next six weeks to create a bushier, fuller plant. Do not pinch or cut back after late July.

Plant a row or two of peanuts in the home garden now as early summer crops are pulled up. Shell raw peanuts and plant about three to four seeds per foot of row. Water once a day until the seeds come up. Peanuts also make an excellent green manure crop. Just as the plants come into flower turn them under. They will enrich the soil with nitrogen and organic matter. Allow the bed to sit for a few weeks while the organic matter decomposes, and you will be ready to plant a fall crop.

Dig and store gladiolus corms after the foliage turns brown. The largest corms are the ones that will flower next year.

Watch the rainfall you receive carefully, as it varies widely around the area. Cut back on irrigation whenever your garden receives one half inch or more of rain. Over watering is entirely possible if you are not careful, and that can lead to fungus problems such as stem, crown and root rot.

High temperatures and high humidity create a high heat index here in the summer. Adjust your gardening schedule to take advantage of cooler times of the day. Remember to drink plenty of water.

Spray peach tree trunks with permethrin to prevent the peach tree borer from getting into the trunk and causing damage.

Keep caladiums well watered during hot, dry weather to keep the foliage in good shape through the summer. Fertilize occasionally to encourage vigorous growth. Break off any flowers that form.

# Lawn Care Do's & Don't's

## Do:

1. Chinch bugs, which are most damaging during hot dry weather, often begin to show up in June. Look for irregular dead areas that enlarge fairly rapidly. The grass will have a dry, straw-like appearance. Treat with acephate, permethrin, cyfluthrin or other labeled insecticides to prevent extensive damage. Follow label directions carefully.



Image at left shows the life stages of a chinch bug from egg to adult.

2. Irrigate as necessary to moisten the soil to a depth of 4-6 inches.
3. Aerate the soil if necessary to alleviate compaction.
4. Spread a 1/4 inch layer of a mixture of fine compost and coarse sand. Rake it so that it falls down between the blades of grass.
5. You may fertilize Your lawn in June if desired. See page 5 of the [Louisiana Lawns Best Management Guide](#) for information about proper fertilization rates for your turf grass variety.
6. Dethatch the lawn if necessary.
7. Spread fill soil and compost over the lawn to add organic material and smooth out the lawn. Do not add more than 2 inches over actively growing grass.
8. Set your mower to the correct height. See page 5 of the [Louisiana Lawns Best Management Guide](#) for information about proper mowing height for your turf grass variety.
9. You may still plant warm season grasses such as St. Augustine, centipede, bermuda and zoysia. You may need to pay particular attention to watering properly. Do not let the new grass dry out.

## Don't's

1. Do not apply selective herbicides (weed killer) to the lawn. It is too hot. Pull weeds by hand or spot treat with non-selective herbicides.
2. Do not cut more than 1/3 of the height at a single time.

**Your Local Extension Office is Here to Help**

**E-mail us at: [GNOGardening@agcenter.lsu.edu](mailto:GNOGardening@agcenter.lsu.edu)**



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