

### GNO Gerdening Megezine

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Research · Extension · Teaching

**c**Center

### In This Issue:

Super Plant Spotlight Camelot Foxgloves By: Dr. Allen Owings

Garden Myth Exposé: Compost is the Best Organic Fertilizer By: Anna Timmerman

Let-tuce Make You Smile By: Dr. Joe Willis

What's Bugging You? Southern Chinch Bug By: Dr. Heather Kirk-Ballard

Mini Prairie Plantings By: Mike Glaspell

September Planting Guide Farmer's Markets in the GNO Area In the Kitchen with Austin Upcoming Events September Garden Checklist Lawn Do<sup>'s</sup> & Don't<sup>'s</sup>

Cover Photo: <u>Prairie Flowers</u> by Mike Glaspell

## **Super Plant Spotlight-Camelot Foxgloves**

he Louisiana Super Plant program is an educational and marketing campaign that highlights tough and beautiful plants that

Plants have a proven track record, having gone through several years of university evaluations and observations. Louisiana Super Plants are "university tested and industry approved".

Each Super Plant must have at least 2 years of rigorous evaluations and have a proven track record under growing conditions in North and South Louisiana. Super Plants must prove hardy across the state. Super Plants must be easily produced and available for all green industry wholesalers and retailers to market and sell.

The Louisiana Super Plant Selection Committee, composed of LSU AgCenter research and extension personnel, selects plants based upon observations made in replicated plots and demonstration trials across the state. The Louisiana Super Plant Advisory Committee, composed of green industry



**Camelot Rose Foxglove** 

Camelot Foxgloves (Digitalis purpurea) are biennials or short-lived perennials. Here in the Deep South, however, we grow them as cool-season annuals. That perform well in Louisiana landscapes. Louisiana Super is, we grow them during the cool season which runs

> from October/November to April/May. They bloom in spring or early summer and then typically die in the heat of summer.

> > The Camelot series foxgloves are bred to be especially strong and vigorous growing. And these foxgloves are somewhat more heattolerant than the foxgloves used in the past, allowing Camelot foxgloves to bloom well into late May or early Iune.

> > These plants produce large flowers displayed on 16- to 18inch-long flower spikes. The flowers are larger and the spikes are taller than previously grown varieties. The bell-shaped flowers of foxgloves are arranged around a strong, tall stem that grows from the center of the plant.

Typically, the flowers of foxgloves tend to hang down, and you cannot see into the beautifully spotted throats.

personnel (producers, retailers, and landscapers) from across the state, meet with the Plant Selection Committee for further scrutiny of the plant's landscape ability and marketability. This selection process gives each Super Plant the combined rating of "university tested and industry approved".

This month's Super Plant Spotlight falls on:

The flowers of Camelot foxgloves, however, are held more horizontally and face outward, instead of down, which creates a fuller-looking flower spike and reveals the spotted interior of the flowers for the best show.

They make an outstanding display anywhere but are great in tall borders or background plantings. Rose, Lavender, and Cream are recommended for the best performance. ~Allen Owings

### September Vegetable Planting Guide

Сгор	<b>Recommended Variety</b>	Planting Depth	<b>Spacing</b> Inches	Days Until Harvest * from transplant date
Beets	Detroit Dark Red, Kestrel, Red Ace F1, Ruby Queen	¼ inch	2-4	55-60
Broccoli	Arcadia, Diplomat, Gypsy, Packman, Premium Crop, Windsor, Greenbelt	¼ inch	18-24	70-90*
Brussels Sprouts	Jade Cross E, Long Island Improved, Royal Marvel	⅓ inch	12-15	90*
Cabbage	Blue Vantage, Platinum Dynasty, Stonehead, Cheers, Blue Dynasty, Emblem, Rio Verde	¼ inch	12-15	65-75*
Chinese Cabbage	None Given	¼ inch	12	60-80*
Carrots	Danvers 128, Purple Haze, Thumbelina, Apache, Enterprise, Maverick, Sugar Snax 54	⅓ inch	1-2	70-75
Cauliflower	Candid Charm, Cumberland, Freedom, Incline, Majestic, Show Crown, Wentworth	⅓ inch	18-24	55-65*
Collards	Champions, Flash, Georgia Southern, Top Bunch, Vates	⅓ inch	6-12	75
Kale	None Given	½ inch	12-18	50
Kohlrabi	Early Purple Vienna, Early White, Vienna, Winner	⅓ inch	6	55-75
Lettuce	Esmeralda, New Red Fire F1, Nevada, Tall Guzmaine Elite	⅓ inch	4-12	45-80
Mustard Greens	Florida Broadleaf, Greenwave, Red Giant, South- ern Giant Curled, Savannah, Tendergreen	⅓ inch	4-6	35-50
English Peas	Mr. Big, Novella II, Oregon Sugar Pod II, Sugar Ann, Super Sugar Snap	½ inch	2-3	60-70
Potatoes, Irish	Dark Red Norland, Red LaSoda, Red Pontiac, Kennebec, Yukon Gold	4 inches	12	90-120
Pumpkins	Atlantic Giant, Baby Bear, Gooligan, Sorcerer, Sprint, Silver Moon	½ inch	36-60	90-120
Radishes	Cherriette, Champion, White Icicle, April Cross	⅓ inch	1	22-28
Shallots	None Given	1 inch	4-8	50
Swiss Chard	None Given	¼ inch	6-8	45-55
Turnip Greens	Alamo, All Top, Purple, Top White Globe, Seven Top, Southern Green, Top Star, Tokyo Cross	⅓ inch	2-6	40-50

The LSU AgCenter has a lot of good information regarding fertilization rates for fruits, vegetables, and ornamental gardens. Typically these recommendations for nitrogen (N), phosphorus (P), and potassium (K) fertilizers are given using a basic 8-8-8 or 13-13-13 balanced fertilizer product per square foot or row foot. If you've gotten

Pretty low N-P-K, right? How much compost would a gardener need to fulfil the needs of their crop? The <u>LSU AgCenter's Louisiana Vegetable Planting Guide</u> is a good reference publication for vegetable gardeners and lists general fertilizer recommendations for many vegetables. Let's use okra as an example.

Potassium (K): 1 - 2%

Okra is listed as needing 3-4 pounds of **8-8-8** per 300 square feet of garden OR 100 feet of row.

Let's pretend that we have a 100 foot long row planted with Clemson Spineless Okra and we decide that we need 4 pounds of 8-8-8 in that row to grow a decent crop according to the guide. How much compost is needed to meet that same rate? Here's how to figure it out for just the nitrogen needed:

At 8% nitrogen, applying 4 pounds of 8-8-8 to the

soil test results back from LSU, they will have recommended rates of nitrogen (ammonium sulfate, urea, or ammonium nitrate), phosphate (triple super phosphate) and potash (muriate of potash) to apply based on soil availability and crop grown.

The N-P-K values on all bags of fertilizer stand for the percentage by weight that the product contains of each of those three macronutrients. For example: a pound of 8-8-8 contains 8% nitrogen,



A handful of compost made from tree leaves, grass clippings and other organic waste material including newspaper and junk-mail.

so .08/lb. or 1.28 ounces of actual nitrogen in that pound of product. (16 oz. x 0.08 = 1.28 oz.)

Organic gardeners do not utilize the above mentioned fertilizer products because they are synthetic. Instead, the seek out natural sources of nutrients. Compost is frequently recommended as a fertilizer, but there are many more efficient organic fertilizers out there.

Compost varies in N-P-K from batch to batch or source to source, but in general the N-P-K of compost falls somewhere within this range:

> Nitrogen (N): 1.5% - 3.5% Phosphorus (P): 0.5% - 1%

100 foot row of okra will actually be 5.12 oz. of actual nitrogen, or 0.32 of a pound of actual nitrogen. To meet this target, how much really good compost is needed? We'll assume that we have really good compost with 3.5% nitrogen.

That 3.5% N is what is immediately available for use by the plants PLUS what is released slowly over time. Within the 3.5% N, approximately 3% is extractible (readily available) nitrogen and 97% slow release nitrogen (more on this later). So at the time of applying the compost to the okra, almost none of it is actually readily available for

(Continued on Page 5)

#### (Continued from Page 4)

use by the okra. About 10-30% of the nitrogen in the compost will become available to plants within the

<sup>1</sup>/<sub>2</sub> lb. of **8-8-8** in mid-March to newly planted trees. That's 0.64 ounces of nitrogen. To apply this rate using compost tea, you'd need to supply 42.66

pounds of

roughly five

lbs.) As that

satsuma tree

matures. the

fertilizer

gallons of

compost tea, or

compost tea over

time (a gallon of

liquid weighs 8.34

recommendation

increases with the tree's needs to 12

lbs. of 8-8-8 per

that 1,024 lbs. or

would need to be

applied that year.

year, meaning

123 gallons of

compost tea

first year after application.

To apply the 0.32 pounds of actual nitrogen required by the okra:

0.32 lbs. / 0.035 nitrogen in compost (5 N) = 9.14 lbs.

To meet this target, 9.14 lbs. of really good compost will need to be applied to that 100 foot row of okra. (Remember, this is 3.5% nitrogen compost, which is super good quality compost)

BUT! Remember that only 3% of that is actually readily available to the crop. To apply a rate of 8% readily available nitrogen, you'd actually need to apply 304 pounds of really good 3.5% N compost to hit this goal.



measuring 3' wide, 3' long and 3' high.

Most commercially available bagged compost at the garden center is more like 1% N, so you'd need to multiply this calculated rate by roughly a factor of 3.5 to derive the same available nitrogen goal. That brings the total required compost application up to 1,064 pounds. A yard of compost weighs roughly 1,600 lbs. Remember, this is for a single 100 ft. row of okra.

Compost tea is even weaker and varies widely, but usually has an N-P-K of around 1.5-O-O. Most commercially sold compost tea products, even the high end ones, are unable to legally be registered and sold as fertilizers because they offer so little nutrition to plants. A steady stream of compost tea would be needed to provide any benefit.

Let's calculate how much would be needed for a newly planted satsuma tree. The <u>LSU AgCenter's</u> <u>Louisiana Home Citrus Guide</u> recommends applying This would quickly add up if you have multiple trees!

And those calculations are just for nitrogen, you can do the calculations for phosphorus and potassium on your own, but I think the point is clear. A whole lot of compost or compost tea needs to be added to soil to meet the same soil fertility goals accomplished by a few pounds of synthetic product. Last time I checked, really good finished compost in the New Orleans area was running about \$60/yard as a bulk price. A yard of compost is roughly 1600 lbs., meaning the cost is then calculated to be roughly 16 to 26 cents per pound for bulk compost. Retail plastic packaged bags of compost cost even more per pound. That cost can add up in even a small garden quickly.

So when and why should we use compost in the garden?

#### (Continued from Page 5)

Compost plays many beneficial roles in any garden, but should not be treated as a sole fertilizer source for any garden or crop. Just some of the benefits of compost include:

- Helps retain soil moisture and nutrients.
- Builds a good healthy soil structure where air and water can penetrate.
- Releases nutrients slowly over months and years.
- Creates habitat for soil microorganisms, which help to suppress disease and pests.
- Sequesters soil carbon and reduces landfill waste.
- Retains other fertilizer sources better and helps to meter it out.
- Buffers the soil pH.
- Increases soil organic matter, reducing compaction.

So what are some organic fertilizers that can be used that are more efficient and cost effective than compost?

Many garden centers are carrying organic fertilizer products that are blends of several organic materials. All are labeled by law with the N-P-K ratio, so gardeners know just

what's in the bag. Using synthetic fertilizer recommendations, they should be able to calculate how much organic product to use by following the same math formula from earlier in the article. There are also a lot of free fertilizer application calculators available on the internet.

Commonly found organic fertilizer sources and their range of N-P-K values are listed below:

Good sources of organic Nitrogen (N):

Blood meal (12.5-1.5-0.6) Fish meal (10-5-0) Feather meal (15-0-0) Good sources of organic Phosphorus (P): Bone meal (7-20-0) Mushroom compost (0.5-50-0.5) Rock phosphate (0-25-0) Good sources of organic Potassium (K): Granite dust (0-0-5) Greensand (0-1.5-5) Kelp meal (1-0.5-10)

Wood ashes (0-5-6)



Greensand, also called glauconite, is a material mined from the ocean floor. It has a bluishgreen color and is made of marine potash, silica, iron oxide, magnesia, lime, phosphoric acid, and about 30 other trace minerals.

Some other very popular, commercially available organic animal-based sources of fertility are low in actual nutrient content just like compost, and may not be a cost-effective soil input:

> Worm castings (1.5-2.5-1.3) Fish emulsion (5-1-1) Composted poultry litter (3-2-2)

Composted cow manure (2-2-2)

Fresh manure can also offer a source of soil fertility, which is a whole other article topic, but in general it should be aged and tilled (Continued on Page 7)

#### (Continued from Page 6)

into the soil. For food safety reason observe the 90/120 day rule, which says fresh manure must be applied to a food crop 90 days before harvest for aboveground crops and 120 days before harvest for crops that have edible portions that make contact with the soil. Manure N-P-K varies widely, so many larger organic farms have it tested for N-P-K value to get a handle on just how much to apply. If you can get Compost is a great soil amendment and offers organic it free, manure may be a cost-effective source of fertility.

One argument for applying a synthetic fertilizer is that products like 8-8-8 or 13-13-13 provide N-P-K in a form that is immediately available to plants. Crops showing signs of nutrient deficiency can be quickly treated and newly planted areas can be given a boost. Compost and other organic inputs, on the other hand, are considered to be slow release sources of nutrients, and need to be metabolized by soil microorganisms to convert it to a useable form for plants.

This process is known as mineralization and relies on the complex ecology of soil, including the fungi, bacteria, protozoa, insects, and other creatures found within the soil. This process takes time and can take several years in some soil systems. Calculating organic

soil amendment applications based on regular soil testing results (yearly testing is recommended) and utilizing soil conservation practices like low or no tillage gardening, mulching, or cover cropping can help to encourage the soil ecology to flourish and create a soil powerhouse able to break organic fertilizers down into forms that plants can use quicker.

gardeners many benefits, however better organic fertilizer inputs are available at most garden centers. An application of compost boosts soil organic matter, which functions as a habitat for the soil microorganisms that act as the workhorses of an organic gardening system. This alone is a great reason to apply several inches of compost per year to your garden beds. While compost does provide some slowrelease nutrition, gardeners should be aware that additional sources of fertility are needed for many of the plants that we commonly grow in our landscapes.

Click on the following link for a complete list of organic soil inputs and their N-P-K values: https:// extension.oregonstate.edu/sites/default/files/ documents/1/lc437organicfertilizersvaluesrev.pdf

~Anna Timmerman



A popular saying is that "Organic fertilizer feeds the soil and synthetic fertilizer feeds the plant". Although fertilizer is not really plant food.

### Let-tuce Make You Smile

ettuce (*Lactuca sativa*) is a favorite coolweather vegetable with most gardeners. Lettuce grows well in cool weather and tolerates light frosts. Lettuce is one of the "must haves" for a fall veggie garden in the greater New are sized to your liking, they generally reach full head size in 35 – 50 days. Recommended varieties of looseleaf lettuce include these green-leaf varieties: Leaf, Grand Rapids, Oak Leaf, Prizehead, Nevada, Salad Bowl, Sierra and Tango and these red-leaf varieties:

New Red Fire, Red

Bowl, Lolla Rossa,

Butterhead lettuce,

also known as Bibb

or Boston lettuce, is

sweet and tender

with loose, almost

**Butterhead** lettuce

varieties form loose

rounded heads that

heads and generally

take 65-75 days to

Recommended

Skyphos (red),

Summer Bibb,

Harmony and

varieties are

form mature heads.

Esmerelda, Caliente,

Buttercrunch. There

buttery leaves.

are most often

harvested as full

Red Oakleaf and

Cherokee.

Sails, Red Salad

Orleans area. With a multiplicity of types and colors, lettuce can even make a nice addition to any landscape bed and still provide you with fresh salad greens all winter long. Lettuce is a rich source of vitamins K and A, and a moderate source of folate and iron.

There are basically four types of lettuce: looseleaf, Cos (Romaine), crisphead (Iceberg) and butterhead. Looseleaf lettuce, sometimes called cutting lettuce, produces a loose rosette of leaves and can be harvested at any stage – from microgreens to full-



A visitor to the LaSalle Park demonstration garden takes home a bouquet of fresh salad greens. Top center-Arugula, left-Butterhead lettuce, lower center-Romaine lettuce, right-Loose Leaf lettuce.

sized leaves. It can also be harvested by cutting entire plants at the base or by plucking leaves individually. Using this method, you can harvest individual leaves at any stage and the plant will keep producing. Looseleaf lettuces also have the widest variety of colors and leaf types. It comes in green, red (burgundy) and speckled with leaves that have smooth entire edges, wavy edges, or deeply lobed. Though they can be harvested as soon as the leaves butterhead lettuce that have distinctive edges, swirls or speckles of red foliage such as Blushed Butterhead, Speckles, Carmona and Four Seasons.

Cos or Romaine lettuce features a crisp texture but has a high nutritional density, making it a favorite in sandwiches and Caesar salads. Romaine lettuce grows narrow heads and has a higher tolerance for heat than other types and is slow to bolt.

### Let-tuce Make You Smile

#### (Continued from Page 8)

Depending on variety, heads reach harvest size from 65-75 days after planting. There is at least one small variety, Little Gem, that matures in only 55 days. Romaine is commonly thought of as green but there are also red and red-flecked varieties available. Some recommended varieties are Cimarron Red, Flashy Trout Back, Cuore, Green Towers, Parris Island Cos, Red Eye, Muscena and Tall Guzman Elite.

While iceberg lettuce doesn't boast much flavor, it's got a crispiness that many other greens lack. Thanks to its high water content, iceberg lettuce doesn't pack many calories, but it's not particularly high in other nutrients either. Iceberg forms a round fairly tight head and takes about 85 days to mature. It is not as popular in our area because it is generally harder to get a good crop. The long maturation time combined with our humidity, snails and insects often leads to disappointing heads. If you want to give it a try, Great Lakes, Crispino, Keeper, Maverick, Raider and Ithaca are varieties that are recommended.

All lettuce types have the same general requirements for growth. Lettuce likes well-drained sandy loam soil rich in organics, a pH 6.0-6.5 and 8-10 hours of sunlight per day. It's a good idea to have a soil test before planting, otherwise incorporate about ½ lb. 13-13-13 per 30 ft<sup>2</sup> before planting. In the fall, most lettuces can be direct seeded. Be careful not to bury the seed over ¼" deep or it may not germinate. Use fresh seed each year; lettuce seed loses viability rapidly even when properly stored. Side-dress with a high nitrogen fertilizer (15N) when leaves are about 4"

wide at the rate of  $\frac{1}{2}$  lb. per 30 ft<sup>2</sup> or 1 Tbs per plant. With lettuce, we are only interested in getting leaves so a higher dose of nitrogen is better. To provide a continual harvest of fresh lettuce do successive plantings about every two weeks. This is an especially good idea if growing head lettuces where the entire plant is harvested when mature.

The most problematic insects on lettuce are caterpillars and aphids. Caterpillars are easily controlled with Bt and aphids can be controlled using insecticidal soaps. Both of these pesticides have a preharvest interval (PHI) of 0 days.

Diseases on lettuce usually occur during cool wet weather and are more prevalent in areas with poor drainage. Damping off and bottom rot are less likely if you have good drainage and mulch your lettuce plants. Mulching is also a great way to control weeds in your lettuce patch. Downy mildew can sometimes be a problem if there are extended periods of wet weather. Mulching and spacing plants for good air movement help to prevent downy mildew. See last month's GNO Gardening for information on snails.

Lettuce should be irrigated every four to five days for healthy growth. Lettuce has a long tap root and smaller side roots so good deep irrigation is most beneficial. Lettuce should be drip irrigated to reduce disease incidence.

There's no reason why anyone with a little bit of garden space or a few good sized containers can't produce their own fresh lettuce and have plants that are attractive as well. ~Dr. Joe Willis



Lettuce variety trials conducted by LSU AgCenter vegetable specialist Dr. Kiki Fontenot.

For more information click on the following link to see the Lettuce publication from the LSU AgCenter or search "lettuce" + "LSU AgCenter" in your internet search engine: <u>https://www.lsu.edu/agriculture/plant/extension/hcpl-publications/lettuce-pub3363.pdf</u>

## What's Bugging You? Southern Chinch Bug

e are continuing to experience a heat wave this August without much relief.

black patch in the middle. The immature insects hatch from eggs and are red and a band of white One thing that thrives in the hot and dry across the back juts out behind the pads where the

climate in our lawns and can become a real issue this time of year is chinch bugs. They are especially fond of St. Augustine grass.

Chinch bug damage can be easily mistaken for lack of water and overall heat-stressed turf. The lawn will look like it has not been watered because of the curling and shriveling up of the grass blades that eventually turn brown and die. However, it can also



An adult chinch bug has white wings that are marked with a triangular black patch in the middle.

adult wings will later develop.

Chinch bugs do their damage with a piercing-sucking mouthpart by inserting a slender beak into the grass at the base of the plant. It then injects a toxin and extracts the plant juices. This toxin can be quite damaging, and the grass cannot recover. If you do not stop chinch bug activity quickly, they can spread into new turf, causing large areas of damage.

be a sign of chinch bug damage.

You've got to do some investigating to get to the root of the problem.

One key sign of chinch bugs is that the symptoms first appear as patches of dead grass in areas where heat is radiated from storm drains near streets and around sidewalks and driveways. This often misleads folks into believing it is caused by drought.

Another definitive clue that you may have chinch bug problems is that the damage does not occur in circular patterns like many of the fungal turf diseases. The brown spots will be more random, and the grass will have jagged edges that will turn yellow before fully dying and going brown.

So what exactly is a chinch bug? It is a slender, black insect that is about 1/8 inch long when fully grown. It has white wings that are marked with a triangular

Chinch bugs reproduce quickly, as the female deposits 15 to 20 eggs per day for 20 to 30 days on a blade of grass. The eggs hatch in seven to 10 days.

These insects are rather difficult to detect because they so tiny and often are not readily visible in the lawn from our viewpoint looking down. If you suspect chinch bugs are to blame for the damage in your lawn, try confirming this suspicion by using a lemonscented soap mixed in water and poured on the brown area.

To make the solution, add 1 to 2 tablespoons of lemon -scented dish soap to a gallon of water. After pouring the solution over a small area, wait for five minutes. If chinch bugs are present you, will see them climbing up the grass blades. To really investigate, you may need to get down on your knees and look around in the thatch. (Continued on Page 11)

## What's Bugging You? Southern Chinch Bug

#### (Continued from Page 10)

You can also take a plug of grass from the damaged area and dip it into the soapy water. Then watch for bugs floating to the surface of the solution.

Thatch is the area where the lawn sloughs-off old stems and roots and replaces them with new plant parts. The accumulation of plant parts often exceeds the rate at which the material breaks down. This creates a layer of thatch above the soil surface. A small amount of thatch is beneficial because it provides organic matter and can help reduce water loss from the soil. However, heavy thatch of more than 3/4 inch deep can be a place where insects such as cinch bugs will thrive.

Late summer is a good time to dethatch your lawn. Dethatching will



Chinch bug damage on a lawn appears as large patches of dead grass.

increase the infiltration of air, water and nutrients into the soil and down to the grass roots while also stimulating new growth. By increasing lawn vigor, you remove a favorable environment for cinch bugs and other insects to infect your lawn.

Dethatching is done in one of two ways. One is by using a thatch rake or heavy garden rake with thick tines to rake deep down into the grass to remove the thatch. Raking is best for an area that is not heavily thatched. If the thatch is thick and soil compaction is water with pH paper or meters that can be readily found at most garden stores and nurseries. The pH should be 5.5 to 6.5. You can buffer the pH down by adding vinegar to the water and rechecking as necessary until you've reached the desired pH.

Retreating again in two weeks to kill any hatched eggs is best practice. If you see further activity two weeks later, a subsequent insecticide application may be necessary.

also an issue, mechanical core aeration is better. Aerators are implements that remove cores, or plugs, from the sod. Rental equipment is often available, and many local landscape and turf companies offer this

service.

Once you have positively identified chinch bugs are the culprit, they can be controlled by spraying with insecticides containing one or more of the active ingredients Scimitar CS, carbaryl or cyfluthrin/ imidacloprid according to the label directions.

The pH of the water used to create the spray solution is important. If the pH is too alkaline, it can cause the insecticide to break down before it has a chance to work, making it less effective and causing you to apply more. Check the pH of the

**P**rairies are ecosystems considered part of the temperate grasslands, savannas, and shrublands biome by ecologists, based on similar temperate climates, moderate rainfall, and a composition of grasses, herbs, and shrubs, rather than trees, as the dominant vegetation type. Temperate grassland regions include the Pampas of Argentina, Brazil and Uruguay, and the steppe of Ukraine, Russia and Kazakhstan. Lands typically referred to as "prairie" tend to be in North America. The term encompasses the area referred to as the Interior Lowlands of Canada, the United States, and Mexico, which includes all of the Great Plains as well as the wetter, hillier land to the east.

A mini prairie or prairie garden is a simulated prairie planting done on a very small scale, suitable for most suburban yards, consisting of mainly native species of grasses and forbs.

#### Why plant a prairie?

There are a myriad of reasons to bring a taste of the wild into our personal space. Besides the aesthetically pleasing aspects of having beautiful flowers, there is a bit of duty and purpose to it. Mini prairies are resilient. Once established, they are drought tolerant, require no additional fertilizer or irrigation, and are generally easy to maintain. Their plants also have extensive root systems that sequester carbon, create soil, make land more water permeable and less susceptible to flood, and can remove contaminants and excess nutrients from water runoff before it reaches our waterways. They also provide native habitat for birds, butterflies, insects, reptiles, and other small wildlife.

Philosophically speaking, there seems to be a calming effect and sense of belonging to surround ourselves with a semblance of true nature as it was intended to be. The well-know naturalist, "The Nature Dude" Bill Fontenot, says there is a sense of time and place associated with native plantings. I think it helps to keep us grounded to experience seasons in our plantings, as well as a sense of place, based on the plants that grow around us. With modern conventional landscaping of cookie-cutter evergreen mounded shrubs, it can be difficult to distinguish what part of the country it is in, much less the season. Prairies and native plantings have a seasonal progression that reminds us of when and where we are in the world.

#### **Getting Started**

First and foremost, find a place. Most prairie plants are sun loving and will require at least a half day or more of sun. You also need to take your soil type into consideration. Many prairie type plants generally like well drained soil, perhaps slightly on the drier side. But take comfort, as South Louisiana is notoriously lacking in drier soils, that these plants are widely adaptable and *(Continued on Page 13)* 



Tickseed Coreopsis (Coreopsis tinctoria)

#### (Continued from page 12)

there are always species and seed mixes for different soil types.

Next, you will have to make a plan and decide on your method of establishment. Whichever method you choose, you will likely have to contend with a turfgrass lawn and other undesirable weeds that you will need to eliminate. This may be done by utilizing multiple applications of a general herbicide, laying down cardboard or other material to block the light reaching the plants or by physically removing the plants.

For my first planting, I applied a few applications of herbicide about a month apart toward the end of summer and into

fall and broadcast a prairie type seed mix in late winter/early spring. Seed to soil contact is very important for establishment, so I raked out most of the dead turfgrass prior to broadcasting seed. After seeding, I then compacted the area by walking on it to make sure that the seed was in good contact with the soil. Keep the soil moist with irrigation until the seedlings get established. Over time, the plants establish themselves and through reseeding, natural spread and competition, they find their micro niches



A purple coneflower *Echinacea purpurea* with a Gulf Fritillary butterfly.

inside the prairie where they will perform best. In my experience, the seed broadcast method provides a greater diversity of plant species.

For my second planting, I placed a layer of cardboard topped with a thick layer of mulch, obtained for free from a tree trimming service, and allowed it to sit for about a year before planting in it. With this particular planting, I used plugs that I grew from seed in starter packs. I obtained several species of locally sourced prairie plant seeds and started the seeds either in late

> summer or early spring. Once established in the planting cells, I plugged them into the planting area a little at a time, as they were mature enough to do so. This method has proved to be slightly slower and I will be adding diversity a little at a time, probably over several years. However, you have far greater control of the placement of a particular species and can create (Continued on Page 14)



Plantings of black eyed Susan and Lemon Beebalm. And they have maintained some lawn area.

#### (Continued from page 13)

"drifts" of color and texture, which may be a little more natural in appearance.

So far, I am pleased with both methods I've used to establish my mini prairie plantings. They each have had their pros and cons, so I will not recommend one over the other. Choose whatever method works for your situation.

#### Maintenance of Mini Prairies

As far as establishment goes, control of weeds will be the initial concern for your prairie. The plug and mulching method had a

far less weed control issue than the broadcast seeding on open ground did. The mulch between my plugs acted as a groundcover to suppress weeds to a large extent. Both of my mini prairies are small enough that I was able to control weeds by hand for the most part. If you are unable to control weeds by hand, mowing at a high setting above the establishing prairie plants can keep the weeds at bay until the prairie plantings



Lemon Beebalm Monarda citriodora with an Eastern Carpenter Bee.

take hold. It is important to have plants spaced fairly close together to create a groundcover to discourage weed growth.



A Wild Bergamont Monarda fistulosa attracts this hummingbird.

In late winter, it will be time to mow or burn your mini prairie to get it ready for the new growth. In this regard, I will again be treating both of my prairie plantings differently.

My oldest planting is in the back of my yard and in a location where it is safe to have a controlled burn. With a water hose on hand, I start a small controlled burn when conditions are favorable, taking wind

speed and direction into account. I only have smaller grass species, so fuel is somewhat limited, which is favorable for me, as it keeps the flames low and controlled. Extreme caution needs to be used with this method and only as local laws will allow.

My newer planting will be mowed/cut back. It is in my front yard and has young, trees among the prairie plants that I would not want to damage by fire. There is also still wood mulch that is not completely decomposed that would likely also catch fire.

Besides some occasional hand control of the more aggressive species that may want to take over the prairie, this is about all the maintenance that will be required.

#### A few miscellaneous things to consider with mini prairies

Local ordinances, HOA's and neighbor complaints may be a few obstacles you will face. I don't have any of these issues, but did some research just in case. (Continued on Page 15)

#### (Continued from page 14)

Most agree that you have to make your mini prairie appear intentional. This may mean a well defined border, surrounded by lawn, and contained to a "bed" if you will. Also, signage such as "Wildflower Meadow", "Pollinator Garden", "Native Plant Habitat" etc., can further indicate that the planting is intentional and not an issue of neglect. You can also

the seasons, but from year to year as well. As plants get established, some will naturally be more aggressive, spreading via root rhizomes and/or prolific reseeding. Some will not do well in the conditions they are in and wither away and disappear in a few years. As mentioned previously, there may be a need for some control of the more aggressive species to prevent your prairie from becoming a

speak to neighbors to explain what you're doing beforehand and make them feel a part of the process. Who knows, maybe they'll even join you or at least become an ally.

The mini prairie will not always appear tidy and neat. Some of these plants will get rangy and most



monoculture. When dealing with ecosystems in a miniature version, you will not always be able to just let nature take its course. Some intervention may occasionally be required. On a positive note, this type of maintenance is very limited and fairly easy to stay on top of. It is also

Black eyed Susan Rudbeckia hirta and purple coneflower Echinacea purpurea.

will die back in the winter. I personally don't mind this as the winter plant structure and seed heads are also appealing to me, especially the grasses.

I intentionally did not get into individual plant species as that is a personal preference. Most will go with some type of seed mix, which should be sourced as locally as possible, as they are most likely best adapted to your growing conditions. Ratios of grasses to wildflowers should also be considered. Natural prairies usually have a high ratio of grass species compared to forbs. You may want to flip this ratio for a mini prairie as the grasses can dominate a small space.

Patience is needed. Many prairie plants will not flower the first year as they are perennials that use the first year for establishment. Most seed mixes compensate for this with a percentage of annuals that will flower the first year.

Your prairie will change in appearance not only with

wonderful to find that "surprise" plant or flower that you never saw before all of sudden erupt and put on a display without warning.

#### In conclusion

I've tried to give an honest account of the few challenges of establishing a mini prairie, but I hope the overall takeaway is that this will be something you can and want to accomplish. I love all my native trees, shrubs and plants, but I have to say that the mini prairie is the most rewarding of all. The diversity of life in both flora and fauna and their interaction is captivating beyond words. Give it a shot and best of luck! ~Mike Glaspell

Mike Glaspell is a member of the Native Plant Initiative of Greater New Orleans and the Louisiana Native Plant Society. He and his wife Jessica are hobbyist landscapers focusing on native plants at their home in Lockport, La. They also enjoy photographing the native flora and fauna of the area.

### In the Kitchen with Austin

#### Agua Fresca

What could be more refreshing during the dog days of summer than an agua fresca? Literally translated, agua fresca means "fresh water." But, it's much more than that. It is a versatile drink that can be made with any seasonal fruit. Ingredients:

4 cups drinking water 2 cups fresh fruit ¼ cup sugar



2 teaspoons fresh-squeezed lime juice Mint (optional)

#### **Directions:**

In a blender combine water, sugar and

fruit. Puree until smooth. Pour mixture (through a strainer, if desired) into a pitcher or serving container. Stir in the lime juice. Taste, then adjust sugar, if necessary. Garnish with slices of fresh fruit or mint.

### Bon Manger!

### **Coming Events**



GEAUX GROW NATIVES! - FALL, 2019 Promotional Tour -



Saturday, Sep	tember 7		
Jefferson Feed	9:00 am - 11:30 am		
Double M Feed	12:30 pm - 3:00 pm		
Saturday, Sep	otember 14		
Crosby Arboretum	10:00 am - 12 noon		
Saturday, Sep	otember 21		
Harold's Plants	9:00 am - 11:30 am		
Rose Garden Center	12:30 pm - 3:00 pm		
Saturday, Sep	otember 28		
Clegg's - Siegen Lane	9:30 am - 12 noon		
Clegg's-Denham Springs	1:00 pm - 3:00 pm		

Plant Promotion and Book Signing!

MULLING ALLAND







### **Coming Events**

Date	Event	Cost	Link
Saturday Sept. 7 <sup>th</sup> 10:30-12:30 рм	Make a Hypertufta Outdoor Flower Pot @ The New Orleans Botanical Garden 5 Victory Ave., New Orleans	\$25, pre- registration required	https://www.facebook.com/ events/281424082503776/ *Master Gardener Continuing Ed Credit!
Monday Sept. 9 <sup>th</sup> 4:30-6:00 рм	Backyard Farming for Fall @ Grow On Urban Farm 2358 Urquhart, New Orleans	\$20	https://www.facebook.com/ events/452860252228695/ *Master Gardener Continuing Ed Credit!
Saturday Sept. 21 <sup>st</sup> 10:00 AM—2:00 PM	Louisiana Cooking Class– Hands in the Soil! Outdoor Cooking and Garden Day @ NOCCA 2800 Chartres St., New Orleans	\$100, pre- registration required	https://www.facebook.com/ events/376908369619092/
Saturday Sept. 21 <sup>st</sup> 10:30 AM—NOON	Collecting Seed from Louisiana Native Plants @ New Orleans Botanical Gardens 5 Victory Ave., New Orleans	\$12, pre- registration required	facebook.com/ events/2181618018583308/ *Master Gardener Continuing Ed Credit!
Monday Sept. 23 <sup>rd</sup> 4:30-6:00 рм	Intro to Permaculture @ Grow On Urban Farm 2358 Urquhart, New Orleans	\$20	https://www.facebook.com/ events/2396213974039394/ *Master Gardener Continuing Ed Credit.
Saturday Sept. 28 <sup>th</sup> 9:00 ам– 3:00 рм	Herb Society Plant Sale @ 8301 Olive St., New Orleans	Free	For further information contact Linda Franzo at lindafranzo57@gmail.com or (985) 781-4372
Saturday Sept. 28 <sup>th</sup> 9:00 AM– NOON	GNO Iris Society General meeting. @Jefferson Parish public library, 4747 W. Napoleon Ave., Metairie	Free	https://www.facebook.com/ events/777285266006935/
Monday Sept. 30 <sup>th</sup> 4:30– 6:00 РМ	Grow Mushrooms on Coffeegrounds @ Grow On Urban Farm 2358 Urquhart, New Orleans, LA 70117	\$20	https://www.facebook.com/ events/638150126594085/ *Master Gardener Continuing Ed Credit!

# FALL GARDEN FESTIVA







### NEW ORLEANS BOTANICAL GARDEN

### **October 5th and 6th, 2019**

# LSU AgCenter Annie's Project Risk Management workshops





Farm and ranch women are generating a cultural tide in American agriculture that is moving management, assets and opportunities to a new wave of farmers across the country. At Annie's Project courses, farm women become empowered to be better business partners or sole operators through networks and by managing and organizing critical information.

LSU AgCenter will host Annie's Project Level I workshop on September 19<sup>th</sup> & 20<sup>th</sup>, 2019 at the Dean Lee Research Station conference room. <u>Annie's Project</u> is an educational program dedicated to strengthening women's roles in modern farm and ranch enterprises. It creates a learning environment where participants build and enhance problem-solving and decision-making skills.

Annie's Project Level I emphasizes the five areas of agricultural risk, namely production, marketing, financial, legal, and human resource risk.

- Financial Risk women and money, basic financial documentation, interpreting financial statements, enterprise analysis, USDA programs, and record-keeping systems
- Human Resource Risk communication and management styles, insurance needs, and succession planning
- Legal Risk estate planning, farmland leasing, and employee management
- Market Risk access to market information and grain or livestock marketing
- Production Risk Natural Resources Conservation Service, web soil survey, and crop insurance

Each day, the workshop meets from 8:00 am to 5:30 pm. Lunch and refreshments will be provided.

Main sponsors NRCS and Farm Credit.

#### **Registration:**

Register on-line by September 13, 2019. Registration for this event is free, but there is limited availability.

#### Questions?

For more information, please contact Maria Bampasidou State Coordinator at 225-578-2367 or email mbampasidou@agcenter.lsu.edu.

## Farmers Markets in the Greater New Orleans Area

Jefferson Parish	Where	When	
Fat City Farmer's Market	3215 Edenborn, Metairie	Every 2 <sup>nd</sup> and 4 <sup>th</sup> Sunday, 9AM-1PM	
Gretna Farmer's Market	739 Third Street, Gretna	Every Saturday, except the Saturday of Gretna Fest, 8:30AM-12:30PM	
Kenner Rivertown Farmer's Market	2115 Rev. Richard Wilson Drive, Kenner	Every Saturday, October-July, 9AM-1PM	
Nawlins Outdoor Market	1048 Scotsdale Dr., Harvey	Every Saturday & Sunday, 9AM-5PM	
Old Metairie Farmer's Market	Bayou Metairie Park, Between Metairie Lawn Dr. and Labarre	3 <sup>rd</sup> Tuesday of the month, 3:30PM-7:30PM	
Westwego Shrimp Lot	100 Westbank Expressway, Westwego	Daily Mon-Sat 8AM-8PM, Sun 8AM-6PM	
Crescent City Farmer's Market- Bucktown	325 Metairie-Hammond, Highway at Bucktown Harbor	Fridays, 3PM-7PM	
Crescent City Farmer's Market- Rivertown New Orleans	Williams Boulevard at the River	Saturdays, 9AM-1PM	
Crescent City Farmer's Market- Ochsner West Campus	2614 Jefferson Highway, Ochsner Rehab Facility	Wednesdays, 3PM-7PM	
Orleans Parish	When	Where	
Laughing Buddha Farm Hubs	See website for details	Bywater, Broadmoor, Lakeview, Irish Channel, Mid-City, Algiers point, Uptown, and Covington Locations. Follow the link for details: <u>https://</u> www.laughingbuddhanursery.com/events	
Crescent City Farmer's Market- Uptown	200 Broadway Street at the River	Tuesdays, 9AM-IPM	
Crescent City Farmer's Market- Bywater	Chartres and Piety, at Rusty Rainbow Bridge	Wednesdays, 3PM-7PM	
Crescent City Farmer's Market- Mid-City	3700 Orleans Avenue	Thursdays, 3PM-7PM	
Crescent City Farmer's Market- Downtown	750 Carondelet St at Julia	Saturdays, 8am-12PM	
Sankofa Market	5029 St. Claude St.	Monday-Thursday, 9:30AM-4:00PM	
ReFresh Farmer's Market	300 North Broad St.	Mondays, 4:00PM-7:00PM	
Vietnamese Farmer's Market	14401 Alcee Fortier Blvd.	Saturdays, 5:30AM-8:30AM	
Marketplace at Armstrong Park	901 N. Rampart	Thursdays, 3PM-7PM	
Mid-City Arts and Farmer's Market	Comiskey Park,	Market dates vary, check http://midcityaf.org	
Treme Farmer's Market	814 N. Claiborne	Market dates vary, check https:// gloriastremegarden.com/treme-farmers-market/	
St. Bernard Parish	When	Where	
St. Bernard Seafood and Farmer's Market	409 Aycock St., Arabi	2 <sup>nd</sup> Saturdays, 10AM-2PM	

## September Checklist/Garden Tips

Mulches may have decayed and thinned out over the summer. Replenish mulch layers with fresh material to maintain about a two to three inch thickness. Ideally, use what you can get for free – such as leaves, dry grass clippings or pine straw. If you prefer the appearance of a purchased mulch, put down an inch or two of leaves, dry grass clippings or pine straw, and then top it off with an about an inch of your favorite purchased mulch. This will save you money and still give you the look you like.

Only light pruning will be appropriate on shrubs from now on. Late, heavy pruning will stimulate growth in the fall and increase the chance of cold damage to your shrubs. Remember, spring flowering shrubs and gardenias, hydrangeas, sasanquas and camellias have already set their flower buds. Any pruning now will remove flower buds and reduce the display.

From now until next spring, do not apply fertilizers containing nitrogen to most landscape plants. Fertilizing trees, shrubs, lawns and ground covers with nitrogen in the fall can reduce the hardiness of some plants and promote winter injury.

Plant petunias into the garden now for blooms this fall and next spring. Petunias, snapdragons, nicotiana, calendula and dianthus are among the more heat tolerant cool season bedding plants, and can be planted earlier than more heat sensitive plants such as pansies.

Control caterpillar problems on ornamentals with a pesticide containing BT, spinosad or carbaryl (Sevin). BT is a bacterium that only attacks caterpillars and is harmless to other organisms. It is essentially non toxic and is appropriate for use by organic gardeners. Spinosad is also organic. Make applications before damage is too extensive, and make sure the damage is fresh and the caterpillars are still active before you treat. Keep these materials well away from butterfly garden areas. They are also toxic to butterfly caterpillars.

Evaluate caladium plantings. When the plants begin to look tired and less attractive and about two-thirds of the leaves have fallen over, it's time to dig the tubers. Caladiums may return the next year if left in the ground, but it is more reliable to dig them and store them indoors over the winter. Dig the tubers carefully leaving the foliage attached. Spread out in a well ventilated area to dry. When the foliage is dry and brown, remove it from the tubers and store them in paper or net bags indoors.

Many summer weeds are setting seeds now. Do not let this happen! Pull these weeds and dispose of them to reduce weed problems next year.

Remove the canes from blackberry bushes that produced fruit this summer. They will not produce again. Vegetative canes may be tipped back to control their growth

It is time to divide and transplant Louisiana irises, Easter lilies, and calla lilies. Louisiana irises generally do best when divided every three years.

Mail order spring bulbs in time for them to arrive in October or November. Bulbs are also readily available in local nurseries now. You can go ahead and purchase them, but there is no hurry to plant them.

Water your vegetable and flower gardens deeply and thoroughly once or twice a week during dry weather. When a good rain occurs (one-half to one inch), adjust your watering schedule accordingly. A daily watering is not recommended for established plants. It increases diseases and encourages a shallow root system. Newly seeded beds, however, should be watered daily until the seeds come up. New transplants also need to be watered more frequently. And plants in containers may need to be watered everyday.

The hurricane season is kicking into high gear now, and if you haven't already done so, its time to look over your landscape. In particular, shade trees in the landscape should be carefully evaluated to make sure they are in good shape. Dead branches must be pruned off and dead trees removed entirely.

### Lawn Care Do's & Don't<sup>'s</sup>

### Do's:

- 1. Finish laying sod by the middle of the month to give it time to establish before winter.
- 2. Apply pre-emergent herbicide to prevent winter weed seeds from germinating in the lawn.
- 3. As the weather gets cooler, you may apply selective herbicides to eliminate broad leaf weeds in the lawn.
- 4. Aerate the soil if necessary to alleviate compaction.
- 5. Dethatch the lawn if necessary. This is the last month before winter to dethatch.
- 6. Continue to scout for fungal damage and control with fungicides if necessary. The most prevalent is called Large Patch of Warm-Season Turfgrass. <u>Click here to find information about large patch disease from the LSU AgCenter</u>.
- 7. Irrigate as necessary to moisten the soil to a depth of 4-6 inches. The best time to water is in the morning.
- 8. Keep an eye open for insect pests. Hot, dry weather is ideal for chinch bug damage to show up on area lawns, particularly St. Augustine.
- 9. 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.

11. Take a soil test. Test kits are available in our offices in the Botanical

Gardens, the Yenni Building, and New Orleans City Hall as well as local garden centers. Follow this link to see Dr. Joe demonstrate how to take a

10. Set your mower to the correct height for your turfgrass type.



Dr. Joe Willis takes a soil sample from a garden bed in the Botanical Gardens.

- soil sample: <a href="https://www.facebook.com/1030624690304124/videos/1452161988150390/">https://www.facebook.com/1030624690304124/videos/1452161988150390/</a> **Don't's**
- 1. Do not apply fertilizer to the lawn again until April of next year.
- 2. Do not apply phosphorous winterizer to the lawn without taking a soil sample first. We have ample amounts of phosphorous in our soil already.
- 3. Do not attempt to install a new lawn with sprigs or seeds.
- 4. Do not cut more than 1/3 of the height of lawn grass at a single time.
- 5. Do not try to grow grass in deep shade.

### Your Local Extension Office is Here to Help

E-mail us at: GNOGardening@agcenter.lsu.edu

Follow us on Facebook at GNOGardening

### For more information visit LSUAgCenter.com

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