# THE FORT BEND GARDENER



# HORTICULTURE IN FORT BEND COUNTY

**SUMMER 2014** 

# TEXAS A&M

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## Tapping into a Pool of Water Conservation Resources in Richmond

By Boone Holladay. County Extension Agent-Horticulture

A water crisis looms in Texas, driven by population and economic growth, drought, and competition among users for an increasingly scarce supply.

The crisis is affecting Texas residents today and it may take decades for the supply and demand equation to achieve balance. All of us who live in Texas have a stake in this problem, and there is something everyone can do to conserve an increasingly scarce and yet vital resource.



In response to this issue, Fort Bend

Extension teamed up in June with Richmond Rotary Club, the City of Richmond, the Historic Richmond Association, and Pepsi-Co to put on a residential water conservation workshop.

Attended by 50 local residents, the workshop covered many practical steps that homeowners can take to reduce water use in the landscape and maintain a healthy landscape with plenty of curb appeal.



Participants enjoyed hands-on learning opportunities focused on irrigation system components (including converting to a low volume drip system) and assistance in assembling their own take-home 50-gallon rainwater collection barrels.

Fort Bend County Master Gardener specialists in irrigation, rainwater harvesting

and Earth-Kind landscaping assisted with the program, addressing such topics as landscaping to conserve water, irrigation efficiency, managing water supplies, and rainwater harvesting methods.

We hope that everyone will help to spread the word to their neighbors, friends and family on how easy it is to maintain a beautiful home landscape using less water while experiencing the financial savings on their water bills!

For more information on home water savings, please visit our state water resources website at http://texaswater.tamu.edu.

# Now is the Time for Pecan Growers to Act on Walnut Caterpillars

By Boone Holladay, County Extension Agent-Horticulture, and Bill Ree, Pecan IPM Extension Specialist

Walnut Caterpillars currently active in Fort Bend County have eaten all the pecan tree foliage they are likely to consume by now, but pecan growers would do well to check their groves for egg masses before a new generation hatches later this summer.

The population that has been quite active during the past few weeks is most likely the second of the summer. Most are in their final growth stage and through eating.

Based on the caterpillar's developmental time line, the period since the region's last frost makes likely the prospect of a third generation hatching in mid-July, one whose larvae – and consumption of leaves – would be more widespread. Though the trees will rebound, this kind of defoliation can be devastating to the crop of young pecans on the trees.

The second generation was very bad, causing complete defoliation in the hot spots around pecan groves. The critical potential is that the third generation, if successful, will infest a much larger area and may move into local commercial orchards, which have a good crop of pecans on them.



The Walnut Caterpillar, Datana integerrima, is a foliage feeder of trees in the family Juglandaceae, which includes the pecans, hickories, and walnuts. Infestations start with female moths depositing egg masses of 300 to 900 eggs on the undersides of individual leaflets of mature foliage.

Egg masses are deposited in one layer and free of any

covering, so that growers can spotlight into the trees at night and see the white dime-size clusters of eggs on the underside of leaves. Eggs will take approximately 10 to 12 days to mature and larval feeding will be approximately 23 days before larvae leave the tree to seek pupation sites.

This would be the best stage at which to treat these pests. Without blindly spraying for them, we ask individuals to scout for new populations. If



you see the new egg masses on mature foliage, it should be about a week before the larvae hatch out.

The safest products for homeowner situations would be Bt, or *Bacillus thuringiensis* (Dipel, Thuricide, Caterpillar Killer) and products with spinosad (such as Green Light Lawn and Garden with Spinosad), or the use of wetable Sevin (Carbaryl) plus soap.

If you cannot reach the top of the tree where the caterpillars are feeding, you may be able to catch them when they move down the tree and cluster to molt. This is usually about 6 to 15 feet up the tree and easy to spot with a little inspection. If you can catch them then, you can spray the cluster with dish soap and water (10 drops to 24 oz. water). Be aware of the potential for acute poisoning to pets and wildlife if you use some chemical pesticides on these insects. With the large populations of these, ingestion of treated insects by birds and other beneficial organisms may prove deadly.

Commercial growers will want to be on the lookout early and often. For commercial producers, products listed for walnut caterpillar will include Intrepid, Confirm, Belt, Delegate and Altacor. For organic producers, products will include Entrust, certified Bt insecticides, Azera and Neemix.

Caterpillars may be observed moving to other tree and shrub species, such as oaks and crapemyrtle, but they will not feed on them. They have simply used up their food stock and are desperately searching for more (pecan, hickory, or walnut) and may die on their own without enough energy to pupate into adult stage.

For more information, contact Boone Holladay, horticulturist with the Fort Bend County Texas A&M AgriLife Extension Service in Rosenberg at 281-342-3034.

Additional information and regular updates on pecanrelated issues throughout the state may be found at the Texas Pecan Integrated Pest Management website, http://pecan.ipmPIPE.org.

#### FORT BEND GARDENER



#### Purple Flash Ornamental Pepper

#### A New Texas Superstar

by Robert Burns, in the Website AgriLife Today

With its nearly black leaves overlaid with dark purple and white swirls, the ornamental pepper Purple Flash — a new Texas Superstar plant — can be used in landscapes as a backup or a standalone bedding plant, according to a Texas A&M AgriLife Research horticulturist.

"Though it has bright colors, the overall effect is dark, so it's more often used as a foliage plant," said Dr. Brent Pemberton, AgriLife Research ornamental horticulturist and chair of the Texas Superstar executive board in Overton. "The red peppers come later in the season, and they're showy in themselves, but Purple Flash is still used in flower borders or mass plantings."

Purple Flash, *Capsicum annuum*, is fast growing, Pemberton noted, but it rarely gets taller than 12 to 15 inches and can also be used "very effectively" in mixed containers.

"It's a nice, semi-compact plant," he said.

All Texas Superstar plants undergo extensive tests throughout the state by AgriLife Research and Texas A&M AgriLife Extension Service horticulturists, Pemberton said.

To be designated a Texas Superstar, a plant must perform well for consumers and commercial growers throughout Texas, Pemberton said. Superstars must also be easy to propagate, which ensures the plants are not only widely available throughout Texas but are also reasonably priced.



In addition to disease resistance, summer plants like Purple Flash must tolerate Texas heat well, and Purple Flash has proven itself exceptional in this regard too, Pemberton said.

In fact, Purple Flash doesn't simply tolerate heat well; it thrives in it, said Wayne Pianta, PanAmerican Seeds representative, Fort Worth. PanAmerican released Purple Flash along with a number of other ornamental peppers in 2008.

"It's like a lot of the ornamental peppers," Pianta said. "It seems to actually do better in the heat. It loves the sun and heat of Texas landscapes."

With its variegations of color, Purple Flash looks great with some of the other PanAmerican flowering plants that have done well in Texas trials, such as the East Texas bedding plant trials, which are conducted by Pemberton, Pianta said.

"Because Purple Flash provides its landscape color from its foliage, you don't have to wait for it to bloom," Pianta said. "This feature also makes it the perfect companion to flowering plants that have been previous Texas Superstar winners like <u>Angelonia Serena</u>."

Though it likes sun and heat, Purple Flash will also tolerate partial shade. It won't develop as deep variegations of black and white with purple flashes in partial shade, but it's still a beautiful plant, Pianta said.

In Texas, Purple Flash can be planted in the spring, late spring — or even into the summer — as long as it is watered regularly during establishment, Pemberton said. It prefers full sun but can tolerate partial shade. It is also tolerant of a wide variety of soils and potting mixes as long as they are well drained. With a little care, it should last through Texas hot summers and into the fall.

Texas Superstar is a registered trademark owned by AgriLife Research, a state agency that is part of the Texas A&M University System. More information about the Texas Superstar program can be found at <a href="http://texassuperstar.com/">http://texassuperstar.com/</a>.

#### So you want to be a

# Master Gardener?



Have you been gardening for years and want to increase your gardening skills? Have you just moved here and you can't seem to figure out this dirt we have?

Do you have young children and feel gardening could be a family project, but you want to teach yourself and your family the best way to achieve your gardening goals?

Then perhaps you should consider taking the Master Gardener program! The Fort Bend County Master Gardeners are an award-winning organization whose main purpose is to help Texas A&M AgriLife Extension Service reach the local community through education.



First, AgriLife Extension trains you! With the assistance of AgriLife Extension Specialists who teach our classes along with many Master Gardeners, residents like you will be amazed at the quality of our training. Classes always begin with an Orientation. Additional classes are Botany, Vegetables, Fruits & Nuts, Soils, Landscape Design, Trees, Propagation, and more. Classes begin on Thursday, October 9, 2014 at 9 a.m. – 3:30 p.m. (2 classes plus lunch) and will continue every Tuesday and Thursday through November 6, 2014.

As the second half of training, 50 hours of volunteer time is required. This is volunteer time that is already laid-out and planned ahead of time. It is spent in various areas of our program so you receive a well-rounded understanding of how this program works.

Applications are now being accepted for the Fall 2014 class. Applications are on <a href="www.fbmg.com/">www.fbmg.com/</a> under "Become a Master Gardener" and on the AgriLife Extension website <a href="fortbend.agrilife.org/">fortbend.agrilife.org/</a>, or you can visit the office for an application.

Please forward your application with your check to Margo "Mac" McDowell, Program Coordinator, Texas A&M AgriLife Extension, 1402 Band Road, Suite 100, Rosenberg, TX 77471.

If you have any questions, please call 281-633-7033 or the main office at 281-342-3034.

Class size is limited; be sure to register early!



# Texas Master Naturalists, Coastal Prairie Chapter, Now Accepting Applications

If you like natural history, wildlife, birding and ecosystems, you may want to learn about the Texas Master Naturalists.

The local chapter, Coastal Prairie, encompasses Fort

Bend and Waller
Counties. This is
a volunteer
training program sponsored
by Texas Parks
and Wildlife and
the Texas A&M
Agrilife Exten-

sion Service.



The Coastal Prairie Chapter will begin its Fall 2014 training class on Saturday, August 23, 2014, with classes continuing through November. Six out of twelve classes will be held on Saturdays, with the remainder on Tuesday evenings. Classes are held in a variety of locations throughout Fort Bend and Waller Counties, covering such topics as climate, soils, mammals, ecology, birds, fish, geology and much more!

Class size is limited and applications are accepted on a first-come, first-served basis. Tuition is \$150. To download an application and view the complete training schedule, please visit

http://txmn.org/coastal/about-our-chapter/tmn-training-information, or http://fortbend.agrilife.org/.

# The Earth Laughs in Flowers

Ralph Waldo Emerson

#### Seasonal Garden Checklist: July/August

By Dr. William Welch,

Professor & Texas A&M AgriLife Extension Service Landscape Horticulturist

- Evaluate the volume of water delivered from lawn sprinklers to ensure healthy, stress-free grass during the heat of the summer. One thorough watering which will deliver one inch of water at a time is better than several more shallow sessions. The amount of water available through flower bed sprinklers may be checked by placing several shallow pans among shrubs or flowers.
- Caladiums require plenty of water at this time of year if they are to remain lush and active until fall. Fertilize with 21-0-0 at the rate of one-third to one-half pound per 100 square feet of bed area, and water thoroughly.
- •Prune out dead or diseased wood from trees and shrubs. Hold off on major pruning from now until midwinter. Severe pruning at this time will only stimulate tender new growth prior to frost.
- •Sow seeds of snapdragons, dianthus, pansies, calendulas, and other cool-season flowers in flats, or in well-prepared areas of the garden, for planting outside during mid-to-late fall.
- •Plant bluebonnet and other spring wildflowers. They must germinate in late summer or early fall, develop good root systems, and be ready to grow in spring when the weather warms. Plant seed in well-prepared soil, one-half inch deep, and water thoroughly. Picking flowers frequently encourages most annuals and perennials to flower even more abundantly.
- •It is time to divide spring-flowering perennials, such as iris, Shasta daisy, oxeye, gaillardia, cannas, day lilies, violets, liriope, and ajuga.
- •Select and place orders for spring-flowering bulbs now so that they will arrive in time for fall planting.
- •Don't allow plants with green fruit or berries to suffer from lack of moisture.
- •A late-summer pruning of rosebushes can be beneficial. Prune out dead canes and any weak, brushy growth. Cut back tall, vigorous bushes to about 30 inches. After pruning, apply fertilizer, and water thoroughly.

#### Volunteer Spotlight

## Jeff McMullan and the Hawk Rescue!

By Margo "Mac" McDowell, Program Coordinator, Texas A&M AgriLife Extension, Fort Bend

Jeff McMullan has been a volunteer since 2001 in several program areas of Texas A&M AgriLife Extension and his involvement has included key roles in leadership in all of them. He is an amazing person, an awesome teacher. Currently, he is heavily involved with the Fort Bend County Beekeepers as Secretary, and is also an active Master Naturalist. Jeff is seen at many public outreach events for children throughout the county, and also is involved with the AG'tivity Barn, through Extension. This beautiful story actually happened not too long ago, and it says a lot about Jeff.

#### The Hawk Rescue!

Imagine you are a hawk. You have a large nest with young ones, and a major rainstorm with heavy winds has arrived and is blowing throughout the tree canopy. What is happening? Oh no! The nest has fallen carrying with it, your young ones who don't fly yet! What's going to happen?

This actually happened to a hawk family in Sugar Land. Luckily enough for one young hawk, Jeff saw him in the road. Jeff thought for sure the baby hawk would get run over, or worse, a raccoon or dog would attack him, even though he noticed an adult hawk was watching closely. Jeff decided he had to take him home until a plan was made.

What was amazing was the plan Jeff came up with! With the baby hawk, ladders, and a laundry basket, Jeff located the "home" tree, and, miraculously, a utility crew was working on utility poles. Jeff was able to recruit a couple of the crew members, albeit a bit reluctant, since they too noticed that an adult hawk had swooped in to watch.

The utility crew tightly secured the basket to the tree with bungee cords. They next filled the basket with dry grass and pine straw to make a new nest (since the old one was destroyed) and left raw chicken for the parents. It looked pretty strange having this pure white laundry basket lodged high in the tree! But once in the nest, the baby hawk acclimated pretty well!

The following morning, Jeff decided to check on the nest only to find several trucks and a number of men standing around the tree. He discovered that they worked for First Colony Homeowner's Association! They had something to add! These HOA guys found three baby red-shouldered hawks gathered closely together near the remains of their nest in a nearby location too. They located a wildlife rescuer and the babies ended up with her overnight. After seeing the white basket in the tree, they called the rescuer, and she was on her way to reunite the siblings. The parents were getting ready for the homecoming — one of the adult hawks had a mouse in its talons, and the other shortly thereafter had a rat for the babies' next meal.

The bucket truck arrived; then the three babies arrived. Like their sibling before them, the three baby hawks were placed in the new nest without much excitement. On the fourth observation day, one of the baby hawks was fanning its wings – a sure sign it was getting ready to fledge!

Thank goodness for Jeff McMullan!

Jeff does not, nor does Texas A&M AgriLife Extension recommend taking injured or what appears to be abandoned wildlife into your home unless you are certified through Texas Parks & Wildlife. For a listing of Rehabbers, see: <a href="www.tpwd.state.tx.us/huntwild/wild/rehab/list/counties/index.phtml?id=101&county=Harris.">www.tpwd.state.tx.us/huntwild/wild/rehab/list/counties/index.phtml?id=101&county=Harris.</a> You can also look up Fort Bend County. For raptors, contact Lone Star Wildlife Rescue: <a href="www.lonestarwildlife.org">www.lonestarwildlife.org</a>.

## Studying the Cowpea for Summer Cover

By Deborah Birge, Fort Bend County Master Gardener

If you venture north of the Extension office, behind the greenhouse, you will notice the signs indicating a demonstration plot. No, we are not demonstrating the rapid growth of pigweed. This is the plot of eleven cowpea varieties planted May 5<sup>th</sup>.



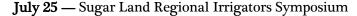
Cowpeas, scientifically known as *Vigna unguiculata* are most commonly known as black-eyed peas in the U.S. They are an important high protein vegetable eaten by humans and as fodder by livestock. Most importantly, cowpeas are a high nitrogen-fixing legume.

We are demonstrating the effects of using cowpeas as a seasonal cover crop. The overall objective is to evaluate the qualities of each variety and then evaluate the amount of nitrogen each variety adds to the soil. Soil samples were taken from each row prior to planting and will be taken again after maturity.

In addition to nitrogen, we are evaluating each variety for weed suppression, insect and disease resistance, vigor, pod production, foliage and color. Data is taken once a week in addition to photos. To date, two out of the eleven varieties have shown the ability to suppress weeds. All have shown resistance to insect damage and most have excellent vigor. However, you can definitely see a remarkable difference in pod production. Whereas some varieties have finished with pods drying, some are just starting to produce.

This project will be ending soon since the pods on most varieties are beginning to mature. The remaining material will be mowed then disked. Finally, we will take soil samples and await the results. This is a valuable research project aimed at benefiting sustainable agriculture producers in and around Fort Bend County. Come out and take a look.

# Mark Your Calendar and Save These Dates



**August 2** — First Saturday with the Master Gardeners: Fall Vegetable Gardening

**August 4-8** — Earth-Kind Kids Kamp

**August 12** — Fort Bend Beekeepers Meeting

**August 21** — Small Acreage Horticultural Crops Seminar: Practical Weed Control

**September 6** — First Saturday with the Master Gardeners

September 9 — Fort Bend Beekeepers Meeting





#### **Backyard Basics:**

Getting the Most from Your Garden

**August 16** — Vermicomposting

**September 6** — Grilling

**September 20** — Freezing & Dehydration

October 11 — Canning

**November 8** — Jams & Jellies

For more information and to download registration forms go to www.fbmg.com.

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Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information or veteran status. Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are required to contact Texas AgriLife Extension Service at 281.342.3034 five working days prior to the meeting so appropriate arrangements can be made. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas cooperating.

## DATES TO REMEMBER

Saturdays with the Fort Bend Master Gardeners First Saturday of the month 9:00-11:00 a.m.

Fort Bend Beekeepers Meeting Second Tuesday of each month, 7:00 p.m.

Backyard Basics Education Series March– November 2014

Coastal Prairie Master Naturalist Programs, First Thursday of the month