

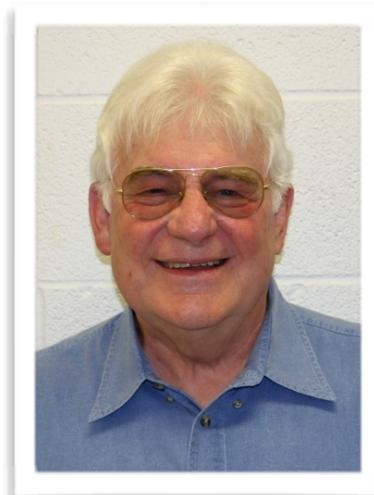


***Williamson County
Master Gardener Newsletter
July 2014***

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President's Message by Wayne Rhoden



Summertime is here and the living is easy or so the song goes. That song was not written for Williamson County because the summertime is definitely not made for easy living. We have been blessed with high humidity and high dew points which makes me think of my time in Houston. It is not as bad here as it was there because each morning when I walked outside it felt like a hot sauna. They say it is good for our complexion but I am not convinced of that theory.

We now have a Nominating Committee formed to come up with a slate of officers for 2015. I encourage each of you to consider taking on a leadership role for our association and find out where you could fit in as an officer. We elect the President, Vice President, Treasurer and Secretary. The current president moves into the Past President role and those officers make up the Executive Committee. The new president then appoints each of the other standing committee chairs and they are approved by the Executive Committee. If you wish to become involved and want to be one of the officers elected later this year, contact Brenda McIndoo who is the chairperson.

We held another information session on June 12th for the new class because we only had 22 applications. We hope to at least get 30 applicants for the new class starting in August. All of the applicants are eager to get started and many want to start volunteering right away, however we cannot allow them to do that until they officially start the class.

We do not always tell our volunteers how much we appreciate your dedication to the association and the help you give to Texas A&M Agrilife Extension Service. More questions are coming into the help desk and all would have to be answered by the agents without your help. Work in the demonstration / research gardens continues to be a source of help to the community. Ask one of the members who work in the veggie gardens how much produce is donated to Williamson County charities! Your volunteer time is greatly appreciated. Hope to see you soon in the gardens or at our monthly program.

Who'll Catch the Rain?

by Chuck McKelley



The current drought in central Texas has had quite an effect on gardeners. In many cities in Williamson County residents can only run irrigation systems once per week. All other watering must be done with hand-held hoses. This presents quite a problem for vegetable gardeners because most vegetables are not native to Texas and require more than once per week watering.

My first attempt to solve this problem was to install two fifty-gallon rain barrels that I used to water thirsty plants by hand with a sprinkling can. While this allowed me to water whenever my plants needed it, it still required time-consuming hand-watering. I wanted a more automated solution. In order to build it, I decided that I needed a bigger rain barrel.



After doing a little bit of research on the Internet I chose a Poly-Mart 250 gallon rain harvesting tank. These tanks are made locally so I felt pretty confident in buying one. My only problem here was that the company does not sell directly to the public. The Poly-Mart website only listed one local source. So I bought one there for \$400. I found out later that the same barrel was available for \$300 from another local source. The moral here is to make direct contact with local rainwater harvesting supply companies before buying rather than relying only on the information available on the Internet.

It is possible to install one of these tanks on a raised platform or on top of some concrete blocks or something else that will raise the bottom above ground level so that the water can be distributed via gravity feed, but I wanted to use enough pressure to drive a drip line or micro sprinkler system, so I decided to add a pump and, since I wanted automatic operation, a timer.



There are many choices for pumps to work with rainwater harvesting systems. There are submersible pumps that fit in the tank and there are external pumps that can be placed outside the tank but must be protected from the elements. There are 12-volt, 24-volt and 110-volt pumps. The first two



must be powered by batteries, usually charged by a solar panel. The last one is intended to be plugged into a protected outdoor outlet. After much research on the Internet I decided to buy a Shurflo on-demand, 3 gallons per minute, 45 pounds per square inch, external diaphragm pump, which I obtained over the Internet from a company in California for approximately \$160 plus shipping. I chose this pump because I had read several testimonials about it from people who had used it for a variety of uses such as drawing water from sumps and powering sinks and appliances in homesteading situations. One person had run one of these pumps for eight years and had spent just \$45 for replacement parts in that time. I also liked the facts that (1) being an external diaphragm pump, it can run dry if the water tank runs out, (2) it can lift water 12 feet, (3) it comes in 12v, 24v and 110v forms so I could get one that would plug into an existing outdoor outlet and (4) the pressure at which it delivers water is just right to drive drip lines and micro-sprinklers. The pump must be protected from the elements so I bought a plastic storage box to house it. I drilled holes in the bottom of the box to make sure it would drain if water leaked into it and I also drilled holes in the sides to accommodate the input and output pipes as well as the power cord.

I wanted to water the vegetable garden and the few plants I have that are not drought-tolerant a couple of times a week. I was a little worried that the pump might not deliver enough water to give all of them a drink at the same time. So I decided to buy an Orbit hose end timer that is capable of handling four zones. That means that you can have a separate zone for something like a vegetable garden and up to three others for watering other things. The zones run sequentially but each can run for a different length of time. Hose end timers typically are

installed on a hose bib (outside faucet) that has male hose threads. However they can also be installed at the male end of a typical garden hose. Usually they use standard batteries like AA or AAA that can be purchased in a variety of places. I bought my timer and batteries at my local home improvement store.

One of the problems I had with the fifty-gallon rain barrels was that I had just cut off the downspouts that feed them and put a couple of elbows on the bottom so that the rainwater washing off the roof went directly into the barrels via the filter at the top, which is just a piece of window screen. The reason this was a problem is that birds and four-legged varmints tend to get on the roof and use it as a litter box. So all of that stuff washes down onto the screen in the top of the barrel and of course some of it dissolves and goes into the barrel. I really didn't like the idea of watering edible plants with that solution. So for the large rainwater barrel, I bought a "first flush" filter and diverter combination. The one I decided to get was a "Clean Rain Advanced" first flush filter/diverter, which I bought over the Internet for \$100 plus shipping from an outfit in Argyle, TX. This thing fits in the downspout. You just cut out a section of the downspout and replace it with the first flush filter/diverter. When rain first begins to come down the downspout, the first flush filter sends it straight on through to the end of the downspout. That is, water is not diverted to the rain barrel. When sufficient rain has been flushed through so that the rain coming off the roof is relatively free of debris, the diverter kicks in and sends the rest of the rainfall to the rain barrel. The Clean Rain device comes with three types of exit ports: a standard hose thread connection, a potable water hose connection like you



would use in an RV, and a three-inch schedule 40 PVC connection, which is what I used to run the water into the top of the rain barrel.

These then are the major components of my water harvesting system:

First flush filter / diverter

Rain barrel

Pump

Timer

Of course all of these things need to be connected. I'll tell you how I did that below, but here's a list of the additional things I needed to connect the system together: I wanted to easily see how much water was in the barrel so I bought a gauge which can be attached to the top of the barrel to allow me to see the level of the water. I got that for less than \$30 at a local store that sells rain harvesting supplies. I used 3-inch schedule 40 PVC pipe and elbows to get the water from the first flush filter/diverter to the input of the rain barrel. I installed a 3/4-inch PVC shutoff valve at the outlet of the rain barrel so that I could work on the delivery system without losing any of the rainwater from the barrel. Because my barrel has two 3/4-inch outlet ports, I installed a standard hose bib in the upper one so that I could run water into a sprinkling can or deliver it by hand with a garden hose. I used 3/4-inch PVC pipe and fittings (elbows, etc.) to carry the water from the shutoff valve in the barrel to the input of the pump. I bought an input filter for less than \$10 from the company at which I purchased the pump so that, if any debris made it out of the barrel, it would be stopped at the filter before clogging the pump. I bought a couple of PVC converters to adapt the standard pipe thread output of the pump to a female garden hose connection so that I could use a garden hose that I already had to carry the water from the pump to the timer. Except for the input filter and the gauge, I got all of these things at my local home improvement store. They were all inexpensive.



So now let's talk about installation of the system. The first thing I did was to install the rain barrel. That was very easy because, since I used a pump and did not rely on gravity to power the water delivery, I was able to simply put the rain barrel on top of a decomposed granite patio that already exist where I installed it. I did have to level the spot where the rain barrel sits. The next thing I did was to install the hose bib and the PVC shutoff valve. Both of them screw into adapters that were already on the rain barrel. I used Teflon tape to seal the connections.



Next I connected the output of the first flush filter / diverter to the input at the top of the rain barrel. Because the downspout and diverter that I used is around the corner from the rain barrel, I had to cut (using a hacksaw) three pieces of PVC pipe and then I had to install three elbows. There is really no pressure on these pipes and fittings, so I didn't seal them. I did, however, attach them to the house using PVC strapping, which I bought at a local home improvement store. As you can see in the photos, I also used an old flower pot to prop the pipe up so that I could see when water was entering the input of the barrel.

The next thing I did was to position the box which protects the pump where I could plug the pump into an outside outlet. Then I put the pump in the box, installed the fittings to the input and output and then used the 3/4-inch PVC to run a line from the shutoff valve at the rain barrel to the input filter of the pump. This line gets enough pressure on it that it must be sealed with





standard PVC sealer, which can be purchased at any home improvement or hardware store. I used a garden hose to run water from the pump to the timer for several reasons. The timer has a female hose thread fitting permanently installed at its input so it is easiest to attach it to a hose. The space from the pump to the timer passes through a decomposed granite patio and a cobblestone walk, so something as flexible as a garden hose is easy to bury in that intervening space. I already had a spare garden hose. The downside here is that there is some pressure in that hose all the time so eventually it will leak. As long as that doesn't happen when I am away for an extended period of time so that the rain barrel is drained, that shouldn't be much of a problem though.

As it turned out, the pump delivers enough pressure so that I only needed to use one



zone. So that's all that is connected to the distribution system now. All of the parts of the distribution system beyond the timer can be purchased at home improvement stores. That system consists of 1/2-inch poly supply line and various types of emitters. I mainly use small adjustable emitters that can be inserted directly into the supply line and that deliver water in a circular pattern. In cases where I need to keep the surface of the soil wet (e.g., to sprout seeds) I use emitters that are mounted on posts to elevate them above the bed. A variety of emitters is available for use in this manner. I usually use emitters that rotate and spray water in a circle 4-5 feet in diameter.

So here's how the system works.

First the input: When it rains water comes down the downspout. The first flush filter has a mechanism that intercepts leaves and other debris and

flushes it down the downspout. It continues to do that until it determines that sufficient water has been flushed to eliminate the debris. Then it delivers water through a filter and then to the output port. The water flows through the 3-inch PVC and is delivered to the input of the rain barrel through a filter in the top of the barrel.

Now the output: Water has previously flowed through the line from the rain barrel shutoff valve to the input filter of the pump, through the pump and the output hose to the point where it is stopped by the timer valve. When the timer reaches the point in its cycle where it is programmed to operate, the timer valve opens and water flows out to the distribution network. When water flows out of the timer that drops the pressure on the output side of the pump. So the pump begins to operate to draw water from the rain barrel and to fill the hose to the timer. When the water has flowed as long as the timer has been programmed to allow, the timer closes its valve. Pressure immediately builds up in the hose and that causes the pump to shut off.

That's all there is to it. This system is not terribly expensive and it is easy to install. In addition, it is extensible in several ways.

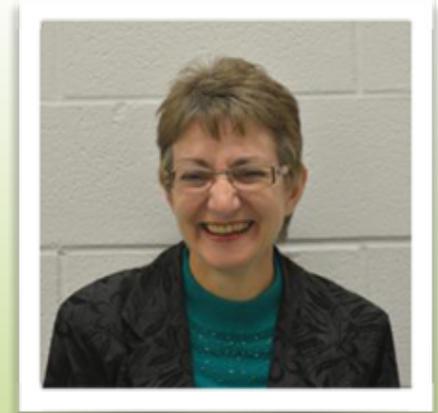
It is easy to add more rain barrels. (Note that if more than one barrel is used it is necessary to connect the outputs together so that one line can run from all the barrels to the pump. Also, each barrel should have its own shutoff valve.) There are a couple of ways to handle the input to multiple barrels. It is possible to fill the barrels from the bottom using the pipe that connects the outputs together. However, since the lines from the barrel outputs are only 3/4-inch in diameter, a really hard rain may not be able to flow readily from one barrel to another. That happens more easily if the 3-inch overflow port on each barrel is used to direct the overflow from each barrel to the input at the top of the next in line.

Another way in which the system is extensible is that the multi-zone timer can be used to deliver water to more plants than can be served using a single zone. One thing to watch here, though, is the rate at which water is delivered and the time that it is allowed to run. The pump I used can deliver three gallons per minute. At that rate it doesn't take long to drain a 250 gallon barrel. So it is a good idea to ensure that you don't drain the barrel more quickly than it can be refilled by the available rainfall.

For more information on water conservation and rainwater harvesting check out the WCMGA Water Conservation page at <http://txmg.org/williamson/rainwater/>.

What I Learned in the Vegetable Garden

by Teresa Wilts



I'm a newcomer in Texas, from Canada by way of Minnesota, so gardening is much different here than what I was used to. Luckily I had time to take the Master Gardener's class last fall and I started volunteering in the vegetable demonstration garden soon after classes started. I hear people say all the time that they have trouble growing vegetables, so here's the secret: show up at the vegetable demonstration garden and help out and then go straight home and do whatever we're doing at the demo garden! That's what I did all year and I'm so excited about my successes in my own yard.

It all starts with the soil and at the extension garden, the soil is amended before planting, every time something is planted. You can learn all about soil amendments from George Prall, who runs the project. In my yard, I have raised beds filled with whatever soil I could have trucked in, which, frankly, looks pretty bad compared to the lovely soil in my yard in Minnesota, but at least it was pretty much weed free to start. I add lots of compost and all the amendments that we use at the extension garden whenever I plant a new crop. I also fertilize regularly using only organic fertilizers. At the extension garden, we are careful to use only organic products, with the exception of glyphosate occasionally when we get frustrated with the weeds around the outside of the garden.

I've been fairly lax about soil testing in my own garden, but George recommends once a year until you get to know your soil and the results are consistent. This is especially important if you are building your own soil west of IH35.



Here are some examples, complete with pictures to prove I can do it! I've been gardening for more than 25 years and I've never been able to actually get an onion to make a bulb. I've been able to grow multiplier onions, walking onions, leeks, and green onions, but never a nice big bulb. See what I harvested this spring!

While I didn't have any pests to worry about in the onions this year, I did have lots of other types of pests. I already knew about Bt (*Bacillus thuringiensis*), which can be used to control cabbage loopers, but I didn't know that it should be used regularly once the cabbage plants are established, to prevent damage. In my previous gardens, I used to just put up with the holey plants. This year I was diligent and had some beautiful plants. And some good sized cabbages.





I had good luck with carrots in Minnesota too, so this next picture is just bragging! My raised beds have wooden sides, so I know exactly how much soil is in them: 10 inches. In theory, that's about how long the carrots should be able to grow, but if they still want to grow after they reach the bottom of the bed, which sits on such hard soil I couldn't loosen it at all, they'll find a way – either by pushing up out of the soil, or by making weird shapes.



If learning to grow really awesome produce isn't enough of a reason to volunteer at the vegetable garden, here are a few more reasons. Did you know that most of the vegetables we grow at the extension garden are donated to non-profit agencies that help feed people who otherwise wouldn't have enough to eat? At the Round Rock Area Serving Center garden, if you help harvest, you'll likely be giving fresh produce directly to clients on your way into the pantry to put the produce away. It is heart breaking to see families with young children and frail elderly people at the pantry and some days what we bring in from the garden is the only fresh produce available. Our total harvest for the week of June 9-13, 2014, was 252.3 pounds of cucumbers, yellow summer squash, tomatoes, peppers of all kinds, and basil. It takes a lot of time to harvest that much produce and I really appreciate all the volunteers that come out to help.

If pulling at your heart strings doesn't make you want to come out, how about this? At the demonstration vegetable garden, we take a break during the morning to get to know each other a little better and look at the food that people bring! This is a great way to make friends. In case you can't tell from the pictures, that day we had peach cobbler from Mike's peach trees, a lovely salsa made with tomatoes and peppers from the raised beds, apples with an awesome dip, grapes and I can't even remember what else.



From the left, Chuck McKelley, Jane Bowman, Pam Johnson, George Prall, and Jean Legan.

Want to learn all about vegetable gardening and make a difference for people that really need help? Come out to the demonstration vegetable garden on Tuesdays and Fridays from 8:30 a.m. until 11:00 a.m. You don't even have to commit in advance; you can just show up and George will help you get started.

If you don't feel like driving all the way out to Georgetown to volunteer, maybe the Round Rock Area Serving Center is closer to you. We're still getting this project off the ground, so volunteer times there vary, but contact me, Teresa Wilts, at twilts@ewilts.org, or 512-551-9487 and I'll help you get started.

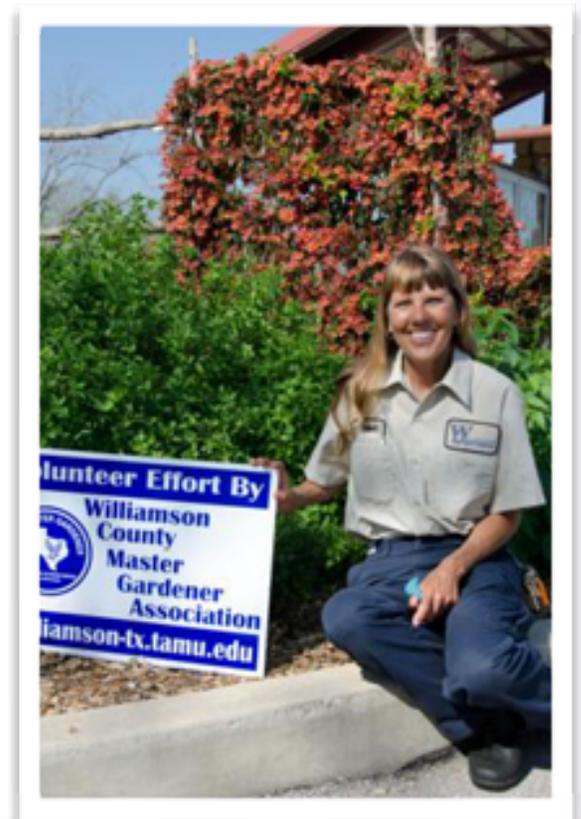
Berry Springs

county park and preserve

Spring 2014 Volunteer Efforts at Berry Springs

by Susan Blackledge

We had plenty of help and lots of fun enjoying what was a wonderful cool spring. Several mornings in March, April, May and June were set aside for Spring Cleaning at Berry Springs. Master Gardeners, Master Naturalists, Native Plant Society members and WILCO Juvenile Services all worked together on an assortment of projects.





Flower and Cactus Bed Beautification: With all of the rain and the cool weather we had more work to do after our Spring Clean Up / Pot Luck. Guessing what plant or wildflower seedling was coming up was fun and challenging.



Harvesting Seeds: Bluebonnet seeds were harvested at the park's neighbor, Alice George's 10 acre tract of land. This has been a good year for poppies. A few are still in bloom. We harvested some but still have more to harvest in a few of the beds, along with standing cypress seeds. The seeds collected will be planted this fall on the Nature Trail and in flower beds at our Fall Clean Up / Pot Luck which is scheduled for Saturday, October 4, 2014. Mark your calendar now!



Donkey's Carrot Garden: It has been a good year for our Carrot Garden. Volunteers planted seeds, weeded and separated carrot seedlings. Our donkeys, Poco and Amigo at first had a hard time adjusting to what isn't an "HEB" variety of carrot but are now enjoying the greens that come with the home grown variety.



Pond Cleaning: With our beautiful new dam and an abundance of flowing spring water the pond is looking good for the month of June. We had three very successful mornings of removing floating aquatic vegetation using rakes on a rope and our water tiller. Anglers are very pleased with our efforts and the results.



We have three more work mornings with WILCO Juvenile Services. They are June 25, July 16, and August 13, 2014. An email will be sent out to announce what we will be working on the Sunday before each scheduled work morning.

We still need help with spraying the small irrigated pecan trees, harvesting more seeds, watering and weeding beds. To volunteer at the park call [512-930-0040](tel:512-930-0040) or email susieblackledge@gmail.com. You can always volunteer even if there isn't a work day scheduled.

Thank you to all who pitched in. Your help is always appreciated. I hear from patrons all the time that the park looks great. This is due to all of your efforts!

White Grubs

by Wizzie Brown

White grubs are creamy-white, C-shaped larvae with six legs and a brownish-orange head capsule (see photo). The larvae become May and June beetles (and other closely related species). Grubs feed on the roots of turfgrass, causing it to lose vigor and turn brown. These insects can cause turf to have brown patchy areas. When there are

heavy populations of white grubs, turf can often be rolled up like carpeting because the grubs eat all the roots leaving no attachment to the soil.



To inspect for white grubs, cut several 6 inch square blocks of turf in various areas of the landscape. Make sure to include areas of suspected white grub damage. Examine grass plugs in the root zone for grubs. Treatment is justified when there are more than 5-8 white grubs per square foot. It is possible that some lawns can withstand higher numbers of grubs without noticeable damage.

White grubs treatments should be applied approximately 6 weeks after the heaviest flights of May and June beetles. Due to rainfall this time period can vary from year to year, but typically in Central Texas treatment falls mid-July to early August.

Beneficial nematodes are available for managing white grubs, but need moisture to move through soil. Nematodes are small worms that attack grubs and other soil-dwelling insects. If you choose to use nematodes to control white grubs, make sure that the soil is irrigated on a regular basis to allow enough moisture so the nematodes can move through the soil to locate a host.

Insecticidal treatments may also be used to manage white grubs. You can spot treat infested areas instead of treating your entire lawn. If soil is very dry, water about one-half inch the day before treatment to encourage grubs to move closer to the soil surface. Liquid or granular formulations are available for white grub management with active ingredients such as bifenthrin, carbaryl, imidacloprid, clothianidin or halofenozide. Do not apply pesticide treatments if rainfall is expected and sweep up any spilled material from driveways, sidewalks or streets. Always read and follow all label instructions and application rates.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600. Check out my blog at www.urban-ipm.blogspot.com

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Extension programs serve people of all ages regardless of race, color, religion, sex, national origin, age, disability, genetic information or veteran status.

Monthly Gardening Tips

July 2014 by Winola Van Artsdalen



- ◆ Check your sprinkler system. Remember trees and bushes need slow watering: hose drip, drip from bucket, soaker hose.
- ◆ Water only as needed. If a plant appears wilted in the evening, wait to see if it has recovered the next morning. Wilting may just be the plant's "drought strategy" for survival. Some perennials even go dormant during July and August. Be a patient water wise gardener!
- ◆ Avoid planting now as too much watering will be required.
- ◆ Remove spent blossoms and prune plant tips for prettier growth and more blooms.
- ◆ Remove damaged wood from shrubs and bushes as necessary, but always paint any wound on oak trees, any size, any season.
- ◆ Eliminate sources of standing water such as trays below flower pots and old containers. Be sure your gutters are clean and functioning properly to avoid future problems with not only mosquitoes, but termites and water damage.
- ◆ Use least toxic solution for insect problems. A hard water spray will often get rid of spider mites and other pests.
- ◆ For lawn care in drought, see Texas A&M publication "Keep Your Lawn Alive During Drought": <http://varietytesting.tamu.edu/criticalinformation/drought/Keep%20Your%20Lawn%20Alive%20During%20Drought%20B-6126.pdf>



*Congratulations to our newly certified Master Gardener:
Rosanne Martine!*

2014 Board Positions

President – Wayne Rhoden

Vice President – Cat McGrath-Farmer

Secretary – Annie Bowersox

Treasurer – Sandra Lawrence

Past President – Jeanne Barker

Programs – Alicia Johnson

JMG – Jane Bowman

Landscape – Chuck McKelley, Janet White

Rose Garden – JoAnne Dieterich

Drought Tolerant Garden – Janet White,
Sandra Lawrence

Water Conservation – Carol Parsonage

Vegetable Gardens – George Prall

Projects – Steve Echols

Awards – Claire Hall

Training – John Papich

Communications – Catherine Nickle

Publicity – Betty Jo Phillips

Help desk – Martha Baddour

Speaker's bureau – Open

Online Presence – Diana Kowalska-Somerville

Newsletter – Jinna MacLaurin

TMGA Directors

1. Wayne Rhoden
2. Cat McGrath-Farmer

Alternates

1. Jeanne Barker
2. Claire Hall

SAVE THE DATE

Williamson County Master Gardener Meetings

Monthly meetings are held at the Williamson County Extension Office, 3151 SE Inner Loop Road, Suite A, Georgetown, Texas.

July 14, 2014, 6:30 p.m. - 8:00 p.m.

6:30 p.m.: Social Time

7:00 p.m. - 8:00 p.m.: Mark Gibbs from The Great Outdoors Nursery, <http://gonursery.com>, will talk about citrus varieties for Central Texas and the care of citrus.

August 11, 2014, 6:30 p.m. - 8:00 p.m.

6:30 p.m.: Social Time

7:00 p.m. - 8:00 p.m.: Speaker TBD

September 8, 2014, 6:30 p.m. - 8:00 p.m.

6:30 p.m.: Social Time

7:00 p.m. - 8:00 p.m.: Grace Bryce will talk about herbs.

October 13, 2014, 6:30 p.m. - 8:00 p.m.

6:30 p.m.: Social Time

7:00 p.m. - 8:00 p.m.: Seed Saving

November 10, 2014, 6:30 p.m. - 8:00 p.m.

6:30 p.m.: Social Time

7:00 p.m. - 8:00 p.m.: Dr. Steve will talk about bromeliads



photo by Suzie Brady

Educational Opportunities for Master Gardeners

Texas A&M AgriLife Extension Service Master Gardener Classes

Master Volunteer Entomology Specialist Training

Monday September 8, 2014 through Friday, September 12, 2014, Travis County Extension Office, 1600-B Smith Rd. Austin, TX, with some field trips to local sites. More information at <https://agriferegister.tamu.edu/index.cfm/productDetails/productid/1540/>.

Williamson County Texas A&M AgriLife Extension Service and Master Gardener Classes

Protecting your Horse from Mosquito-Borne Viruses

Tuesday, July 1, 2014, 5:30 p.m. - 9:00 p.m., Williamson County Extension Training Room, 3151 SE Inner Loop Road, Georgetown, Texas. No charge, but you can reserve a seat by calling the Extension office at 512-943-3300 by 12 noon on Monday, June 30. See <http://williamson.agrilife.org/files/2014/06/Protect-your-horse-from-mosquito-borne-viruses.pdf>.

Private Applicators Training

Wednesday, July 9, 2014, 8:00 a.m. - 12:00 p.m., Williamson County Extension Training Room, 3151 SE Inner Loop Road, Georgetown, Texas. The charge is \$50.00, and you should reserve a seat by calling the Extension office at by 12 noon on Thursday, July 3. Call 512-943-3300 for more information or see <http://williamson.agrilife.org/files/2014/05/Private-applicator-training-flyer6-11-14.pdf>.

Wildlife Management and Pond Basics

Saturday, July 26, 2014, 9:00 a.m. - 3:00 p.m., Williamson County Extension Training Room, 3151 SE Inner Loop Road, Georgetown, Texas. Call 512-943-3300 for more information or see <http://williamson.agrilife.org/event/wildlife-management-and-pond-basics/>.

Patio Lecture Series - Butterfly Gardening

Monday, July 28, 2014, 6:30 p.m. - 8:00 p.m., Williamson County Extension Office at 3151 SE Inner Loop Road, Suite A, Georgetown, Texas. Call 512-943-3300 to register; \$10 at the door.

Master Gardener and Master Naturalist, Wayne Rhoden, will discuss Butterfly Gardening.

Williamson County Texas A&M AgriLife Extension Service Webinars

Webinars are held at the Williamson County Extension Office, Extension Training Room, 3151 SE Inner Loop Road, Suite A, Georgetown, Texas. Register by noon the day before by calling 512-943-3300. Webinars are free. More information can be found at <http://williamson.agrilife.org>.

Managing Soil Health when Raising Potatoes,- A Farmer's Perspective

Tuesday, July 8, 2014, 1:00 p.m. - 2:00 p.m.

eOrganics Webinar Series

Understanding our Urban Forest Assets

Wednesday, July 9, 12:00 p.m.- 1:00 p.m.

eOrganics Webinar Series

Conservation Compliance and the Agricultural Act of 2014

Thursday, July 17, 2014 1:00 p.m. - 2 p.m.

eOrganics Webinar Series

Minimizing Mosquito Problems

Friday, August 1, 2014, 2:00 p.m. - 3:30 p.m.

All Bugs Good and Bad Webinar Series

Travis County Texas A&M AgriLife Extension Service and Master Gardener Classes

Seminars held at Zilker Botanical Garden are free; Zilker park entrance fee is \$2 per adult, \$1 per child or senior. For more information, call (512) 477-8672

You must register for seminars held at Travis County Extension Office <https://agriferegister.tamu.edu/TravisCounty> or by phone 979-845-2604. \$10 fee, \$15 at site. Class size is limited.

Raising and Managing Bees

Saturday, July 19, 2014, 10:00 a.m. - noon, Zilker Botanical Garden, 2220 Barton Springs Road, Austin, Texas
Chris Doggett, of Williamson County Beekeepers Association, <http://www.wcaba.org>, will share his knowledge and expertise in raising and managing bees. Learn how to provide a healthy and attractive environment for bees, whether you have a backyard hive, or acres of crops needing pollination.

Insect Visitors in Your Garden

Saturday, August 16, 2014, 10:00 a.m. - noon, Zilker Botanical Garden, 2220 Barton Springs Road, Austin, Texas
Update your understanding of good bugs and bad, with Master Gardeners Pat Mokry and Sheryl Williams. Pat, an entomology specialist, will describe the common insect visitors to your garden, and help you determine if and how you should treat for them. Following identification of beneficial insects, Sheryl will then share a fascinating project she has constructed to attract insects into her garden for observation, pollination and just plain fun. Don't miss these two lively, informative ladies!

Monument Cafe Market Gardening Classes

500 S Austin Ave, Georgetown, Texas 78626, 512-240-4715

July In the Garden

Saturday, July 5, 2014, 10:30 a.m.

Michelle will go over the garden to-do list for the month. Learn what to plant, what to harvest and timely garden tasks.

Vermiculture

Saturday, July 12, 2014, 10:30 a.m.

Debbie Keller will talk about how to compost with worms.

Organic Pest Control

Saturday, July 19, 2014, 10:30 a.m.

Michelle will discuss chemical free ways to manage pesky bugs in your garden.

Backyard Composting

Saturday, July 26, 2014, 10:30 a.m.

Michelle will discuss how to make black gold out of your food and yard waste.

Natural Gardener Gardening Classes

8648 Old Bee Caves Rd, Austin, Texas 78735, 512-288-6113. Classes are subject to change so please call first to confirm. Classes are held outdoors under an open air canopy – be sure to dress for the weather. Arrive early for best seating. You are welcome to bring your own chair. Classes last about an hour. For more information see <http://www.naturalgardeneraustin.com>.

Bees

Saturday, July 19, 2014, 9:00 a.m.

Mark Bradley of Austin Honey Company, teaches us about Bees.

Online classes

The state Texas Master Gardener Association allows only three online educational hours per year. They offer 12 different free online EarthKind Modules from which to choose. The link for these classes is here:

<http://aggie-horticulture.tamu.edu/earthkind/training/>

WCMGA also has approved the webinars from the Lady Bird Johnson Wildflower Center, <http://www.wildflower.org>, to the approved list. There is a small fee associated with their webinars.

A total of three online educational hours per year is allowed whether they are all through A&M or a combination of EarthKind and Wildflower.

Events of Interest to Master Gardeners

2014 Southern Region Master Gardener Conference

October 21 through October 24, 2014 in Baton Rouge, Louisiana

See www.southernregionmgconf2014.com.

2014 Texas Master Gardener Conference

September 25-through 27, 2014 in Midland / Odessa, Texas

Register at <http://2014tmgaconference.org/register-online>.

Austin Home and Garden Show

Friday, Saturday and Sunday, August 15-17, 2014, Austin Convention Center

See <http://www.austinhomeandgardenshow.com>.

This issue of the *Williamson County Master Gardener Newsletter* was made possible because of the contributions of the following Williamson County Master Gardeners: Wayne Rhoden (president), Jinna MacLaurin (editor), Catherine Nickle (proofreader), Susan Blackledge, Suzie Brady, Wizzie Brown, Chuck McKelley, Teresa Wilts, and Winola Van Artsdalen. Cover photo of Okra Flower by Jinna MacLaurin.

If you would like to contribute to the August 2014 *Williamson County Master Gardener Newsletter*, please send your submissions to Jinna MacLaurin at austindadamama@gmail.com by July 16, 2014. As you garden, volunteer and learn, please take a moment to share your experiences with other gardeners. Thank you!



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