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Upcoming dates: First New Class: January 9

January General Meeting: Tree Care Through the Seasons, January 9

The President's Corner

Q & A

As November comes to a close, I have been reflecting on the past year. 2012 has been a busy year for master gardeners. Plant sales, home tours, a new class, public events and plans for a new building have kept our calendar crowded. The calendar for 2013 will also reflect an involved Master Gardener chapter.

The December General Meeting is our annual Christmas party on November 29th. The December board meeting will be on December 12th at 9:00am.

January brings the beginning of a new class with at least 17 students ready to become Master Gardeners. Please welcome them into our organization. Opportunities to join them in propagation classes will be offered to existing members.

The January meeting will be "Tree Care through the Seasons" presented by arborist Seth Thompson. If you are planning to add a tree this winter or with the ongoing drought you need a tip or two on how to continue to care for existing trees, the January program should add to your knowledge. Some of you have prepared your gardens for the winter, while others are enjoying our mild climate and continue to be actively gardening at home. The first seed catalogue arrived yesterday encouraging me to get my gardens ready for a short winter's nap before spring.

I wish you all a Merry Christmas and much happiness in 2013.....Laura

On Page 9, you'll find the answers to last months Q & A column. I've got a couple more questions for you - Terrie Hahn

What kind of caterpillar is this. I believe it will be some sort of moth. We had a large population of them eating many different types of plants. This one was eating Spiderwort.



Below is a Jelly Bean Succulent Plant (sedum rubrotinctum, I believe). Most sources say it isn't cold hardy, but KLRU's Central Texas Gardener said that it is. Has anyone had experience with this plant in the cold? It's sitting in a pot I bid for at one of our silent auctions, painted by MG Deb Martin.



Photos
by
Terrie
Hahn

Tips on Growing Onions

By Beverly Wickersham



1. Plant Short-day varieties such as 1015Y TEXAS SUPER-SWEET, TEXAS EARLY WHITE, HYBRID SOUTHERN BELLE RED, YELLOW GRANEX, RED CREOLE, or WHITE BERMUDA. These varieties produce softball-size bulbs if planted at the right time.
2. Set out pencil-size transplants (or slightly smaller) about four to six weeks before the last average frost-free date in your area. We live in Killeen, and we plant our onions at the end of the third week in January. If the planted onions have been well watered and mulched before late frost, they will most likely survive.
3. Plant onions in the full sun, preferably in a raised bed or in raised rows.
4. Plant in loose, tilled soil. If necessary add compost to improve aeration and drainage.
5. Onions prefer soil with a pH between 6.2 and 6.8. If it is too acid, mix in ground limestone (available at your garden center.) If the soil is too alkaline, add peat moss.
6. If weeds are a problem in your garden area, rake a pre-emergent herbicide such as Treflan or Corn Gluten meal into the top inch of soil before planting. The herbicide will not affect the onion plant roots.
7. A balanced fertilizer (10-20-10) should be applied when the onions are planted to help establish a healthy root system. Three weeks after planting, the onions need a rich source of nitrogen such as Ammonium Sulfate blend (21-0-0). Apply 1 cup of Ammonium Sulfate per 35 feet per row. After the first application of Ammonium Sulfate, apply again every 4-6 weeks throughout the growing season. Discontinue fertilizing when the bulbing process starts. **WATER THE FERTILIZER IN AFTER APPLYING.**
8. Drip irrigation is the preferred method for watering the garden in order to avoid foliage diseases. An alternative method is to direct the water from the garden hose to the base of the plant, avoiding the foliage as much as possible.
9. When setting out onion transplants, use a short stick, or dibble, or your finger, to make holes 3 to 4 inches apart and about 1 deep to accommodate the transplants. Set the transplants in the holes, firm them in, and water immediately to settle the soil around them.
10. An onion is fully mature when the top falls over on its own. However, the onions in your garden will not all mature on the same day. Completing the harvest will usually take several days, so be patient. Of course you can harvest your onions for cooking purposes long before they reach maturity.
11. (Suggested method for drying onions in the garden) At harvest time, lift the fully mature onions out of the ground and put the top of one onion over the bulb of another onion. Continue the process until all of the harvested onions are covered. Let the onions dry for three days in the garden (weather permitting) before bringing them in. The tops of the onions should be completely dry before clipping them.
12. Store the dried onions in a cool, dry, well-ventilated location.

Sources: 1. A Dixondale Farms publication: "The Onion Patch" 2. "The Vegetable Book" by Dr. Sam Cotner, 3. Ben Wickersham

Edible Landscape

- Rick E. Schroeder

(This is the fifth installment of this series.)

In earlier articles we introduced the concept of an edible landscape, discussed specific edible plants, and introduced you to a great resource, Linda Runyon at www.OfTheField.com. In this article I want to introduce you to some additional resources.

There are three books that I recommend. The titles and authors are listed below. The books are listed in the priority I would purchase these.

1. "The Edible Front Yard" by Ivette Soler. This book covers designing and planning as well as the plants. So it is perfect if you are interested in a beautiful garden as well as edible plants. The book has fantastic pictures and recommends combinations for maximizing color and appearance.
2. "The Forager's Harvest" by Samuel Thayer. This book has great color pictures and covers a number of common plants. In addition harvesting and preparation are dealt with in detail.
3. "Edible Wild Plants" by Bradford Angier. This book is the best if you are looking for plants that grow in the wild. If you want to take a walk in the field or a drive in the country this book will provide an extensive list that could keep you busy for years.

Tip of the month: The most highly recommended book by professionals is "Edible and Useful Plants of Texas and the Southwest" by Delena Tull. Rick's recommendation is do not buy it. There are no color pictures in the book and you need color pictures for identification. The black and white drawings that are in the text are not very good and the descriptions are very technical. If you are interested in heavy research and applying for a PhD this book may be helpful but it is not designed for the average user.

Tip Two of the month: Now is the time to pick Turk's Cap berries. They make a great healthy snack.

Remember: If you can't eat it, don't plant it.

Announcements

No December Monthly Meeting

- Laura Murphy

There will not be a December monthly meeting as it is tradition that our annual Christmas party is the monthly meeting. The December board meeting will be held December 12th. This is earlier in the month due to the Christmas holiday. Please try to attend this board meeting as we wrap up 2012 and plan for 2013.

Grounds Committee Upcoming Dates

- Brenda Albro

"The Grounds Committee will be meeting on December 5 for a work day, short meeting and Burger Wednesday. We will meet on the 12th for a work day and then be off for a Christmas break.

Sophia and I want to say THANKS for the Grounds Committee. They are a great group of people. They have lots of patience and are great to share their years of knowledge with us.

Merry Christmas,

Sophia and Brenda

Girl Scouts Journey Day

- Ursula Nanna

The Aquatic Division of Master Gardeners presented Knots and Tackle to 107 Scouts and 8 leaders at the Scouts Journey Day on November 3rd at Camp Kachina in Belton. Instructor Ray Machovsky presented the Palomar and the Improved Clinch Knots to the groups. He gave each girl a mock hook and line and demonstrated the steps



to finish the knots. For some reason, Ray thinks the most important part of setting a line is a really good knot..... He says it keeps the fish from running off with the hook as they get away!!!

Ray has volunteered four different times at various Docks presenting Casting, Knots and Tackle, and Fishing Safety and Regulations.

Photos by Don Wyatt and Ursula Nanna.



MG's Help With Girl Scout Journey Day

Photos by Don Wyatt



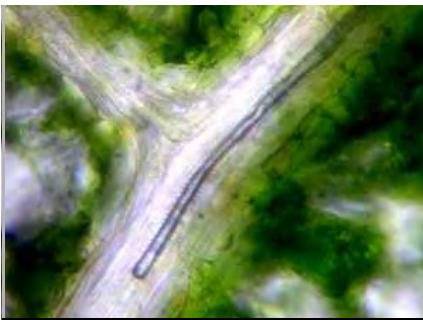
Arbor Embolism? Why Trees Die In Drought

by Christopher Joyce of NPR

This article is reprinted from www.npr.org. Annette Ensing suggested it may be of interest to us.

Scientists who study forests say they've discovered something disturbing about the way prolonged drought affects trees.

It has to do with the way trees drink. They don't do it the way we do — they suck water up from the ground all the way to their leaves, through a bundle of channels in a part of the trunk called the xylem. The bundles are like blood vessels.



Herve Cochard/Nature

When drought dries out the soil, a tree has to suck harder. And that can actually be dangerous, because sucking harder increases the risk of drawing air bubbles into the tree's plumbing.

Plant scientist Brendan Choat explains: "As drought stress increases, you have more and more gas accumulating in the plumbing system, until they can't get any water up into the leaves. This is really bad news for the plant because this is like having an embolism in a human blood vessel."

Like a human embolism, the gas bubbles stop the flow of fluid. If that persists, it means thirst, starvation and eventually death.

Choat is from the University of Western Sydney in Australia, a region that has seen years of record-breaking drought. He wondered: How much drought does it take before trees start choking on air bubbles?

He and a team of researchers studied 226 species of trees around the world, including desert trees, rain forest trees and many others. They discovered that for most, it doesn't take much drought at all.

"So this is the key thing," Choat says, "that it would only take a small shift in terms of the moisture environment, the temperature ... to push these plants across the threshold."

The threshold between drinking and choking, that is. The reason there's so little margin of error is that trees have to finely balance eating and drinking. To eat, they open holes in their leaves, called stomata, to absorb carbon dioxide. But the more they do that, the more they lose water by transpiration through the stomata. Lose too much, and they have to start sucking harder — and risk a deadly embolism.

Choat's [research](#), in the journal *Nature*, shows that it doesn't take much drought before trees start to self-destruct.

But what about trees that have evolved to live in really hot, dry places? They're sippers, not gulpers.

Plant scientists like Bettina Engelbrecht figured they'd have a larger margin of safety before they choke. "Instead," she says of Choat's research, "we find, well, it's all the same — everyone is right at the edge and has a very risky strategy."

Engelbrecht, at the University of Bayreuth in Germany, studies rain forest trees. "Now, we have to worry about all of them," she says. "We have to really deal with the problem at the global scale." That's because temperatures are rising around the globe. That makes drought more likely and more intense. Big droughts have hit southern Europe, Russia, Australia and the U.S. in recent years.

The first 10 months of 2012 were the warmest ever in the continental U.S. Along with the heat came widespread drought, which still persists in the Southwest.

Nathan McDowell, a plant scientist at the government's Los Alamos National Laboratory in New Mexico, actually puts trees under plastic to see how they deal with less water and more heat. He says trees are adaptable, up to a point.

"Now we're changing that climate range really fast," he notes, "faster than any of the living plants here have experienced. So can they change fast enough to adapt to that? You know, the preponderance of evidence right now is saying that [at] lots of locations around the world, they're not adapting fast enough."

When they don't adapt, they stop growing. Beetles and other insects invade. If droughts last long enough, the forests just die, and get replaced with something else.

Q & A

Editor's note: This is a new column for Questions and Answers. When I get a question from a MG, I'll put it out there for other MG's to answer and publish the answer for everyone to benefit from it. Please send your questions and answers to me at moom-pie45@hotmail.com or call me at 512-863-9837.

And last month's questions from:

Terrie Hahn

Do Tarantulas hibernate during the winter?

And the answer is:

- Terrie Hahn

Margie Klein with www.desertusa.com says:

"Each tarantula lives in a burrow, or hole, which it digs itself. The webbing in the burrows actually serves to reinforce the structure and keeps it from collapsing. Tarantulas are nocturnal and come out at night to search for insects, lizards and other small animals to eat. During the day, they keep to their burrows or other sheltered sites to avoid the heat (in the summer). In winter, they **will enter torpor**, similar to hibernation, but it allows them to come out and hunt when it's warm."

Photo by Werner Hahn



And the photos below are of the same flowers. The one on the top is how humans view the flower. What insect views flowers as depicted in the bottom photo?



Silverweed (*Potentilla anserina*): It is hard to imagine that these yellow flowers are actually hiding a two-tone pattern, as revealed in the ultraviolet image



And the answer is:

- Terrie Hahn

This is how **bees** see color according to Flo Oxley of the Wildflower Center. Ms. Oxley also teaches botany at ACC.

The images, taken by Norwegian scientist-cameraman Bjorn Roslett, present flowers in both natural and ultraviolet light, revealing an insect's eye view.

"Ultraviolet light, invisible to us, uncovers colors and patterns which draw them to the source of pollen and nectar - all hidden to humans without special equipment. This secret color world was discovered in the Fifties and scientists realized that these distinct patterns were designed to act as "landing strips" or arrows, guiding the insects to the right spot. Because we cannot see UV light, the colors in these photographs are representational, but the patterns are real." - Michael Hanlon, Mail Online

Read more: <http://www.dailymail.co.uk/sciencetech/article-473897/A-bees-eye-view-How-insects-flowers-differently-us.html#ixzz2DM5stDDp>
photos taken by Bjorn Roslett

What's Happening in Your Yard?

Duchesse de Brabant Rose

- Jann Dworsky

This charming rose (right) was often worn by Teddy Roosevelt as a boutonniere and is shaped like a delicate wine glass. It's delicate pink color and apple green leaves compliment each other. This rose was introduced by Bernede of France in 1857 and was named for the Duke of Brabant, a Belgian prince. Don't you just love a beautiful rose with a piece of history attached!



To the left and below are photos of a bee on Queen's Wreath, and Queen's Wreath on the trellis along the house.

Photos by Jann Dworsky



What's Happening in Your Yard?

Butterflies in the Garden

- Frances Idoux

The copper canyon daisies are always "late bloomers," but I was surprised to see the butterflies having lunch here last week.

Photos by Frances Idoux



Favorite Plant for Bees and Butterflies

- Terrie Hahn

This is an African Blue Basil. It grows to about 3' x 2' and the Pollinators absolutely love it. It's still going strong while a lot of other flowering plants are petering out.



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