

## Henderson County Master Gardener

### “THE INSIDE DIRT”

# Texas Drought 2011 The Most Severe on Record

## The Survivors In My Garden Summer 2011

Nina Ellis

As I write today, August 1, 2011, my garden has received less than 2 inches of rain since the middle of May. Temperature has hovered between 97 degrees and 103 degrees every day. All of East Texas is experiencing these same conditions. Where have the butterflies gone? I have seen an occasional Eastern black swallowtail and buckeye. There are very few nectar plants in my garden. In my rural home setting the deer are eating not only the plants they love but also the ones that are called “deer resistant”. I guess if you are starving anything green looks good. As my son said “I would hate to think I had to make a living in those woods”.

The plants that continue to bloom with absolutely NO supplemental water are: Esperanza (yellow bells)\*, Mexican bird of paradise\*, Pride of Barbados\*, Maxmillian sunflower\*, rudbeckia maxima\*, assorted lantanas, Gulf muhly grass\*, pavonia lasiopetalia\* (rock rose), plumbago (absolutely covered with blue blossoms), Turk’s cap\* (still blooming and providing nectar for butterflies and humming birds). Our native salvias\*, (azurea and faranicea) continue to bloom.

Past its blooming season, columbine\* (aquilegia Canadensis) is green, salvia greggi\* (autumn sage) is not blooming but green, Copper Canyon daisy\* waiting for shorter days to bloom, and our fall asters\*. I am amazed by the tenacity of our native penstemons\* (Brazos, laxiflorus, digitalis and Red Husker). Long past their blooming season, they are green and continue to mature

their seed. The crinum are holding their own against the unrelenting heat and drought.

Surprisingly, there are some plants that have impressed me with their ability to survive with an occasional sprinkling of water. I have very little water for my garden as I depend on a gravity flow spring. Thankfully it is still flowing at the present time. At the top of the list I must place gomphrena (also known as bachelor buttons or straw flower) which is continually blooming. Numerous



Echinacea’s\*, (purpurea, Tennesseeensis, pallida, augustifolia and paradoxa), verbena bonariensis (verbena-on-a-stick) and the monardas\* (bee balm) also make the list.

All of the plants that have an\* by their name are classed as “natives”. Whatever your personal definition of “native” is, these plants want to live and prosper in our unpredictable Texas weather. Most of them were thriving here, providing host plants for butterfly larva and nectar for hummingbirds, bees and mature butterflies long before we arrived.

As we all look forward to rain and cooler temperatures so we can once again enjoy working in our gardens, I share with you a comment from Greg Grant “Face it, this is Texas, we’re in the middle of a drought so it’s fixin’ to come a flood”.

# Stress? What Stress??? Trees & The Drought Of 2011

Cecelia Bowles

With records dating back to 1895 the driest 10-month period in Texas occurred between Oct 2010 and July 2011 (and it's not over yet!). While that very statistic makes me thirsty, it's not possible for our drought stricken trees to run get a drink of water. But they need it! Without it they can't carry nutrients up into their leaves or push the sugar they create down into their roots. Normally a mature tree can "weather" a drought till Mother Nature quenches its thirst, but with this dire drought and record heat, your trees likely have already begun to feel the stress.

But wait, don't you stress out!! Trees are amazingly resilient, and you would be surprised how much water a tree can "store". Drought stressed trees may exhibit signs of dieback or decline, but this is the tree's way of coping with a stressful situation. If the roots are unable to supply enough moisture and nutrients to the crown of the tree, the crown will usually begin to die back to bring the tree's crown and root system into balance. In other words, to conserve energy the tree goes into hibernation and the leaves "brown out", much as they do in October or November. This means the tree doesn't have to spend energy (and use water) keeping the leaves green or growing.

In practical terms, this means it can be difficult to tell if a tree has died from drought stress or has simply become dormant. Don't be too quick to cut down a stressed tree (unless it poses a risk of falling on your home or property). The chances are if the tree gets watered, either by you or Mother Nature sometime before fall, the tree may try to re-bud and sprout a new crop of leaves. Two simple tests can be done to help determine if a drought-stressed tree is alive or possibly dead. First, collect some small twigs about one-eighth inch in diameter and try to break the individual twigs. If they snap and break like dead, dry twigs it could mean the tree has died. If, however, the twigs bend and don't break with a snap, the tree may still be alive. Second, use your fingernail to scrape bark from a small twig or branch. If the tissue under the bark is still green and moist, the tree may still be alive. If the bark is coming off your tree in chunks that could be a sign your tree is already dead, possibly from hypoxylon canker, a fungus

which will readily attack a tree that is stressed. Once hypoxylon canker actively infects a tree (it can remain dormant in a healthy tree), the tree will likely die. There is no control for hypoxylon canker other than maintaining tree vigor. So, if possible, water your trees during drought periods, to lessen the stress from drought and heat. Wait before cutting that tree till next spring to see if comes back with new growth.



The Texas Forest Service has compiled some hints for folks trying to nurse their trees through this drought:

-Evenly water the ground beneath the branches all the way to the drip like in the evening or early morning. About one to four inches of water should be applied. A light sprinkling is not of much value. To measure the amount of water applied, place a rain gauge or tall drinking glass in the sprinkler pattern. When one to four inches of water is measured in the gauge or glass, the tree should be adequately watered.

-Without rainfall, watering should be done about every 10 days.

-Don't fertilize trees. Let the tree slow down its growth and respiration rate to compensate for lack of water.

-Never prune your trees during a drought. It reduces the tree's ability to make food, transport water and survive.

-Don't plant trees during this drought. It's better to wait until the soil has regained some of its moisture.

- Don't disrupt the trees root system if at all possible. Consult an arborist before building or excavating around your mature, valuable trees.

-Reduce the watering needs by removing plants that surround your tree. Grass and trees often fight for available water. Replacing the grass, especially around new trees, with a large circle of mulch can help keep moisture on the ground and available to the tree.

- Water, water, water!!! Water slowly, water steadily and water regularly.

These suggestions will give your trees the best chance of survival although each tree's condition of health before the drought will greatly impact its survival rate. At this point, besides watering or doing a rain dance, all we can do is wait and see!



## What Survived The Summer Of 2011 At My House?

Sherry Bitz

One of the qualities I admire about gardeners is their sense of optimism and wonder. Whether it comes from their intimate relationship with nature or is an innate quality that pushes them to seek out relationship with nature I don't know, but it's there.

My personal sense of optimism and wonder has been tested this summer as I watch plants, creatures and people I've loved and nurtured wither and die while the sun burns on relentlessly. But, thank goodness, there's no keeping optimism and wonder down when one is engaged with nature! Life and its beauty are all around when I let go my notions of how it should look and just notice how it is.

The summer of 2011 has brought me an abundance of grasshoppers. My grasshoppers haven't just survived; they've thrived! When I walk up the sidewalk the gardens come alive with movement as the hoppers bound up to

greet me, a frenzy of hopping, hurtling energy. When I look out my kitchen window I see not one or two, but a multitude of armored creatures, bug-eyed, chomping away at what remains of a butterfly bush.

I wonder at the uniqueness of their design. I see delicate grass green hoppers, winged, yellow, brown and black chevron emblazoned hoppers, hoppers with checks and stripes and hoppers with spots and dots. They are gorgeous! What amazingly patterned works of art! And, their bodies, designed for function, are awesome. Jaws, fierce and formidable, quickly consume leaves and blossoms leaving bare stems to brown in the sun. Powerful legs propel resting insect away from tomcat's leaping grasp. Thick "skin" appears impervious to the blazing rays of the sun. Wow!

As I devote time to observing the assortment of unique grasshoppers outside my kitchen windows I become more and more appreciative of their design and more and more grateful for Creation as a whole. There is so much beauty in the expressions of life around me. I can not help but be filled with wonder. I can not help but be optimistic about the gifts inherent in each cycle of life, if I'll but keep aware.

As I wondered at the beauty of grasshopper design I wanted to learn more about the different kinds I was seeing. Here are just a few of the Texas grasshopper species I recognized on <http://insects.tamu.edu/fieldguide/>, a helpful resource. There are 150 species of grasshoppers in Texas with 30 of them classified as pests, and five species cause 90% of the plant damage.

The Differential Grasshopper is 1<sup>3/4</sup> inches long with black chevrons on its legs. It eats a wide variety of plants and is responsible for most forage crop and garden damage we see.



The Banded-Wing Grasshopper is 1 to 1<sup>1/2</sup> inches long, grayish brown to black, mottled with numerous spots and bright red hind wings. It is not usually considered a pest since it feeds on range grasses in open areas. You'll see it along trails too.



The Lubber grasshopper is 1 1/2 to 2 1/2 inches long. It is flightless, reddish-brown with greenish-brown markings and reddish and black spots. It feeds on forbs *i.e.* sunflower, blanket flower, cotton, lettuce, feverfew.



The Rainbow Grasshopper is similar to Lubber Grasshopper except more colorful.



False Katydid is 1 to 2 1/2 inches long, winged or short-winged, green to brownish with long, hair-like (filamentous) antennae. They are general plant feeders, but seldom numerous enough to cause serious plant injury.



## Garden Catalogs

Dawnvolyn Callahan

Garden catalogs can be dangerous literature for plant lovers. The beautifully photographed specimens can seduce East Texas gardeners to give Zone 10 tropicals a try even though it freezes here almost every year. Years of ordering from all kinds of catalogs and now on-line vendors have taught me a few useful tips that I'd like to share with you.

Above all catalogs are a great way to add unusual and hard to find varieties to your garden. Many fine heritage plants and bulbs are no longer offered for sale at nurseries. My favorite shrub, tinus viburnum, came from a mail order source mentioned in a magazine article. Finding something hardy and unique is truly worth the higher price plus the shipping charge that you will pay.

The biggest problem with mail order is really a combination of two factors, shipping-size plants and northern growers. Many growers won't begin shipping until it is already too hot here to establish small seedlings. I have tried to overcome this problem by using mulch and sun shades with some success. I have even nursed some tiny plants in pots until fall when they had a better chance of survival. A better solution is to purchase from vendors that are in a growing zone similar to ours. Another trick is to wait until fall to order your perennials. It is often the ideal planting time anyway.

Most mail order vendors offer fair warranties on their products; many even offer a lifetime warranty. If you are ever unsatisfied with an order, let the seller know right away. A few years back I purchased a rather large order from an Ohio company that had several weeks of excessive rain and flooding. The order contained several waterlogged plants and mushy bulbs. I hoped for the best and planted them anyway. I lost well over half of the order, all that growing time, and still haven't sent in the warranty claim.

If you find a plant in a catalog search consider checking the seed racks before ordering. It is surprising how many varieties can be obtained in this budget-friendly way. One other big money saver is to research the plants on your "wish list" before ordering. I have learned that some vendors are extra liberal in describing the hardiness of their offerings. Be a little suspicious if nearly every plant is described as hardy from Zones 3-9.

If you find a mail-order source that you really like, be sure to tell your gardener friends. The source that I had the best plant success with didn't even have a proper catalog. They only published a plant and price list and had limited shipping dates. Although the plants were small, they arrived healthy and ready to grow. I passed the list on to another gardener who had similar success. GOOD LUCK and happy planting!

## Achimenes

Jean Brewton

When I think about the colors of the various seasons, winter comes to mind as gray, brown and the white of early blooming bulbs. Spring brings soft pinks, blues, yellows and purples. Summer is the hot version of those spring colors adding red to the palette and Halloween is a descriptive word for the colors of fall.

There is a wonderful geophyte that defies my traditional thoughts of seasonal color. This plant goes by the names of Cupid's bow, magic flower, Star of India, and about a dozen more common names, but its correct name is Achimenes.

Achimenes break winter dormancy very late, usually late spring to early summer. The foliage arises from the strangest looking rhizome. Some describe the "bulb" as looking like a scaly catkin or scaly unopened pinecone.

Although I do not disagree with those descriptions, when I first opened my order of Achimenes I thought that the company had sent me insect droppings. The foliage ranges from almost smooth to fuzzy in texture, arrow to heart in shape, and red green to gray green in color depending on the species. Some species can reach 1-2 feet in height; some trail. It is most frequently used in baskets or as ground cover.

The flowers that begin to appear in late summer and continue to bloom up to frost are tubular with large, flat lips that make them look like small petunia blossoms pouting. The colors can include the primary shades of red, yellow and blue but are more often pink, blue and purple. These "spring" colors are soft but vibrant, almost glowing, and are in great contrast to summer's fiery blast or the muted colors of fall. Although not fragrant, the constant state of bloom and the richness of the color of the blooms more than make up for the lack of aroma.



The rhizomes need to be planted in the spring about one inch deep and three to four inches apart. It doesn't matter which "end" is planted down. Just lay the rhizomes on their sides. They enjoy rich, moist soil especially when in full foliage and bloom. They perform best in light shade as full sun will scorch the foliage. Some say to shower the foliage to prevent tripe and red spider mite problems, but I have never had problems with any insect on these plants. Drought is to be avoided because rhizome production (instead of blooms) will occur on the stems of stressed plants.

Because this plant hails Central America from Mexico to Panama, they are not hardy in our zone. This is true except for a variety known as "Purple King", which I have grown in pots as well as in the ground for decades. If growing any of the other varieties, dig up the rhizomes and store them in peat moss until after the last frost in spring. Another way is to grow them in baskets that are then taken in and kept dry during the winter dormancy. The time to divide the rhizomes is when they are dormant in the winter. The scaly rhizomes often break apart when handled. Don't worry, it seems that even the smallest piece will produce a plant if it is not allowed to desiccate.

**Henderson County Office**  
**2<sup>nd</sup> Floor, Courthouse Annex**  
**101 E. Tyler St.**  
**Athens, TX 75751**

**Henderson County  
Master Gardener Association**

**Officers 2011**

<b>Robyn Stack</b>	<b>President</b>
<b>Dawnvolynn Callahan</b>	<b>Vice-President</b>
<b>Marie Hancock</b>	<b>Secretary</b>
<b>Karla Odom</b>	<b>Treasurer</b>
<b>Dan Reynolds</b>	<b>Historian</b>
<b>Sally Keenan</b>	<b>Editor</b>

**The Henderson County Master Gardener Association is sponsored by the Henderson County office of Texas AgriLife Extension Service which is a part of the Texas A&M University System. Its objectives are to increase knowledge of gardening to its members and the general public, and to provide the community with information on good gardening practices.**

<http://henderson-co-tx-mg.org/>

