October 21, 2016

Dear Friends,

Here is the 178th issue of our weekly gardening newsletter for Houston, the Gulf Coast and beyond. We really appreciate all of our readers hanging in there with us, sharing stories and inspiring us in so many ways.

Thanks so much!

This newsletter is a project of The Lazy Gardener, Brenda Beust Smith, John Ferguson and Mark Bowen (John and Mark are with Nature's Way Resources). We also have a great supporting cast of contributing writers and technical specialists who will chime in and tweak away regularly. We would love to keep receiving your input on this newsletter . . . . comments . . . . suggestions . . . . questions. . . .E mail your thoughts to: lazygardenerandfriends@gmail.com. Thanks so much for your interest.

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INCORPORATING NATIVES . . . DEAD LAWN AREAS

By BRENDA BEUST SMITH

Greg Grant -- one of my favorite horticulturists (and not just 'cause he's so cute) -- is offering his take below on why sometimes we have such trouble introducing more native bloomers into our landscapes.

It's not often we get to meet the folks behind fantastic plants now available to us for our landscapes. We usually assume nursery plants come from huge growers and just hope they work in our specific areas.

This was definitely was true when I started garden writing in the mid-'70s when most of those "huge growers" were in California and Florida. But today we're blessed with many dedicated Texas, and even Greater Houston-area, growers who focus specifically on our climate. Greg is one of those treasures and here are just a few of the great bloomers he's introduced:

Above l to r, Helen Fredel Cross Vine (**Bignonia capreolata atrosanguinea** ***'Helen Fredel'), Nacogdoches Yellow Rose, (*** **Rosa x** ***'Nacogdoches Yellow') and two verbenas, Blue Princess and Pinwheel Princess. Below l to r: Pam Puryear's Pink Honeysuckle (*** **Lonicera x** ***'Pam's Pink'), Laura Bush petunia, Stars and Stripes pentas, and Greg's book "*** In Greg's Garden: A Pineywoods Perspective on Gardening, Nature and Family ***."***

Many of Greg's intros honor dear friends. Of course, we all know who Barbara Bush is. But are you curious about Helen Fredel and Pam Puryear? Both have now left us and they are sorely missed. Helen was a 95-year-old gardener from Bryan who provided the crossvine from which this one was developed. Pam, a renowned Navasota gardener and an incredible lady, was one of the original three founders of the "Texas Rose Rustlers" and is credited with locating many now-available heritage Texas roses. One of my favorite Pam stories is about how, to ward off snakes, she always carried an old cavalry saber while out rose hunting. John Fanick (his phlox is mentioned below) was a second generation nurseryman in San Antonio.

From his home base in Arcadia, Greg is a Texas naturalist, horticulturist and garden writer in addition to his plant developments. He writes the "In Greg's Garden" column in Texas Gardener and an arborgate.com blog and has co-authored "Heirloom Gardening in the South" and "Texas Home Landscaping." He and Dr. Bill Welch are just finishing a new book, " Texas Rose Rustlers."

Just a personal note here: I'm often asked about planting ONLY Texas natives. We live in a unique subtropical area here along the Upper Texas Gulf Coast -- actually closer to Louisiana in ecology than to

any other part of Texas. Too often Central Texas natives (our largest retail resource area) are sold without the cautions that we need for this area. True, Central Texas natives are very drought- and heat-tolerant. But they also require EXCELLENT drainage and porous soil. Most of us have thick gumbo soil with spring and fall monsoons. In the Greater Houston area, Central Texas natives usually need to be planted in very porous soil, on slopes, or in well-raised beds to bloom up to potential.

Personally, I prefer the term "Gulf Coast Hardy." Most of these WILL be natives. But that also opens the door to great adapted plants such as antique roses and plumbago. And the great cultivars Greg Grant has introduced to our retail trade. That's one important key: availability. It's so frustrating for gardeners when great natives are touted, but they aren't readily available. (One source for retailers: npsot.org.)

* * *

Before we get to Greg's great observations, two senior moments caught me up last week:

- Mea culpa to Harris County AgriLife Extension. I inadvertently last week listed the item below as being from Montgomery County AgriLife Extension Service. It's not. It should have read:

  Harris County *AgriLife Extension Service's Nov. 8-12 Earth-Kind® Landscape Design Short Course is getting really personal, with a 45-minute individualized landscape design consultation by AgriLife Horticulture Agents and Specialists. Details: 713-274-0956, kimberly.figgs@ag.tamu.edu*

- While reading Vince Brach's great ***"The Seaside Naturalist"*** column in the *Beach Triton*, suddenly realized I was guilty of another senior moment. I reported native Bolivar Peninsula rudbeckias were transplanted from the wild to the Monarch Gardens. They're actually Helianthus. Both are in the aster family. So many wildflowers look so much alike, the foliage is where real distinctions often occur. I should be more obsessed with actual botanical names. Unfortunately, I'm not.

L to r, helianthus (sunflowers), rudbeckias (black-eyed Susans) and my favorite Bolivar Peninsula beach sunflower photo.

Know why they're called sunflowers? Some (not all) helianthus blooms follow the sun, a trait known as heliotropism. They face east in the morning and west in the evening. When I photographed the Bolivar dune sunflowers at right above, I had to shoot in the afternoon so the flowers would be facing me (west) to get the surf in background. In morning, these flowers are facing the surf (east).

BARE LAWN SPOTS - Several readers have written in about this summer's infestation of webworms (and other invaders) in lawns. I treat for nothing. In our 50-year-old lawn, I've always found St. Augustine eventually refills disease-/insect-/weather damage all by itself.

However, I know this isn't what most lawn-fanatics want to hear. So am sharing what John Ferguson, my soil guru, advised reader Barbara Pottlitzer. These tips apply to ANY dead St. Augustine lawn areas, regardless of trigger:

- Leave dead grass to act as a cover/mulch. Also, often some runners are still alive and will regrow. Weeds like bare ground, hence removing it at this time will invite weed seeds to germinate. Keep grass mowed high (4" or more).
- Mulch area with 1/2 inch layer of good compost. Many weed seeds require light to germinate. Compost mulch reduces this issue. It will stimulate/help grass runners that are alive to regenerate.

- Our soils are still too warm, however in a few weeks when soil temperature get below 70 degrees agricultural corn gluten meal acts as a pre-emergent for many species of weeds.
- If weeds germinate in this area one can use agricultural vinegar to knock them out since there is no grass in this area. Flame weeders are quick and easy to kill winter weeds, just use in the mornings when grass residue is damp from dew or rain so there is no fire issue.
- Why did problems attack that area? Too much water as they like over watered yards? Use of artificial fertilizer stimulating weak growth that attracts the moth? Soil compaction preventing beneficial microbes from parasitizing the caterpillars? Too much shade?

Brenda's column in the free, emailed LAZY GARDENER & FRIENDS HOUSTON GARDEN NEWSLETTER is based on her 45+ years as the Houston Chronicle's Lazy Gardener. To sign up: CLICK HERE

LG&F GARDEN CALENDAR EVENTS submitted in our EXACT format will be copied & added to calendar right away. Any necessary re-typing/reformatting may take couple of weeks. See calendar for format. Always check the LG&F Newsletter* Calendar to make sure your submitted event is listed! If not, let me know!

* * *

Greg's introductions of improved native varieties include, above l to r, Augusta Duelberg Mealycup Sage (Salvia farinacea 'Augusta Duelberg'); Gold Star Esperanza (Tecoma stans); LeCompte vitex and Salinas pink vitex. Below, l to r, Big Momma Turk's Cap, Pam Puryear Turk's Cap, and Greg standing behind John Fanick phlox.

Countdown to the . . .
TOP 10 MISTAKES GARDENERS MAKE WHEN PLANTING NATIVE PLANTS

By GREG GRANT,
Texas A&M AgriLife Extension

ggrantgardens@yahoo.com

#10. Not native at all: What is native and what is not has always been a source of confusion and even controversy. Always remember that plants don't read maps and it's better to choose something that is locally native or at least from a similar climate.

#9. Planting something aggressive or even invasive: Just because a plant "runs wild" doesn't mean it's native. Chinese tallow is invasive and goldenrod will gobble up your bed.

#8. Not planting something because you see it in the wild: Avoiding a plant because it's "just a wildflower" or "I see these in the woods" is a mistake. Plants belong in their homes.

#7. Not fitting into your local ecosystem: Every bird, bug, and butterfly in your area evolved with local plants and local genetics. To keep them happy and healthy, plant natives in your area are essential.

#6. Thinking all natives are adapted: Wrong. Many native plants are adapted to very specific niches that your garden may not provide.

#5. Expecting too much from a plant . No plant looks great all the time and blooms all the time. Celebrate the plant as part of your world and appreciate that it lives. Stems, pods, dead leaves, and even death are all part of life.

#4. Constantly controlling insects and diseases: Plants attract bugs, bees, and butterflies. Bugs attract birds. Birds and other insects control the bugs. Seeds and fruit attract birds. Birds spread the seeds to make more plants

#3. Planting too few: Plants generally look best and more natural in groups that are in scale with your home and landscape. Generally, the more the merrier.

#2. Wrong plant, wrong place: Always know the ultimate size of a plant, whether it likes sun or shade, and whether it likes moist or dry soils.

(AND THE NUMBER ONE MISTAKE WE MAKE WHEN INCORPORATING NATIVE PLANTS INTO OUR GARDENS?)

#1. Bad design: Design is design whether it's native or not. The same basic design principles apply whether it's floral design, fashion design, interior design, or landscape design. Native plants don't make up for bad design. If you don't grasp the creative concept, get professional help.

* * *

Greg's "Five Basic Principles of Landscape Design" blog appeared in The Arbor Gate newsletter.
You can speak personally with Greg Sat., Nov. 5 at two events:

- ***9-11am on "Growing Naturally: Landscaping with Native Plants"** - Montgomery County Master Gardeners event at the AgriLife Extension Office, 9020 Airport Road, Conroe. $25/website; $30/door. mcmga.com; 936-539-7824*
- ***3:30pm on "My Life as a Rustler" -** Antique Rose Emporium's Nov. 4-5 26th Annual Fall Festival of Roses in Independence. antiqueroseemporium.com/events*

JOHN'S CORNER

MINERALS - The Elements and What They Do

Over the years, the minerals have fascinated me. How they affect everything from soil and microbes to plants, animal and human health. Every gardener knows that if the soil is missing something, plants to not grow as well and have more insect and disease problems. Similarly, this applies to animal and human health.

My first exposure to the importance of trace minerals occurred about 20 years ago. I was planting some early spring vegetables in the garden behind my house. This extremely rich organic soil had been amended with compost and organic fertilizers for years. There was a new trace mineral package had just been introduced to the market and I decided to test it. I planted many of the cool season vegetables from transplants (cabbage, broccoli, Brussels sprouts, cauliflower, etc.) and for every other plant; I placed a tablespoon of the mineral package in the bottom of the hole. Nothing showed a response except the Brussels sprouts, but did they respond as shown in the picture below! Obviously, there was some trace mineral in the package that the plant needed that was limiting growth.

This experience reminded me of **Liebig's Law of the Minimum** , often simply called **Liebig's Law** or the **Law of the Minimum.** It is a principle developed in agricultural science by Carl Sprengel in 1828 and later popularized by Justus von Liebig. It states that plant growth is controlled; not by the total amount of nutrient resources available, but by the scarcest resource (the limiting factor). From Wikipedia "The availability of the most abundant nutrient in the soil is only as good as the availability of the least abundant nutrient in the soil." On the other hand, to use an old analogy, "A chain is only as strong as its weakest link."

Most agricultural and horticultural departments in our universities teach that we only need 16 elements to grow a plant. As the photo above shows, we really do not know what a plant needs, much less what an animal or humans need. If the trace elements are not in the soil, plants cannot take them up; hence, they do not get to the animals or to the humans that eat the animals.

To compile this information I have collected hundreds of articles from various journals and other publications as well as the books listed below to list a few.

References:

Nature's Building Blocks - An A-Z Guide to the Elements, John Emsley, Oxford University Press, 2011, ISBN 978-0-19-960563-7

Trace Elements in Soils and Plants, Alina Kabata-Pendias, CRC Press, 2011, ISBN 978-1-4200-9368-1

Trace Elements in Abiotic and Biotic Environments, Alina Kabata-Pendias and Barbara Szteke, CRC Press, 2015, ISBN 978-1-4822-1279-2

How Plants Work, Linda Chalker-Scott, Timber Press, 2015, ISBN 978-1-60469-338-6

Seawater Concentrate for Abundant Agriculture, Arthur Zeigler, Ambrosia Technology, Arthur Ziegler, 2012, ISBN: 978-0-615-66614-3

"The Hidden Half of Nature: The Microbial Roots of Life and Health", David Montgomery and Anne Bikle, W.W. Norton and Company, 2016, ISBN: 978-0-393-24440-3

The Handbook of Trace Elements, Istavin Pais and J. Benton Jones, 1997, CRC Press/St. Lucie Press, ISBN 1-884015-34-4

Soil Mineralogy with Environmental Applications, Editors Joe Dixson and Darrell Schultz, Soil Science Society of America, 2002, Library of Congress Card Catalog Number: 2002100258

Food Forensics - The Hidden Toxins Lurking in Your Food and How You Can avoid Them for Lifelong Health, Mike Adams, BenBella Books, 2016, ISBN: 978-940363288

Chemical Exposure and Human Health, Cynthia Wilson, McFarland Publishers, 1993, ISBN: 0-89950-819-3

Rare Earths - Forbidden Cures, Joel Wallach, DVM, ND and Ma Lan, MD, MS, 1994, Happiness Publishing, Library of Congress Catalog

Minerals for the Genetic Code, Charles Walters (Dr. Olree), Acres, USA, 2006, ISBN: 0-911311-85-8

Dead Doctors Don't' Lie, Dr. Joel Wallach, DVM, ND and Dr. Ma Lan MD, Wellness Publications, 2015, ISBN: 0-9748581-0-2

The Elements, Theodore Gray, Leventhal/Workman Publishers, 2009, ISBN: 13-978-1-57912-814-2

The Art of Balancing SOIL Nutrients, William McKibben, Acres, USA, 2012,
ISBN: 978-1-60173-032-9

Life Extension Foundation, LE Publications. A monthly health magazine, which summarizes hundreds of papers in the medical research journals.

Minerals - Foundations of Society, American Geologic Institute, 2002

Earth Magazine - American Geosciences Institute, assorted articles

Journal of Rocks & Minerals - assorted articles

For those that do not have a technical background I am going to cover each element as they are listed in what is known as the periodic table. It is a method commonly used to organize the elements. Each element is shown using a one or two-letter abbreviation that reflects its name (most are straightforward but a few use Latin or the names in other languages). Most gardeners will recognize many of the common elements, such as nitrogen (N), calcium (Ca), phosphorous (P), iron (Fe), etc.

To help understand how an atom is organized, think of our solar system. We have the sun at the center and the planets revolve around it at different distances (orbits). For atoms, the protons and neutrons are in the center and the electrons revolve around them similar to the planets around our sun. The distance the planets are from the sun determines if they are hot or cold and icy. Similarly, the distance the electrons are from the center of the atom helps determines many of an element's chemical properties. This is why is one form of Chromium (Cr) may be good for you and another form of chromium very bad.

Scientists have discovered 118 total elements of which 94 occur naturally in nature. Of these only 81 elements are considered stable.

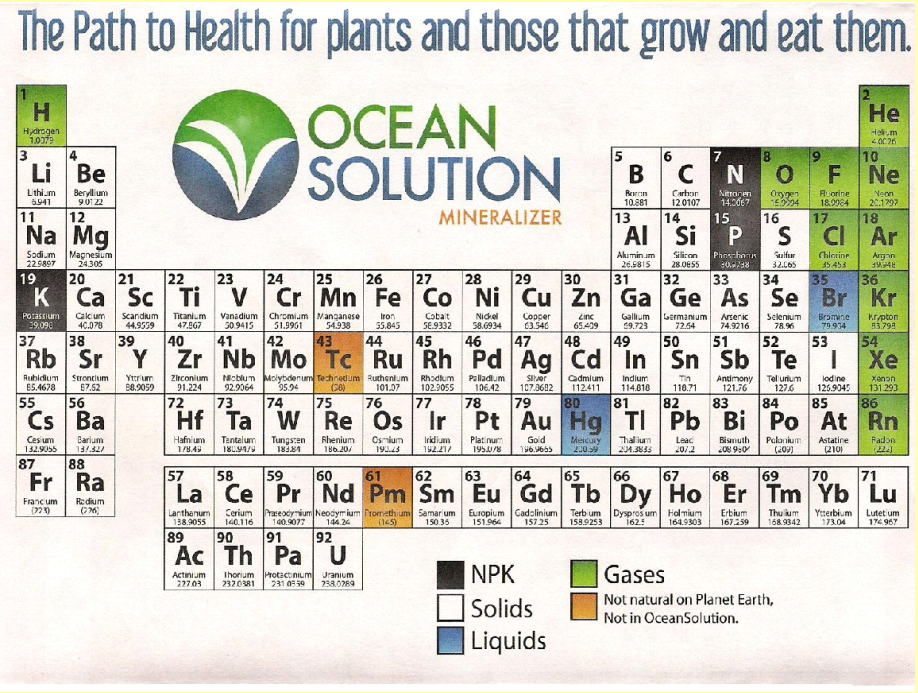
In nature, the individual elements (atoms) are often found combined with other elements into what we call minerals. Today scientists have identified over 4,300 distinct minerals from the simple to the complex. We are all familiar with these simple minerals like common table salt that is sodium chloride (NaCl) or limestone, which is calcium carbonate ($CaCO_3$).

So, let us begin our journey through the elements.

The simplest atom is hydrogen, which has the chemical symbol (H). It has only one proton (a positive charged sub atomic particle) in its nucleus and one electron (negatively charged) outside the nucleus. It is assigned the number one (1). As we add additional protons and neutrons (electrically neutral sub atomic particles), the atoms become more complex and their chemical and physical

properties change. When two protons are present, we now have the element helium (He) and it is number two (2). Every time we add a proton, the atom changes as they become larger and heavier.

For reference for those interested, I have included the periodic table. For the gardeners that do not have a technical background, elements in each column have similar chemical properties. This similarity affects how all life forms use them.



Now let us begin our journey and look at each of the elements, and discover what they do in soils, microbes, plants, and animals.

1) Hydrogen (H) - Hydrogen is one of the most common elements in the universe. As hydrogen is burned (fusion) in our sun, it gives off tremendous amounts of energy. It has one proton in its nucleus hence the number one on the periodic table. When two hydrogen atoms are combined with one oxygen atom, we have the molecule that we all know as water (H_2O). Hydrogen is a building block in many common substances like hydrocarbons (gasoline and oil) or sugar. The human body is more than 60% water and as all gardeners know, plants require water. Hydrogen is one of the three most used elements along with carbon (C) and oxygen (O). These three are the building blocks of organic compounds like carbohydrates, proteins, fats, DNA and RNA as well as cellulose and lignin found in plants. Plants combine hydrogen and oxygen from water, carbon dioxide (CO_2) from the atmosphere to form glucose (a simple sugar) or more complex molecules like cellulose and lignin. The energy to do this work comes from the sun via photosynthesis. When hydrogen is combined with nitrogen, we get ammonia and ammonium. Ammonia (NH_3), is a nitrogen atom connected to three hydrogen atoms and is often used as a common cleaning agent. If we add a 4th hydrogen atom, nitrogen atom we get Ammonium (NH_4^+) a plant nutrient.

Note: Scientists like to use an abbreviation of an elements name; they also like to use a "short hand" that makes it *very easy* to describe the element or molecule formed by one or more elements. For ammonia above the short hand version (NH_3), tells us that there is one nitrogen atom connected to three hydrogen atoms. The subscript after the symbol tells us how many atoms of that element there is in that molecule. For ammonium (NH_4^+), the short hand tells us that this molecule has four hydrogen atoms connected to the nitrogen atom, the superscript (+) tells us the molecule has a positive electrical charge. When atoms have an electrical charge, we call them ions (short for ionized). If we have lots of hydrogen ions in the soil then the soil is acidic.

We find hydrogen in all living things and in minerals and rocks. Hydrogen is found in igneous rocks like granite and basalt at 1,000 ppm (parts per million) to maybe 5,600 ppm in shale's. In marine plants like Kelp it can reach 41,000 ppm to 55,000 ppm in land plants. Hydrogen is essential for all life.

2) Helium (He) - We are most familiar with this element in filling balloons to blimps as it is lighter than air (hydrogen is lighter and cheaper to use, however it is very reactive which led to many fires). Helium is one of the noble gases, which means that it is inert and reacts with nothing. Helium has two protons in its nucleus. There are traces of helium in the human body absorbed from the air. It serves no known biological role in plants or animals. It mainly comes from natural gas deposits from where it becomes trapped after being formed by radioactive decay of other elements deep inside the earth. Helium does not become a liquid until it is very cold (4^0 K which is -269^0 C) or minus -452^0 F. The major use of Helium today is in physics research on super conductors, which require very cold conditions. Helium is a very tiny atom, which is so small it can escape through the molecules that compose the walls of balloons (the reason they quickly go flat). As a result, we do not find much Helium, igneous rocks at 0.008 ppm and even less in seawater.

3) Lithium (Li) - Lithium is a very light and soft metal that will float in water. It is used in hundreds of consumer devices from batteries, plastics, and ceramics to pace makers.

Lithium is found in igneous rocks at 20-25 ppm (up to 40 ppm in acidic igneous rocks like some granite), shale's at 66 ppm, limestone at 5 ppm, and seawater at 0.18 ppm and in soils at 30 ppm. When Lithium is in the ion form (Li^+) it easily moves around in soils. Lithium is found at 5 ppm in marine plants, marine animals at 1 ppm, land plants at 0.1 ppm, and land animals at 0.02 ppm. In undisturbed natural soils, it is found from 13-28 ppm and is highest in heavy loamy soils and the least in sandy soils. In the coastal plains, it ranges from 4-6 ppm. As the primary rocks (minerals) break down, Lithium is incorporated into clay minerals or is easily absorbed by organic matter. As a result, it is readily available for plants. The ability to absorb or tolerate Lithium varies between plant

families. Members of the *Rosaceae* family often have 0.6 ppm in their tissues. For the *Polygonacceae* they will only have 0.04 ppm. The *Solanaceae* have the most Lithium with levels reaching 1,000 ppm.

Historically, Lithium is not considered to be an essential plant nutrient. However, newer studies have shown that it can effect plant growth and development. Excess calcium (Ca) in the soil inhibits Lithium uptake by plants.

Since 1915 the risk of clinical depression has doubled with each generation and occurs at younger ages. Since Lithium is not considered an essential plant nutrient, thus it was not replaced as the various crops used it up. Most artificial fertilizers tend to make the soil very acidic, hence to counter act this, farmers apply large amount of lime (calcium oxide CaO) or limestone (calcium carbonate $CaCO_3$) to their fields. This practice creates excess calcium in our soils. Each generation of farmers have used more and more artificial fertilizers; as the toxic chemicals destroyed the fertility of their fields. I wonder how strong the link is to the mental problems we see in society today.

Lithium has been used for decades by psychiatrists to treat depression and other mental disorders. Animal studies have shown that a lithium deficiency results in reproductive failure, infertility, reduced growth rate, and multiple behavioral problems. Studies in Texas, California, and Oregon found that normal healthy people had 400 times the lithium in their hair than violent criminals. When Lithium is in the metallic form, it is not biologically available. A deficiency has been linked to several forms of cravings.

Several animal studies have shown that adequate levels of lithium increases their lifespan up to 18% as it has been found to activate a protein that protects cells against damage. Lithium has been found to be associated with the amino acid histidine and has been shown to help protect brain cells. Lithium is now considered an essential element for humans.

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WEEKLY GARDENING EVENTS & ANNOUNCEMENTS CALENDAR

PLEASE READ BEFORE SUBMITTING AN EVENT TO THIS CALENDAR.

Events NOT submitted in the EXACT written format below may take two weeks or longer to be reformatted/retyped. After that point, if your event does not appear, please email us. Sorry, no children's programs. - Submit to: lazygardener@sbcglobal.net

IF WE INSPIRE YOU TO ATTEND ANY OF THESE EVENTS, PLEASE TELL SPONSORS YOU HEARD ABOUT IT IN *THE LAZY GARDENER & FRIENDS HOUSTON GARDEN NEWSLETTER*

FRI.- SUN., OCT. 21-23: AMERICAN RO SE SOCIETY SOUTH CENTRAL DISTRICT 2016 FALL ROSE SHOW & CONVENTION, Pasadena Convention Center, 7902 Fairmont Parkway. houstonrose.org .

SAT., OCT. 22. STARTING A COMMUNITY OR SCHOOL GARDEN WORKSHOP, 8:30am-2:30pm. $20. University of St. Thomas, Malloy Hall, Rm 113, 3812 Yoakum Blvd. 713-880-5540; urbanharvest.org

SAT., OCT. 22: 2016 FAIRY GARDEN WORKSHOP , 10am, Enchanted Forest, 10611 FM1750; 2pm, Enchanted Gardens, 6420 FM359, both Richmond. $10. Register: myenchanted.com

SAT., OCT. 22: GUNTERS HEIRLOOM VEGETABLES by PAM AND LEAH GUNTER 9am-1pm, & THE FALL AND WINTER FRUIT GARDENER by ANGELA CHANDLER, 10am-noon, Arbor Gate, 15635 FM 2920, Tomball. 281-351-8851. Free. Register: arborgate.com

SAT., OCT. 22: SAN JACINTO COUNTY MASTER GARDENERS FALL SYMPOSIUM & PLANT SALE, 9am-4pm, Community Center, 101 East Cedar Ave., Coldspring. $25. 713-252-5254

SAT., OCT. 22: 2016 FALL "ACROSS THE BEND" GARDEN TOUR, 9am-3pm, $15. Sugar Land Garden Club event. Homes/tickets: sugarlandgardenclub.org

SAT., OCT. 22: STARTING A COMMUNITY OR SCHOOL GARDEN WORKSHOP, 8:30am-2:30pm, University of St. Thomas, Malloy Hall, Rm 113, 3812 Yoakum Blvd. $20. Urban Harvest event. 713-880-5540; urbanharvest.org

SAT., OCT. 22: 2016 ACROSS THE BEND FALL GARDEN TOUR, 9am-3pm, $15. Sugar Land Garden Club event. Homes/tickets: sugarlandgardenclub.org

SUN., OCT. 23: DAYLILIES, 2-4pm, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Cypress Creek Daylily Society event. Register: 713-274-4160

TUES., OCT. 25: GARDEN TO VASE by Linda Gay & Pat Hermes, 9am-noon, Houston School of Flowers, 4340-D Directors Row. $75. 713-681-2400, agardenforcutting.com

WED., OCT 26: FALL & WINTER HABITAT GARDENING by DIANA FOSS, noon-1pm, Arbor Gate, 15635 FM 2920, Tomball. 281-351-8851. Free. Register: arborgate.com

WED., OCT. 26: "FEDERALLY-ENDANGERED PLANT SPECIES OF TEXAS" by ANNA STRONG, 7:30 pm, Metropolitan Multi-Services Center, 1475 West Gray, Free. Houston Cactus & Succulent Society event. hcsstx.org .

THURS.., OCT. 27: GARDEN TO VASE by Linda Gay & Pat Hermes, 9am-noon, Houston School of Flowers, 4340-D Directors Row. $75. 713-681-2400, agardenforcutting.com

THURS.-SUN., OCT. 27-30: STAR MASTER COMPOSTER TRAINING by City of Houston Green Building Resource Center, 1002 Washington Ave. Sites vary. $40 for series. 832-394-9050; greenhoustontx.gov/gbrceducation-2016oct.pdf

SAT., OCT. 29: GULF COAST MEAD FESTIVAL, LUCY-STYLE GRAPE STOMP COMPETITION & GRAPE GROWING DISCUSSIONS, 10am-5pm, Frascone Winery, 308 Bayside Dr., Anahuac. Free. Frascone Winery, Mystic Oak Meadery, Bentley Bees & Crane Meadows event. Facebook: Gulf Coast Mead Festival.

SAT., OCT. 29: GARDEN TO VASE by PAT HERMES ,10am-noon, Arbor Gate, 15635 FM 2920, Tomball. 281-351-8851. Free; register: arborgate.com

SAT., OCT. 29: FRIGHTFUL FUN IN THE GARDEN by ASHLEY GRUBB, 10am, Enchanted Forest, 10611 FM1750; 2pm, Enchanted Gardens, 6420 FM359, both Richmond. Free. myenchanted.com

SAT., OCT. 29: MERCER BOTANIC GARDEN OVERSTOCK PLANT SALE, 9am-3pm, Northside growing area, 3610 Hirschfield Rd.

SAT., NOV. 1: NATIVE LANDSCAPING CERTIFICATION LEVEL 1 CLASS, 8am-5pm, Armand Bayou Nature Center, 8500 Bay Area Blvd., Pasadena. $37. Native Plant Society of Texas - Houston Chapter. 713-657-0372. npsot.org/wp/houston/native-landscaping-certification

TUE., NOV 1: DAY LILIES, by MICHAEL MAYFIELD, 6:30-7:30 pm. AgriLife Extension, Carbide Park, 4102 Main, La Marque. Galveston County Master Gardener events. Free. Register: galvcountymgs@gmail.com, 281-534-3413; aggie-horticulture.tamu.edu/galveston

TUE., NOV 1 - NOV 30: WALLER COUNTY MASTER GARDENERS FRUIT & NUT TREE SALE PRE-ORDER, 9am-noon, Waller County Extension Office, 846 6th St., Hempstead, TX 77445 Pickup date is Sat, Jan 28, 2017.979-826-7651. txmg.org/wallermg; wallermgardener2013@gmail.com

TUES., NOV.1: #TXPLANTS TWITTER TUESDAY - MILKWEED & MONARCHS PHOTO/EXPERIENCE SWAP, 7-8 pm, Free on Twitter follow hashtag #TXplants. Native Plant Society of Texas-Houston Chapter, npsot.org/wp/story/2016/9263/; 713-714-6931.

FRI.,-SAT., NOV. 4-5: 26TH ANNUAL FALL FESTIVAL OF ROSES, Antique Rose Emporium, Independence. antiqueroseemporium.com/events

SAT., NOV. 5: GARDEN TO VASE by LINDA GAY & PAT HERMES, 9am-noon, Houston School of Flowers, 4340-D Directors Row, $75. ,713-681-2400; agardenforcutting.com

SAT., NOV 5 : PECKERWOOD INSIDER'S TOUR, 10am & 6pm, 20559 FM 359 Road, Hempstead. Garden Conservancy event. $15. R egister: peckerwoodgarden.org . 979-826-3232; info@peckerwoodgarden.org

SAT., NOV. 5: GREETING, GIFTING GUESTS WITH BEAUTIFUL PLANTED CONTAINERS, 10am, Enchanted Forest, 10611 FM1750; 2pm, Enchanted Gardens, 6420 FM359, both Richmond. Free. myenchanted.com

SAT., NOV. 5: GROWING FRUIT TREES IN A SMALL SPACE, 9:30-11:30am, Houston Museum of Natural Science, Moran Hall, 5555 Hermann Park Dr. $45. Urban Harvest event. 713-880 5540; urbanharvest.org

SAT., NOV. 5: GROWING NATURALLY: LANDSCAPING WITH NATIVE PLANTS by GREG GRANT, 9-11am, AgriLife Extension Office, 9020 Airport Road, Conroe. $25/website; $30/door. Montgomery County Master Gardeners event. mcmga.com; 936-539-7824

SAT., NOV. 5: SOUTH TEXAS UNIT of THE HERB SOCIETY OF AMERICA 44th ANNUAL HERB FAIR. 9am-2pm, Judson Robinson Community Center, 2020 Hermann Dr. Free. herbsociety-stu.org/

MON., NOV. 7: NEW GARDEN DOCENT ORIENTATION, 9 am-noon, Mercer Botanic Garden , 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160

THURS., NOV. 10: SOILS, FERTILIZERS, ETC.-ORGANIC SOLUTIONS by Louis Bennett, 10am, Municipal Utility Bldg. #81, 805 Hidden Canyon Dr, Katy. Free, Nottingham Country Garden Club event ; nottinghamgardenclub.org

THURS., NOV. 10: SOILS, FERTILIZERS, ETC.-ORGANIC SOLUTIONS by Louis Bennett, 10am, Municipal Utility Bldg. #81, 805 Hidden Canyon Dr, Katy. Free, Nottingham Country Garden Club event. nottinghamgardenclub.org

THURS., NOV. 10: THE ARS AND YOU by LAURA SEABAUGH 7:30pm, Cherie Flores Garden Pavillon, 1500 Hermann Dr. Free. Houston Rose Society event. houstonrose.org

SAT., SEPT. 10: RAISING & CARING FOR BEES, 9-11am, AgriLife Extension Office, 9010 Airport Rd., Conroe. $5. Montgomery County Master Gardener event. 936-539-7824, mcmga.com

FRI., NOV. 11: FLOWER SHOW - JUDGING DEMYSTIFIED by SUZANNE MILSTEAD & NELL SHIMEK, 10am, & TRAFFIC FLOW, 1pm, White Oak Convention Center, 7603 Antoine. Free. Houston Federation of Garden Clubs event. houstonfederationgardenclubs.org

SAT., NOV 12: PECKERWOOD GARDEN OPEN DAY, 10am-2pm tours, 20559 FM 359 Road, Hempstead. $10. Garden Conservancy event. peckerwoodgarden.org 979-826-3232; info@peckerwoodgarden.org

TUES.-SUN., NOV. 8-12: MONTGOMERY COUNTY 2016 EARTH-KIND LANDSCAPE DESIGN SHORT COURSE, 6-9pm (1st. 4 classes), Weekly Community Center, 8440 Greenhouse Rd., Cypress. $195/household. Limited space: 713-274-0956, kimberly.figgs@ag.tamu.edu

WED., NOV. 9: THE MADALENE HILL PHARMACY GARDEN, noon-2pm, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

SAT., NOV. 12: HERBS THAT LIKE TO CHILL by HENRY FLOWERS, 10am, Enchanted Forest, 10611 FM1750 & 2pm, Enchanted Gardens, 6420 FM359, both Richmond. myenchanted.com

MON., NOV. 14: DOCENT TRAINING-REFRESH YOUR SKILLS, 9am-noon, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

SAT., NOV. 19: ANNUAL ENCHANTED OPEN HOUSE & EVENING, 2-8pm, Enchanted Gardens, 6420 FM359, Richmond. Free. myenchanted.com

MON., NOV. 21: STORYTIME IN THE GARDEN, 10:30 am- 11:30 am, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160

TUES., NOV 22: HARRIS COUNTY MASTER GARDENERS OPEN GARDEN DAY & SEMINAR: HOLIDAY PREPARATION; 10-11 am, Weekley Community Center, 8440 Greenhouse Rd. ogd.harrishort@gmail.com

SAT., NOV 26: PECKERWOOD GARDEN OPEN DAY, 10am-2pm tours, 20559 FM 359 Road, Hempstead. $10. Garden Conservancy event. peckerwoodgarden.org , 979-826-3232; info@peckerwoodgarden.org

SAT., NOV. 26: ANNUAL ENCHANTED OPEN HOUSE & EVENING, 2-8pm, Enchanted Forest, 10611 FM 2759, Richmond. Free. myenchanted.com

TUE., NOV 29: TOOL CARE by TIM JAHNKE and HENRY HARRISON, III, 6:30-8:30 pm. AgriLife Extension, Carbide Park, 4102 Main, La Marque. Galveston County Master Gardener event. Free, but pre-register: galvcountymgs@gmail.com,281-534-3413,

SAT. DEC. 3: THE ARBOR GATE CHRISTMAS OPEN HOUSE, 2-6pm, 15635 FM 2920, Tomball. 281-351-8851. Free; register: arborgate.com

SAT., DEC. 3: CITRUS FEST & Q&A by DR. BOB RANDALL, 8:30am-noon, Urban Harvest Farmer's Market, 3000 Richmond Ave @ Eastside. Urban Harvest event. 713-880-5540, urbanharvest.org.

SAT., DEC. 3: GROWING CITRUS IN HOUSTON & S.E. TEXAS, 9:30-11:30am, University of St. Thomas, Malloy Hall, Rm 017, 2812 Yoakum Blvd, $45. Urban Harvest event. 713-880-5540; urbanharvest.org

SAT., DEC 3: HOLIDAY OPEN HOUSE, 10am-4pm, Buchanan's Native Plants, 611 E 11th. Free. 713-861-5702; buchanansplants.com/events

SAT., DEC. 3: FRUIT TREES by SCOTT SNODGRASS, 10am, Enchanted Forest, 10611 FM1750; 2pm, Enchanted Gardens, 6420 FM359, both Richmond. Free. myenchanted.com

FRI., DEC. 9: HOLLY-JUJAH by JIM JOHNSON, 10am, White Oak Convention Center, 7603 Antoine. $25 advance sale only. Houston Federation of Garden Clubs eve nt. houstonfederationgardenclubs.org

SAT., DEC. 10: WINTER AT MERCER BOTANIC GARDEN, 9am-noon, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

WED. DEC. 14: CHRISTMAS CRAFTS USING NATURAL MATERIALS, noon-2pm, Mercer Botanic Gardens , 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

SAT., DEC 17: PECKERWOOD GARDEN OPEN DAY, 10am-2pm tours, 20559 FM 359 Road, Hempstead. $10. Garden Conservancy event. peckerwoodgarden.org , 979-826-3232; info@peckerwoodgarden.org

SAT., DEC. 17: CHRISTMAS BIRD COUNT, 8am, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: albbarr@comcast.net.

MON., DEC. 19: STORYTIME IN THE GARDDEN, 10:30 am- 11:30 am, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

MON., DEC. 19: WALLER COUNTY MASTER GARDENER TRAINING REGISTRATION DEADLINE. 9am-4pm Saturday classes starting Jan. 14. $160. Waller County Extension Office. txmg/org/wallermg; wallermgardener2013@gmail.com; 979-826-7651

WED., JAN. 11: EXPLORING THE PRIMEVAL FLORA OF NEW CALEDONIA, noon-2pm, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

FRI., JAN. 13: PENNY WISE / POUND FOOLISH: WHEN & WHY TO HIRE A LANDSCAPE PROFESSIONAL by RITA HODGE, 10am, White Oak Convention Center, 7603 Antoine. Free. Houston Federation of Garden Clubs event. houstonfederationgardenclubs.org

MON., JAN. 16: STORYTIME IN THE GARDEN, 10:30-11:30 am, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

MON., JAN 23-FEB. 27: TEXAS GULF COAST GARDENER TIER III: THE ART OF LANDSCAPE DESIGN, 9am-3pm with an hour lunch break, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. $250. Register: 713-274-4160.

WED., FEB. 8: MICROGREENS, noon - 2pm, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

FRI., FEB.10: FLORAL DESIGN INSPIRED BY ART by HOUSTON DESIGNING WOMEN, 10am, White Oak Convention Center, 7603 Antoine. Free. Houston Federation of Garden Clubs event. houstonfederationgardenclubs.org

MON., FEB. 20: STORYTIME IN THE GARDEN, 10:30-11:30 am, Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

If we inspire you to attend any of these events, please let them know you heard about it in . . .
THE LAZY GARDENER & FRIENDS NEWSLETTER!

PLEASE READ BEFORE SUBMITTING AN EVENT FOR THIS CALENDAR.

Events NOT submitted in the EXACT written format below may take two weeks or longer to be reformatted/retyped. After that point, if your event does not appear, please email us. Sorry, no children's programs. - Submit to: lazygardener@sbcglobal.net

IF WE INSPIRE YOU TO ATTEND ANY OF THESE EVENTS, PLEASE TELL SPONSORS YOU HEARD ABOUT IT IN
T HE LAZY GARDENER & FRIENDS HOUSTON GARDEN NEWSLETTER

THIS NEWSLETTER IS MADE POSSIBLE BY THE FOLLOWING SPONSORS

NATURE'S WAY RESOURCES
an organically based service company

http://natureswayresources.com/

ADOPTABLE DOG OF THE MONTH

DIESEL

Diesel was abandoned by his owners when they moved, and he ended up at Montgomery County Animal Shelter.

Diesel is a American Blue Pittbull Mix and is thought to be about 10 years old.

He knows basic commands- is housebroken and crate trained- loves everyone he meets... Loves bones, treats and squeaky toys- even likes a nice jog. He has a good amount of life to live and would love to have somewhere to spend it. If he has siblings- they have to be female.

Diesel loves to play and socialize and is so much fun to have around.

He is fixed and has all of his shots.

If interested in adopting Diesel, please reply to this newsletter and type "Diesel" in the subject line. Diesel is not at the shelter currently. He is in foster care.

ABOUT US

BRENDA BEUST SMITH

WE KNOW HER BEST AS THE LAZY GARDENER . . .

. . . but Brenda Beust Smith is also:

* a national award-winning writer & editor
* a nationally-published writer & photographer
* a national horticultural speaker
* a former Houston Chronicle reporter

When the Chronicle discontinued Brenda 's 45-year-old Lazy Gardener" print column a couple of years ago, it ranked as the longest-running, continuously-published local newspaper column in the Greater Houston area.

Brenda 's gradual sideways step from Chronicle reporter into gardening writing led first to an 18-year series of when-to-do-what Lazy Gardener Calendars, then to her *Lazy Gardener's Guide* book and now to her *Lazy Gardener's Guide* on CD (which retails for $20. However, $5 of every sale is returned to the sponsoring group at her speaking engagements).

A Harris County Master Gardener, Brenda has served on the boards of many Greater Houston area horticulture organizations and has hosted local radio and TV shows, most notably a 10+-year Lazy Gardener run on HoustonPBS (Ch. 8) and her call-in "EcoGardening" show on KPFT-FM.

Brenda recently ended her decades-long stint as Production Manager of the Garden Club of America's **BULLETIN** magazine. Although still an active horticulture lecturer and broad-based freelance writer, Brenda's main focus now is **THE LAZY GARDENER & FRIENDS HOUSTON GARDEN NEWSLETTER** with John Ferguson and Mark Bowen of Nature's Way Resources.

A native of New Orleans and graduate of St. Agnes Academy and the University of Houston, Brenda lives in Aldine and is married to the now retired Aldine High School Coach Bill Smith. They have one son, Blake.

Regarding this newsletter, Brenda is the lead writer, originator of it and the daily inspiration for it. We so appreciate the way she has made gardening such a fun way to celebrate life together for such a long time.

JOHN FERGUSON

John is a native Houstonian and has over 27 years of business experience. He owns Nature's Way Resources, a composting company that specializes in high quality compost, mulch, and soil mixes. He holds a MS degree in Physics and Geology and is a licensed Soil Scientist in Texas.

John has won many awards in horticulture and environmental issues. He represents the composting industry on the Houston-Galveston Area Council for solid waste. His personal garden has been featured in several horticultural books and "Better Homes and Gardens" magazine. His business has been recognized in the Wall Street Journal for the quality and value of their products. He is a member of the Physics Honor Society and many other professional societies. John is is the co-author of the book *Organic Management for the Professional.*

For this newsletter, John contributes articles regularly and is responsible for publishing it.

MARK BOWEN

Mark is a native Houstonian, a horticulturist, certified permaculturist and organic specialist with a background in garden design, land restoration and organic project management. He is currently the general manager of Nature's Way Resources. Mark is also the co-author of the book *Habitat Gardening for Houston*

and Southeast Texas, the author of the book *Naturalistic Landscaping for the Gulf Coast*, co-author of the *Bayou Planting Guide* and contributing landscape designer for the book *Landscaping Homes: Texas.*

With respect to this newsletter, Mark serves as a co-editor and periodic article contributor.

PABLO HERNANDEZ

Pablo Hernandez is the special projects coordinator for Nature's Way Resources. His realm of responsibilities include: serving as a webmaster, IT support, technical problem solving/troubleshooting, metrics management, quality control, and he is a certified compost facility operator.

Pablo helps this newsletter happen from a technical support standpoint.

Confirm that you like this.

Click the "Like" button.