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Gardening Newsletter

March 8, 2019

Dear Friends,

Here is the 283th 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. (John is 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. . . .Email your thoughts to: lazygardenerandfriends@gmail.com. Thanks so much for your interest.

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Enjoy!



*This multi-petal-type rose at above left probably won't draw butterflies
(May be fake photo!) But other two roses are definitely butterfly-attractors*

ROSES FOR HABITAT GARDENS? YES . . . BUT NOT JUST ANY ROSES

By **BRENDA BEUST SMITH**

Have you've ever noticed, when anyone talks about putting in a Habitat Garden, they never mention roses. Why not?

I ran the question by former [Cockrell Butterfly Center](#) Director Nancy Greig, [Houston Rose Society](#)'s Gaye Hammond and longtime friend [Sally Ferguson](#) who shared this dilemma with Michael Marriott, Senior Rosarian and Technical Manager of [David Austin Roses Ltd](#) in Albrighton, England. And even more...

Generally butterflies are observed on tubular flowers that, as Nancy describes them, "don't really have a landing pad, but do contain nectar in a tube that is perfectly accessible to their long proboscis." Typical flowers, l to r below, include paintbrushes, pentas and porterweed.



Roses often don't fit this criteria. But it's been so interesting watching the changes in our gardening perspectives over the decades. Maybe it's time roses became part of these ecology-oriented waves of change?

Home rose growers usually position roses as a focal point. The formal look of hybridized tea rose always fit well into more structured landscapes long so popular in suburbia. They do better when their roots don't have to compete with other plant roots. And slight isolation makes necessary pruning easier.

In the mid-'80s, some gardeners decided to go "native," incorporating our local and state-wide "wildflowers" into their gardens, both for easier maintenance and as their ecological statements.

As usual the pendulum swings a little too far a little too quickly. We went through a rather polarizing period. Naturalistic (or native) landscape enthusiasts on one side (saving the ecology) and more manicured landscape proponents on the other (decrying what they saw as "messy" yards that lower property values).

It was an interesting time. Native plant enthusiasts sparked a growing interest gardening to help threatened flora & fauna. The [Texas Rose Rustlers](#) focus on shrubby old roses happily growing for centuries in old cemeteries and other abandoned rural properties helped bridge the gap between highly organized home landscapes and relaxed, environmentally-friendly natives-filled yards. (Best source on this fascinating group:

texasgardener.com/pastissues/marapr16/Rose-Rustlers.html

When the "native landscape" focus began spreading to schools it was no surprise that butterflies proved most entertaining for children. Somehow roses never made the list of recommended plantings for butterfly gardens. Truth is, most roses don't attract butterflies.

Ironically, all these memories were triggered by Sarah H. in Rosenberg. Sarah wrote asking which butterflies the "butterfly rose" would attract?

Sorry to disappoint you, Sarah, but the butterfly rose (*Mutabilis*) is so-called because its blossoms open yellow, turn pink and then crimson, creating a wonderful (albeit false) vision of masses of butterflies clustered on the limbs. (*Mutabilis* was named a [Texas A&M "Earth-Kind® Rose of the Year."](#))



Butterfly Rose (*Mutabilis*), left, and *Buddleia madagascarensis*

Now the scope has broadened and "Habitat Gardens" have been upgraded to "Pollinator Gardens," designed to attract an even wider variety of beneficial insects in a beautiful, organized home landscape setting.

It was Chris LaChance who came up with the phrase that I always thought helped push the gardening divide pendulum back toward center. She urged natives/butterfly/habitat/pollinator gardeners to always:

"Make your yard look INTENDED, not UNTENDED"

And that opens up whole new horizons. Including roses, maybe?

Fragrance is one prized aspect of antique roses (those known to have been in this country since were in existence before 1867 — the year the first recognized Hybrid Tea rose was introduced). Yet the role of fragrance in attracting butterflies is a bit vague. I loved Nancy Greig's comment about an experience at the Cockrell Butterfly Center:

"I don't think butterflies are as discerning in that arena as bees. Lots of butterfly flowers have little scent (pentas, porterweed, etc.) but conversely, the Buddleia species butterflies were most attracted to in the Butterfly Center (B. madagascarensis) had a strong odor of wet dog!" (See photo above)

After quizzing various rose & butterfly experts, I was amazed the only one who actually had personal experiences noting butterflies on specific roses was Houston Rose Society Rosarian Gaye Hammond:

"The ones (roses) I see butterflies on are typically the ones that have fragrance," Gaye said. "When I see a rose bush routinely visited by butterflies, I try to discern what is special about that plant. I have had to fight butterflies and bees off of Dr. Griffith Buck's 'Summer Wind,' which has a strong fragrance like Old Spice."

After 'Summer Wind.' Gaye says 'The Green Rose' * is "most favored" bush by her garden's butterflies. She agrees butterflies she's observed seem to favor roses with a relatively flat or open face that give them a landing pad on which to perch and feed. Not appealing, apparently, are heavy-petaled or florist type roses.

(*NOTE: Through mutations, The Green Rose has developed sepals instead of petals. It's said abolitionist Quakers planted these in their front yards to identify themselves as members of the Underground Railroad. Who else would tell you these things?)



'Summer Wind', left, and The Green Rose

Back to butterflies and roses, Gaye says the best choices for a habitat garden would be single roses and old-fashioned roses with semi-double form (two rows of petals with a loose open bloom shape). For example, some of the China, polyantha and noisette types (e.g. Caldwell Pink, Allister Stella Gray, OSO Easy Petit Pink, etc.)



L to r Caldwell Pink, Allister Stella Gray and OSO Easy Petit Pink

Spreading my queries even further, I touched base with more old friends, true "*horticulturists extraordinaire*," whose advice I treasure. And they all recommend "the right" roses for today's Pollinator Gardens.

- Mike Shoup of the [Antique Rose Emporium](#) pointed out many roses are favorites of bees, especially those with single or double flower forms, such as climbing roses like Cherokee, Mermaid, and Climbing Old Blush. These, Mike says, are usually covered in bees with the rose's spring bloom. And shrub roses like Mutabilis, Nearly Wild, and Ballerina are even better because they bloom repeatedly.



L to r, climbing roses Cherokee, Old Blush and Mermaid, with shrubs Nearly Wild and Ballerina.

- Greg Grant, Texas A&M AgriLife agent, [book author](#) & [The Arbor Gate](#) blogger, also recommends single petaled roses. And Dawn Stover with [Stephen F. Austin U gardens in Nacogdoches](#) adds, "Don't hesitate to add roses to the habitat if they please you. Surely the structure of them will also provide protection from the elements and roost potential. "

MERCER BOTANIC GARDENS' annual MARCH MART plant sale Mar. 15-16 would be the perfect time to check out Mercer's Rose Garden, located in front of the adjacent library (so deer can't eat the roses!). Mercer's Suzanne Chapman says its a popular site for pollinating bees. Although she's never specifically looked for butterflies among its many antique roses as well as others, she will from now on!

Many of the plants mentioned above should be available at [March Mart](#).

FRI.-SAT., MAR. 15-16: MARCH MART PLANT SALE, Fri., 10am-4pm; Sat., 8am-4pm. Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. 713-274-4160.

* * *

In the meantime, here are more upcoming rose/butterfly plants events, not the least of which is Gaye's important presentation:

- **THURS., MAR. 14: ROSE ROSETTE DISEASE UPDATE** by **GAYE HAMMOND** 7pm, Lott Clubhouse, 6201 Hermann Park Dr. Free. Houston Rose Society event. houstonrose.org.

Also mark your calendar for . . .

- **SAT., MAR. 30: TEXAS ROSE RUSTLERS SPRING SEMINAR**, 9am-1pm, 9655 FM 50, Independence, Tx. Free. Texasroserustlers.com
- **SAT., MAR. 30: TAKING CARE OF ROSES** by **JIM MAAS & LOTHAR BEHNKE**, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$25. 281-474-2488, maasnursery.com
- **SAT., APR. 6: COCKRELL BUTTERFLY CENTER SPRING PLANT SALE**, 9am-noon, Houston Museum of Natural Science, 5555 Hermann Park Dr. hmns.org, 713-639-4742

If you're considering incorporating roses into any kind of multi-variety setting, who better to offer overall design tips than Michael Marriott, senior Rosarian and technical manager of David Austin Roses Ltd in Albrighton, England. The incredibly beautiful British mixed gardens include so many plants that are related in size, color and form to our natives, these design tips should come in very handy. gardennewsbreak.com/david_austin/releases/2019_companions/

* * *

READERS CHIME IN . . .

- **FAIRY GARDENS.** Arlene Harbin is a fellow garden fairy enthusiast. But whereas I stick to silhouettes, Arlene likes vignettes, planted fairy niches in containers (below left), often using cuttings that root providing the right atmosphere. Among the many plants she will be recommending in her lecture below are easy-rooting favorites like polkadot plant, succulents, fig and other small leaf ivies, ajuga and even asparagus fern, although this requires regular haircuts: **TUES., MAR 19: WHAT TO DO WHEN FAIRIES INVADE YOUR GARDEN** by **ARLEEN HARBIN**, 10am; *St. Basil's Hall, 702 Burney Road, Sugar Land.* Free. Sugar Land Garden Club event. sugarlandgardenclub.org



- **DELORES GREGORY**, a fellow St. Agnes Fannin St. gal, asked the difference between brugmansia and datura. These floral cousins' blooms are almost identical. Both are called angel trumpet.

- **Brugmansia** flowers (above center) almost always point downward; Picture angels in heaven above playing to us. 15+/- ft. VERY easy to propagate. Break off a branch and plant. Tolerate some shade, well-drained soil, regular watering. Easiest for us.
- **Datura** flowers (above right) usually point upward. Full-sun 4' short-lived perennial shrubs, native to most of U.S. except the deep Southwest. Also called devil's trumpet, moonflowers, hell's bells, jimsonweed, devil's weed, thorn-apple. Prefer prolonged cold winter so are usually (not always!) short-lived here.

THANKS TO READERS who added to my search list of right-now yard color perennial plants (*come back with no work on my part after the initial planting*) so I don't have work outside in our typical cold wet winter-into-spring transition.

- **LEON MACHA'S CHINESE GROUND ORCHIDS.** I can only hope the ground orchids I just planted do as well as Leon's (below left) in his Eagle Lake garden left below. His started back in 1970 with three corms. Now he has maybe 1,000 of these early spring delights, especially counting the hundreds he's given away over the years



- **MARY JOHNSON** in Woodville says her most reliable "carryover" color through this often dreary season is dianthus. Her "Firewitch" dianthus (above center) bloomed off and on all winter, along with Tête-à-tête daffodils (above right).

* * *

Favor? Check to make sure submitted Calendar events are published.
Cyber-gremlins abound. If it's not in, let me know! lazygardener@sbcglobal.net

* * *

Brenda's column in the **LAZY GARDENER & FRIENDS HOUSTON GARDEN NEWSLETTER** is based on her 40+ years as the Houston Chronicle's Lazy Gardener.
Download PDF copies at www.natureswayresources.com

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NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS # 76

Bio-Solids or Sewage Sludge Revealed

Historically, biosolids (sewage sludge) have been dealt with common disposal practices including ocean dumping, landfilling, and incineration. When sewage sludge is buried in landfill it creates many problems hence landfill operators do not want it. Incineration creates toxic gasses and is very expensive and ocean dumping has been outlawed due to extreme environmental damage it causes. As a result, disposal prices are rising. To save money many cities are pelletizing it to sell as fertilizer or composting it. There is a limited market for this toxic material, hence several companies are using it in bagged products to sell to gardeners and homeowners. They believe that our yards and gardens are the perfect dumping ground.

Let's start our review of this issue with the following article by Dr. Snyder:

Ten Government-Industry Myths about Biosolids

Caroline Snyder Ph.D.*

MYTH NO. 1: For more than 2000 years industrial waste and sewage sludge have been land-applied as soil amendments. (Source: EPA i)

FACT : The myriad hazardous industrial chemical wastes found concentrated in modern treated sewage sludges (biosolids), including pesticides, pharmaceuticals, plasticizers, flame retardants and growth hormones to mention a few, did not even exist until recent decades.

MYTH NO. 2: Biosolids are nutrient-rich organic fertilizers. (Source: EPA ii)

FACT : It's highly deceptive to call mixtures of many thousands of industrial chemical pollutants "nutrient-rich", simply because several of the pollutants are nitrogen and phosphorus compounds found in commercial fertilizers. Biosolids produced from sewage sludges generated in industrial urban centers are undoubtedly the most pollutant-rich materials on Earth. When applied to land, industrial pollutants in biosolids re-enter aquatic systems and are magnified up the food chain. iii

MYTH NO. 3: Over 99% of biosolids is composed of water, organic matter, sand, silt, and common natural elements. (Source: NEBRA iv)

FACT : It's also deceptive to call mixtures of many thousands of industrial chemical pollutants "natural," especially when EPA and the biosolids industry are targeting consumers who use the words "natural" and "organic" to mean free of synthetic chemical contaminants.

MYTH NO. 4: Biosolids are essentially pathogen free. (Source: State of

California v)

FACT : Many if not most pathogenic (disease-causing) bacteria and viruses can survive treatment processes used to produce biosolids (Class A and Class B); and many dangerous pathogens, such as *Salmonella* and *Staphylococcus* , can re-grow to high levels in biosolids, which is mostly comprised of human feces. vi New research indicates that sewage sludge treatment facilities are actually breeding grounds for antibiotic-resistant pathogens. vii

MYTH NO. 5: Infectious prions will not survive wastewater treatment and therefore, are not present in land-applied biosolids. (Source: U. Arizona viii)

FACT : The latest research shows that prions survive wastewater treatment processes. ix

MYTH NO. 6: Biosolids are not sources of pathogens or toxicants. Sludge syndrome is a somatic disease triggered by biosolids odors and by fears raised in the community and through the media. (Source: Mid-Atlantic Biosolids Association x)

FACT : Odors from biosolids are a warning that the material is emitting disease causing pathogens and biological toxins, *e.g.* , endotoxins. Peer-reviewed scientific studies have demonstrated that resulting health effects are not imagined but real. xi

MYTH NO. 7: Allegations of health problems linked to biosolids exposure are urban myths. (Source: NEBRA xii)

FACT : Many hundreds of sludge-exposed rural neighbors have reported chronic respiratory, skin and gastrointestinal conditions consistent with exposures to the types of chemical and biological contaminants found in biosolids. The relationship between land application of biosolids and such adverse health effects has been documented in valid scientific studies, including the peer-reviewed scientific literature. xiii

MYTH NO. 8 : Treatment breaks down most organic chemical pollutants. (Source: NEBRA xiv)

FACT : EPA's 2009 Targeted National Sewage Sludge Survey of 74 sewage treatment plants in 38 states, which sampled 145 industrial chemical pollutants, found them in every sample. xv Their concentration ranges often topped ppm-levels and higher, exceeding concentrations considered safe in drinking water by orders of magnitude. Moreover, the breakdown products from organic chemical pollutants are often more harmful than the parent compounds. xvi

MYTH NO. 9: Biosolids contaminants are tightly bound to soil and do not become bioavailable. According to Rufus Chaney, "You can put enough heavy metals in the soil to kill the crop but that crop is still safe for human consumption." (Source: USDA xvii)

FACT : EPA and the USDA buried studies demonstrating heavy metals in biosolids exceeding current levels permitted by EPA caused liver and kidney damage in farm animals grazing on fields treated with biosolids. xviii. After EPA promulgated the current sludge rule in 1992, it worked with the Water Environment Federation to establish the "National Biosolids Public Acceptance Campaign." EPA's Office of Inspector General investigated EPA's efforts to silence Dr. David Lewis, one of its top scientists who documented adverse health effects, and concluded that EPA could not assure the public that land application of biosolids is safe. xix

MYTH NO. 10: US sludge regulations that govern the land application of biosolids (40 CFR Part 503) are completely protective, based on science and valid risk assessment models. (Source: NEBRA xx)

FACT : A 1999 Cornell Waste Management Institute paper concluded that the 503s do not protect human health, agriculture, or the environment. xxi The 503s regulate only nine metals plus inorganic nutrients (N, P). Even though industry can legally discharge any amount of hazardous waste into sewage treatment plants, the rules are based on chemical-by-chemical risk assessment which ignores the effects of mixtures and interactions. The 2002 NRC biosolids panel recognized this and concluded that “ *is not possible to conduct a risk assessment for biosolids at this time (or perhaps ever) that will lead to risk-management strategies that will provide adequate health protection without some form of ongoing monitoring and surveillance . . . the degree of uncertainty requires some form of active health and environmental tracking* . xxii

i R.K. Bastian. Interpreting Science in the Real World for Sustainable Land Application 2005; JEQ, 34,1:174.

ii EPA Fact Sheet.

<http://water.epa.gov/polwaste/wastewater/treatment/biosolids/>

iii Hale, R.C., M.J. LaGuardia, E.P. Harvey, M.O. Gaylor, T.M. Mainor, and W.H. Duff. Persistent pollutants in land applied sludges. *Nature* 412:140-141.

iv NEBRA, Response to Toxic Action Center's Toxic Sludge in Our Communities. March 3, 2003.

v CalRecycle. <http://www.calrecycle.ca.gov/organics/biosolids/>

vi Gattie, DK and DL Lewis. 2004. A high-level disinfection standard for land-applied sewage sludge (biosolids). *Environ. Health Perspect* . 112:126-31.

vii Gibbs, RA et al. 1997. Re-growth of faecal coliforms and salmonellae in stored biosolids and soil amended with biosolids. *Water Science and Technology* 35 (11-12).

viii Miles S.L; Takizawa, C.P. Gerba, and I.L. Pepper. 2011. Survival of Infectious Prions in Class B Biosolids. *J.Env..Sci. & Hlth* . 46: 364-370.

ix Kaplan N. Prions' Great Escape.

<http://www.nature.com/news/2008/080701/full/news.2008.926.html>

x Toffey, W.E. Biosolids Odorant Emissions as a Cause of Somatic Disease. Presentation to the 2007 North East Biosolids & Residuals Conference & Exhibit. Philadelphia Water Department. December 4, 2007.

xi Shusterman, D. 1992. Critical review; the health significance of environmental odor pollution. *Arch.Environ.Health* 47:76-87.

- xii NEBRA March 3, 2003 op.cit p. 10.
- xiii Lewis, D. L. et al. 2002. Interactions of pathogens and irritant chemicals in land-applied sewage sludges (biosolids) *BMC* 2:11.
<http://www.biomedcentral.com/1471-2458/2/11> ; Lewis, DL, Gattie DK. 2002. Pathogen risks from applying sewage sludge to land *Environ. Sci. Technol.* 36:286A-293A; Ghosh, J. 2005. Bioaerosols Generated from Biosolids Applied Farm Fields in Wood County, Ohio. Master of Science Thesis, Graduate College of Bowling Green State University. Abstract by Robert K Vincent, Advisor.
www.ohiolink.edu/etd/sendpdf.cgi/Ghosh%20Jaydeep.pdf?bgsu1131322484 ; Khuder, S. et al. *Arch. Environ. Health* 2007; 62, 5–11.
- xiv NEBRA. March 3, op.cit. p. 22.
- xv USEPA. Biosolids: Targeted National Sewage Sludge Survey Report - Overview, January 2009, EPA 822-R-08-014.
<http://water.epa.gov/scitech/wastetech/biosolids/tnsss-overview.cfm> ; See also Jennifer G. Sepulvado, Andrea C. Blaine, Lakhwinder S. Hundal, and Christopher P. Higgins. Occurrence and Fate of Perfluorochemicals in Soil Following the Land Application of Municipal Biosolids. *Environmental Science and Technology* , Publication Date (Web): March 29, 2011 (Article) DOI: 10.1021/es103903d
- xvi DL Lewis, W Garrison, KE Wommack, A Whittemore, P Steudler, J Melillo. Influence of environmental changes on degradation of chiral pollutants in soils. *Nature* 1999; 401:898-901; Paris DF, Lewis DL. Chemical and microbial degradation of ten selected pesticides in aquatic systems. *Residue reviews* 1973; 45:95-124.
- xvii MD Abernethy, "To sludge or not to sludge?: At summit, scientists discuss risks," Interview with R. Chaney, USDA. Green Consumer Headlines, Times-News, May 2, 2010.
<http://www.managemylife.com/mmh/articles/curated/278108>
- xviii US EPA Report: EPA-600/S1-81-026, 232 p. (Apr. 1981). "Sewage Sludge – Viral and Pathogenic Agents in Soil-Plant-Animal Systems." G.T. Edds and J.M. Davidson, Institute of Food and Agricultural Systems, University of Florida. An EPA Project Summary is available at <http://nepis.epa.gov/> by searching 600S181026 or key words in the title of the report.
- xix U.S. EPA Office of Inspector General Status Report - Land Application of Biosolids, 2002-S-000004, Mar. 28, 2002.
www.epa.gov/oig/reports/2002/BIOSOLIDS_FINAL_REPORT.pdf
- xx NEBRA, "Is biosolids recycling safe? How do we know?"
<http://www.nebiosolids.org/index.php?page=faqs>
- xxi Harrison, E.Z. McBride M.B. and Bouldin D.R. Land application of sewage sludges: an appraisal of the US regulations. *International Journal of Environment and Pollution*, Vol.11, No.1. 1-36. Retrieved at <http://cwmi.css.cornell.edu/PDFS/LandApp.pdf>. See also Case for Caution Revisited 2008 (revised 2009) retrieved at <http://cwmi.css.cornell.edu/case.pdf>. <http://cwmi.css.cornell.edu/PDFS/LandApp.pdf>. The 503 sludge rule can be found at <http://water.epa.gov/scitech/wastetech/biosolids/upload/fr2-19-93.pdf>
- xxii National Academy of Sciences, National Research Council. Biosolids Applied to Land: Advancing Standards and Practices, National Academy Press, Jul. 2, 2002. www.nap.edu/books/0309084865/html , *Citizens for Sludge-Free Land www.sludgefacts.org 9-6-13

Note: There is a very good book on how the government (EPA) falsified safety data on sewage sludge and the following cover up, by a whistle blower Dr. David Lewis. Evidence presented in Federal courts confirmed Dr. Lewis's testimony.

Science For Sale: How the US Government Uses Powerful Corporations and Leading Universities to Support Government Policies, Silence Top Scientists, Jeopardize Our Health, and Protect Corporate Profits, by David Lewis, PhD., Skyhorse Publishing, 2014, ISBN: 978-1-62636-071-6

Since Dr. Caroline Snyder wrote the above article there has been a lot of additional research published and material discovered on the dangers of sewage sludge (biosolids).

First, what is biosolids? Biosolids is the marketing name given to the sewage sludge cake produced from waste water treatment plants. It was coined by public relations firms to make toxic sewage sludge sound benign and even friendly. Remember: Biosolids = Sewage Sludge

Let us look at some of the new information that has become available that we will not hear about in the media.

There are hundreds of scientific reports on the dangers of artificial sweeteners from how they destroy the human enzyme system, to causing cancer, to causing weight gain. Another issue has emerged dealing with artificial sweeteners that they pass-through one's digestive system into the sewage sludge or waste water (purple pipe). These chemicals in the artificial sweeteners can cause good microbes in the soil to turn toxic (or become pathogenic) when the sludge itself, compost made from biosolids, or waste water from the dewatering of the sewage sludge is applied to the soil.

Another new issue has emerged with sewage sludge (biosolids) in recent years, is that it now contains radioactive isotopes from both medicine and industry that bio-accumulate in the sludge. These radioactive compounds cause DNA damage and increase the cellular damage from natural gamma radiation.

In addition, there are now many petrochemical derivatives in the sewage sludge and over 80,000 different chemicals have been identified. There has been NO testing on how they interact. Compost made from the sewage sludge like "Dillo Dirt" or fertilizer pellets like "Milorganite or Houactinite" (dried and pelletized sewage sludge) contain chemicals that cause many health problems from birth defects to cancer. Additionally, over 2 dozen human pathogens can survive the standard waste water treatment process.

Note: The Dr. Mercola's health e-newsletter had a recent article on this issue and it can be found at:

<https://articles.mercola.com/sites/articles/archive/2018/12/05/biosolids-contaminating-food.aspx?>

[utm_source=dnl&utm_medium=email&utm_content=art2&utm_campaign=20181205Z1_B_UCM&et_cid=DM251358&et_rid=486994883](https://myemail.constantcontact.com/Lazy-Gardener---Friends-Houston-Garden-Newsletter.html?utm_source=dnl&utm_medium=email&utm_content=art2&utm_campaign=20181205Z1_B_UCM&et_cid=DM251358&et_rid=486994883)

Antibiotic resistance is an issue causing more and more problems in our society today and now killing thousands of people every year. Antibiotics are fed to animals to make them grow faster and keep them alive from the unhealthy conditions of our factory farms. Doctor's increasingly prescribe antibiotics to their patients for any cause. Hence, pathogens with antibiotic resistant genes is excreted in the manure (human or animal). These antibiotic resistant genes can be transferred back to the environment and pose a serious threat to public health. Biosolid composting is only required to reach a temperature of 55 °C (131 °F) for a few days. However, it takes a temperature of 90 °C (194 °F) to kill these antibiotic resistant bacteria and destroy the genes. When one land applies sewage sludge (biosolids) or compost made from biosolids, these dangerous genes and bacteria are released back into the environment. Journal of Environmental Science and Technology, 2017.

Researchers recently found that there is another reason to avoid biosolids or compost from biosolids as they cause mineral imbalances in the soil. One of the issues is that the repeated use of biosolids leads to an excess of copper in our soils and when this occurs, the symptoms we see in our plants resembles an iron (Fe) deficiency. Hence, if we add iron, we make the soil problems worse. Another issue with using biosolids is that it is high in manganese (Mn). When there is too much manganese in our soil, the activity of required enzymes and hormones in plants are reduced. With excess manganese in the soil, many legumes will no longer fix nitrogen into the soil. High levels of manganese prevent plants from absorbing and using calcium (Ca) efficiently, which leads to a calcium deficiency in plants. This deficiency in turn, increases the insect and disease problems a gardener will encounter. High levels of manganese also stunts the growth of many plant species like Pines. A third issue is the high levels of zinc (Zn) often found in sewage sludge cake (131-1,670 ppm). In soils, levels of zinc over 500 ppm are known to prevent plants from absorbing other critical elements which lead to many long-term problems. Many plant species have been shown to accumulate zinc in their tissues to the point of death. Once the soil has been contaminated by excess elements (or toxins) it is very costly to fix the problems and takes a very long time.

Another new problem that occurs when biosolids are applied to the soil is that many plants suffer, even with low level exposure. The drugs (pharmaceuticals) left over in the sludge interferes with plant hormones that support the plants defense mechanisms against predators and diseases, thus increasing the problems. They also reduce a plants ability to absorb energy from sunlight and in some cases even caused a reduced level of chlorophyll due to too much magnesium (Mg) since sewage sludge has magnesium in it. At higher levels plants can experience stunted roots and burnt edges of leaves. The chemicals caused many plants to absorb so many elements that they were essentially poisoning the plants.

There are 27 toxic heavy metals known to cause health problems. However, the EPA only monitors 9 of the 27 toxic heavy metals. There are over 352 toxic chemical pollutants that have been identified in the sewage sludge, including pesticides, pharmaceuticals, and solvents. Of these 61 are listed as hazardous materials with known human health effects. Some of these include hormones (including those used in birth control pills), fire retardants, plasticizers, PCP's, dioxins, PFH's, etc. Other chemicals in sewage sludge are medicines from anti-depressants to steroids, detergents, fragrances, disinfectants like triclosan, antibiotics, hormones like estrogen, PCB's (poly chlorinated biphenyls), asbestos (two thirds of the sludges tested), pesticides, heavy metals (arsenic, mercury, lead, nickel, cadmium), dioxins, naphthalene, and other POP (persistent organic pollutants).

Note: Industry has manipulated the system to allow each company to dump 33 pounds of hazardous waste per month into the sewer without having to report it. The amount and type of toxics in sludge depends on the source and the treatment it has received.

Researchers at the Spanish Foundation for Science and Technology have found an association between esophageal cancer in people living in areas where soils have lead (Pb) in them. Lung cancers are higher in areas that have excess copper in them. Brain tumors are more common with soils that have arsenic in them. Bladder cancer is associated with soils with high cadmium levels. Journal of Environmental Geochemistry and Health, 2017; 40 (1): 283. All of these toxic and dangerous heavy metals are found in sewage sludge and they are not removed by pelletizing or by composting, or by changing the name from sewage sludge to "Biosolids".

In 2014 the United States Geological Survey analyzed nine different consumer products containing biosolids as a main ingredient, for 87 different chemicals found in cleaners, personal care products, pharmaceuticals, and other products. These analyses detected 55 of the 87 chemicals measured in at least one of the nine biosolid samples, with as many as 45 chemicals found in a single sample.

In 2014, the City of Charlotte discovered extreme levels of PCB's in their biosolids after being alerted by SCDHEC that illegal PCB dumping was taking place at regional waste water treatment plants across the state. Biosolids land application was halted after an emergency regulation was enacted by SCDHEC that outlawed any PCB contaminated biosolids from being land applied regardless if Class A or Class B. Very soon thereafter, SCDHEC expanded PCB fish consumption advisories for nearly every waterway bordering biosolids land application fields.

The most recent discovers of dangerous materials in biosolids is nano-particles that have showed up in the last few years. Health effects from these items are just beginning to be studied.

The current EPA regulations are outdated and no longer protect the public. Many of the diseases and illnesses reported in the media over the last few years have come from conventional crops fertilized with sewage sludge. This is

another reason to buy organic produce as sewage sludge is not allowed to be used.

Warning signs that a product contains sewage sludge or sewage sludge compost are the following Buzz words (the producers rarely tell you the truth or one would not purchase it):

Natural organic nitrogen

Naturally grows plants

Recycling symbol on the bags

Pictures of a mother and child or beautiful flowers

A big seal from some certifying agency

Meets strict EPA standards

EPA's exceptional quality compost (means it is sewage sludge)

**Note: The Biosludged full movie launched Wednesday, Nov. 28th, 2018:
See trailer 2 here, and prepare to be shocked**



Your world is being deliberately mass poisoned with toxic sewage sludge that's dumped on forests, food crops, city parks and public-school grounds. A massive, coordinated cover-up has been in place for years, making sure you never learn the truth about this deliberate environmental poisoning that's spreading toxins everywhere. Two years in the making, the Biosludge film launched Wednesday, Nov. 28, 2018, at Biosludged.com and BrighteonFilms.com. You can watch the full film for free, and you'll also be able to download the film's video file and post the full video to your own video channels. The full film is closed captioned for the hearing impaired.

Other Resources:

www.biosludge.news

www.BrighteonFilms.com

www.Biosludged.com

www.SourceWatch.org

www.NaturalNews.com

The book "Toxic Sludge Is Good For You", by John Stauber and Sheldon Rampton, 1995, Common Courage Press, ISBN: 1-56751-060-4 is about the public relations industry and how they try to green wash the risk factors of sewage sludge and compost made from sewage sludge.

Will sewage sludge make my grass green? Yes, one application will green up your grass or make hay grow faster. However, it starts the process of poisoning one's soil. Each application there after makes the issues worse. Many of the issues above can be reduced by different management techniques, different treatment systems and regulations to protect people rather than industry profits. Proper composting can also reduce many of the issues, however I have yet to find a company that does it in a manner to reduce these issues.

We as a society have to do something with our waste. If we would clean it up at the source and do not allow dumping of toxic chemicals into the sewers, then we would have a product that could help reduce some other environmental issues.

Have You Tried . . .

WOODLAND PAINTED PETALS

(*Anomatheca laxa*)

Also known as flowering grass, this unusual freesia has showy deep coral March-April flowers with 8-8" iris-like foliage that appears in fall/winter, then goes dormant in summer. Needs well drained soil and likes sun but tolerates some shade. Very drought tolerant bulbs.



Nature's Way Resources carries these freesias.

Or, contact independent nurseries or our sponsors below.

* * *

LAZY GARDENER & FRIENDS HOUSTON GARDEN NEWSLETTER

CALENDAR EVENTS

GARDEN/PLANT EVENTS ONLY

Events are in Houston unless otherwise noted. No events are picked up from newsletter, etc.

Events must be submitted in exact format below to lazygardener@sbcglobal.net

FRI: MAR. 8: NATIVE PLANTS ARE BEAUTIFUL TOO! by LINDA GAY, 10am, First Christian Church, 1601 Sunset Blvd. Free. houstonfederationgardenclubs.org

SAT., MAR. 9: HARRIS COUNTY MASTER GARDENERS PLANT SALE: TOMATO/PEPPER, HERBS, VEGETABLES, ROSES & PERENNIALS, 9am-1pm (or sellout), 19110 Longenbaugh, Cypress. Free. 713-274-0950; hcmga.tamu.edu

SAT., MAR. 9: SPRING VEGETABLE GARDENING CLASS II by Jim Maas, Pat Cordray & Paul Nesrsta, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$40. 281-474-2488, maasnursery.com

SAT., MAR. 9: USE SUCCULENTS & CACTI INDOORS & OUT, Cornelius Nursery, 2233 droppable-1551734082235 South Voss Road. Free. calloways.com

SAT., MAR. 9: 11th ANNUAL FORT BEND COUNTRY MASTER GARDENERS' SPRING VEGETABLE-HERB PLANT SALE, 9am-noon, AgriLife Extension office, 1402 Band Rd, Rosenberg. fbmg.org/events/annual-sales/vegetable-herb-sale/; 281-341-7068; FortBendmg@ag.tamu.edu.

SAT., MAR. 9; HONING IN ON SPRING GARDEN, 8-10am, & START VEGETABLE GARDEN, 10:30am-12:30pm, AgriLife Extension Office, 9020 Airport Rd, Conroe. \$5 each/\$8 both. Montgomery County Master Gardener event. 936-539-7824; mcmga.com

SAT., MAR 9: PECKERWOOD GARDEN OPEN DAY, 10am-2pm tours, 20559 FM 359 Road, Hempstead. \$10. peckerwoodgarden.org, 979-826-3232

MON., MAR 11: CLIMATE CHANGE AND YOUR GARDEN by Dr. Bob Randall, 6:30-9pm, Good Shepherd Episcopal Church, 2929 Woodland Hills, Kingwood. Free. Lake Houston Gardeners event. lakehoustongardeners.org

TUES., March 12: GROWING PLUMERIAS, 7:00-9:00pm, Cherie Flores Garden Pavilion, 1500 Hermann Drive. Plumeria Society of America event. Free. theplumeriasociety.org

TUES., MAR. 12: CONTAINER GARDENING by LUCY HARRELL, 9 am, Shenandoah Municipal Complex, 29955 I-45 North, Shenandoah. Free. The Woodlands Garden Club event. thewoodlandsgardenclub.org

THURS, MAR. 14 ROSE ROSETTE DISEASE - WHAT YOU NEED TO KNOW by Gaye Hammond 7pm, Lott Clubhouse, 6201 Hermann Park Dr. Free. Houston Rose Society event. houstonrose.org

THURS., MAR 14: SMALL SCALE BACKWARD COMPOSTING by John Ferguson, 10-11:30am, PLANT SALE, Genoa Friendship Gardens Educational Center Building, 1202 Genoa Red Bluff Road, Pasadena. Free. Harris County Master Gardener event. 713-274-0950; hcmga.tamu.edu

THURS., MAR. 14: HERBS – 6:30-8:30pm, Barbara Bush Library, 6817 Cypresswood Dr., Spring. Free. Harris County Master Gardener event. 713-274-0950; hcmga.tamu.edu

FRI.-SAT., MAR. 15-16: MARCH MART PLANT SALE, Fri., 10am-4pm; Sat., 8am-4pm. Mercer Botanic Garden, 22306 Aldine-Westfield, Humble. Free. 713-274-4160.

SAT., MAR. 16: BROMELIAD SOCIETY/HOUSTON SALE, 9 am – 4 pm, Judson Robinson Jr. Community Center, 2020 Hermann Dr. Free. bromeliadsocietyhouston.org

SAT., MAR. 16: HERBS, 10:30am-12:30pm, Maud Smith Marks Library, 1815 Westgreen Blvd., Katy. Free. Harris County Master Gardener event. 713-274-0950; hcmga.tamu.edu

SAT., MAR. 16: PLANT EDIBLES THAT THRIVE IN SMALL SPACES, Cornelius Nursery, 2233 South Voss Road. Free. calloways.com

SAT., MAR 16: HAVING FUN GROWING & KILLING COOL PLANTS IN TULSA by DR. TODD LASSEIGNE, 11:30am, free. GARDEN TOUR, 10am, \$10, 20559 FM 359 Road,

Hempstead. Free. Register:

eventregistration@peckerwoodgarden.org, peckerwoodgarden.org, 979-826-3232

SAT., MAR. 16: PRUNE LIKE A PRO & RUSTLE UP SOME NATIVES! by HEATHER THORMAHLEN-MOLIK, 10am, Bluebonnet House & Garden Center, 5095 Main St., FM-1155, Chappell Hill. -

SAT., MAR. 16: POLLINATION, POLLINATORS & GARDENING by ED ERWIN, 11 am-noon, Wabash Feed & Garden, 4537 N. Shepherd. Free. Register: bit.ly/2SEJxAw. wabashfeed.com, 713-863-8322.

SUN., MAR 17: WATERING PLANTS MADE EASY (DIY AUTOMATIC WATERING) by FRED ROBINSON, 2pm, Judson Robinson Jr. Community Center, 2020 Hermann Dr. Free. Texas Gulf Coast Fern Society event. tgcfernsoc.org .

TUES., MAR. 19: HERBS, 6:30-8:30pm, Spring Branch Memorial Library, 930 Corbindale. Free. Harris County Master Gardener event. 713-274-0950; hcmga.tamu.edu

TUES., MAR 19: WHAT TO DO WHEN FAIRIES INVADE YOUR GARDEN by ARLEEN HARBIN, 10am; St. Basil's Hall, 702 Burney Road, Sugar Land. Free. Sugar Land Garden Club event. www.sugarlandgardenclub.org

TUES. MAR 19: INSECTS AND OTHER PESTS IN THE GARDEN/GREENHOUSE by RAY PAGE, 7pm, West Gray Multi-Service Center, 1475 West Gray St. Free. Bromeliad Society event. bromeliadsocietyhouston.org .

THURS., MAR. 21: BIRD MIGRATION: HOW PLANTS HELP by SARAH FLOURNOY, 6:45-8:30pm; Houston Arboretum, 4501 Woodway. Free. Native Plant Society of Texas/Houston Chapter event. npsot.org/houston

THURS., MAR. 21: HERBS – 6:30-8:30pm, Freeman Branch Library, 16616 Diana Ln. . Free. Harris County Master Gardener event. 713-274-0950; hcmga.tamu.edu

SAT., MAR. 23: ORANGE COUNTY MASTER GARDNERS ANNUAL BLOOMIN' CRAZY PLANT SALE, 8am-1pm, Cormier Park, 8235 FM 1442, Orangefield, Free, 409 882-7010, <https://txmg.org/orange>

SAT. MAR 23: TOMATO STRESS MANAGEMENT by IRA GERVAIS, 9-11 am; SNAKE SENSE by TOM WILKS, 1-3pm, AgriLife Extension Bldg, Carbide Park, 4102-B Main (Hwy 519), La Marque. Free. Register: Galveston County Master Gardener event. galvcountymgs@gmail.com ; 281-309-5065, aggie-horticulture.tamu.edu/galveston/index.html

SAT. MAR. 23: USE EDIBLES AS ORNAMENTALS, Cornelius Nursery, 2233 South Voss Road. Free. calloways.com

SAT., MAR. 23: MONTGOMERY COUNTY MASTER GARDENERS SPRING PLANT SALE 9am-Noon. AgriLife Extension, 9020 FM 1484 Rd, Conroe. Free. mcmga.com; 936-539-7824.

SAT., MAR 23: PECKERWOOD GARDEN OPEN DAY, 10am-2pm tours, 20559 FM 359 Road, Hempstead. \$10. peckerwoodgarden.org, 979-826-3232; eventregistration@peckerwoodgarden.org

SUN., MAR. 24: RESTORING NATURE THROUGH PERMACULTURE (4 classes). First: 10am-3pm, Shlenker School, 5600 N. Braeswood. \$190. Urban Harvest event. Register: 713-880-5540; urbanharvest.org/classes-calendar

SUN., MAR. 24: ORGANIC FERTILIZING & PEST CONTROL by Marti Graves, 2-3pm. Klein United Methodist Church, 5920 FM 2920, Spring . Cypress Creek Daylily Club event. Free. cypresscreekdaylilyclub.simplesite.com

TUES., MAR. 26: HARRIS COUNTY MASTER GARDENERS OPEN GARDEN DAY, 10-11:15am, Weekley Community Center, 8440 Greenhouse Rd, Cypress. Free. Register (by Mar. 24): ogd.harrishort@gmail.com

FRI., MAR. 29: CYPRESS CREEK DAYLILY CLUB ANNUAL PLANT SALE, 9am-4pm. Klein United Methodist Church, 5920 FM 2920, Spring, TX 77388. Cypress Creek Daylily Club event. Free. cypresscreekdaylilyclub.simplesite.com

SAT., MAR. 30: HARRIS COUNTY MASTER GARDENERS PLANT SALE: PEPPERS PERENNIALS & PLANTS, 9am-1pm (or sellout), Campbell Hall, Pasadena Fairgrounds, 7600 Red Bluff Rd., Pasadena. Free. 713-274-0950; hcmga.tamu.edu

SAT., MAR. 30: BASIC ORGANIC VEGETABLE GARDENING, 9:30am-noon, Houston Museum of Natural Science, Moran Conference Room, 5555 Hermann Park Dr. \$30. Urban Harvest event. Register: 713-880-5540; urbanharvest.org/classes-calendar

SAT., MAR. 30: TAKING CARE OF ROSES CLASS JIM MAAS & LOTHAR BEHNKE, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$25. 281-474-2488, maasnursery.com

SAT. MAR 30: BUTTERFLIES & NATIVE PLANTS by LISA NICKLOW DAVIS, 9-11 am; BENEFICIALS IN THE GARDEN, 1-3 pm, AgriLife Extension Bldg, Carbide Park, 4102-B Main (Hwy 519), La Marque. Free. Register: Galveston County Master Gardener event. galvcounnymgs@gmail.com ; 281-309-5065, aggie-horticulture.tamu.edu/galveston/index.html

SAT., MAR. 30: TEXAS ROSE RUSTLERS SPRING SEMINAR, 9am-1pm, Green Meadows, 9655 FM 50, Independence. Free. Texasroserustlers.com

SAT. MAR 30: BUTTERFLIES & NATIVE PLANTS by LISA NICKLOW DAVIS, 9-11 am; BENEFICIALS IN THE GARDEN, 1-3 pm. AgriLife Extension Bldg, Carbide Park, 4102-B Main (Hwy 519), La Marque. Free. Register: Galveston County Master Gardener events. galvcounnymgs@gmail.com; 281-309-5065, aggie-horticulture.tamu.edu/galveston/index.html

SAT. MAR. 30: PICK PERFECT PLANTS WITH YEARLY COLOR, Cornelius Nursery, 2233 South Voss Road. Free. calloways.com

Sat., MAR 30: BUDDING OUT FESTIVAL, 10am-4pm, 20559 FM 359 Road, Hempstead. Free. peckerwoodgarden.org, 979-826-3232; eventregistration@peckerwoodgarden.org

SAT., MAR. 30: THE WOODLANDS GARDEN CLUB ANNUAL SPRING PLANT SALE, 8 am, Farmer's Market, Grogan's Mill. Free. The Woodlands Garden Club event. thewoodlandsgardenclub.org

SAT., APR. 6: HERB GARDENING CLASS by JIM MAAS & PAT CORDRAY, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$40. 281-474-2488, maasnursery.com

SAT., APR. 6.: WHITE OAK GARDEN SPRING PLANT SALE, 10am-2pm (or sell-out); SALE PREVIEW by HEIDI SHEESLEY, 9am, White Oak Conference Center, 7603 Antoine Dr. Free. nnmd.org

SAT., APR. 6: SFA GARDENS GARDEN GALA DAY PLANT SALE, 9am-2pm, SFA Pineywoods Native Plant Center, 2900 Raguet St., Nacogdoches. Free, sfagardens.sfasu.edu

SAT., APR. 6: COCKRELL BUTTERFLY CENTER SPRING PLANT SALE , 9am-noon, Houston Museum of Natural Science, 5555 Hermann Park Dr. hmns.org/spring-plant-sale, 713-639-4742

SAT., APR 6: COLLECTIONS LOCATED ACROSS THE CREEK PECKERWOOD INSIDER'S TOUR, 10am, 20559 FM 359 Road, Hempstead. \$15. Register: eventregistration@peckerwoodgarden.org, peckerwoodgarden.org, 979-826-3232

SAT. APR 6: SUCCESSFUL CONTAINER GARDENING by KAROLYN GEPHART & KAYE COREY, 10:30 am-12:30 pm, & **GARDENING FOR JEWELS—HUMMINGBIRDS** by DEBORAH REPASZ. Friendswood Public Library, 416 S. Friendswood Dr, Friendswood. Free. Register: galvcountrymgs@gmail.com. Galveston County Master Gardener event. 281-309-5065, aggie-horticulture.tamu.edu/galveston

TUES., APR. 9: GARDENS OF EUROPE by VIVIANE TONDEUR, 9am, Shenandoah Municipal Complex, 29955 I-45 North, Shenandoah. Free. The Woodlands Garden Club event. thewoodlandsgardenclub.org

WED., APR. 10: INCREDIBLE EDIBLES, noon–2pm, Mercer Botanic Gardens, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160

THURS.-SUN., APR. 11-14: BONSAI ON THE BAYOU – AMERICAN BONSAI SOCIETY 2019 NATIONAL CONVENTION, Marriott Houston Westchase, 2900 Briarpark Dr. Houston Bonsai Society/The Lone Star Bonsai Federation hosts. houstonbonsaisociety.com

FRI: APR. 11: PLANT SALE and REFUGEES FROM THE ANIMAL KINGDOM by MARGARET PICKELL. 10am, First Christian Church, 1601 Sunset Blvd. Free. houstonfederationgardenclubs.org

THURS, Apr. 11 HYBRIDIZING, A CHILD CAN DO IT AND SO CAN YOU by Mary Fulgham 7pm, Lott Clubhouse, 6201 Hermann Park Dr. Free. Houston Rose Society event. houstonrose.org

SAT., APR. 13: EDIBLE LANDSCAPES, 9:30-11:30am, Houston Museum of Natural Science, Moran Conference Room, 5555 Hermann Park Dr. \$30. Urban Harvest event. Register: 713-880-5540; urbanharvest.org/classes-calendar

SAT., APR. 13: WILD THYMES HERB CLASS by JIM MAAS & MELDA SIEBE, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$25. 281-474-2488, maasnursery.com

SAT. APRIL 13: WHICH, WHAT & HOW OF SPRING BLOOMS, 8-10am, & **MULTIPLYING YOUR BLOOMS**, 10:30am-noon, AgriLife Extension Office, 9020 Airport Rd., Conroe. \$5 each/\$8 both. Montgomery County Master Gardener event. 936-539-7824; mcmga.com

SAT., APR 13: PECKERWOOD GARDEN OPEN DAY, 10am-2pm tours, 20559 FM 359 Road, Hempstead. \$10. peckerwoodgarden.org, 979-826-3232

SAT. APR 13: BENEFICIALS IN GARDEN by DR. WILLIAM M JOHNSON, 1-3 pm. Friendswood Public Library, 416 S. Friendswood Dr., Friendswood. Free. Register: galvcountrymgs@gmail.com. Galveston County Master Gardener event. 281-309-5065, aggie-horticulture.tamu.edu/galveston

SAT., APR. 20: HANGING BASKETS CLASS by JIM MAAS & PAT CORDRAY, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$25. 281-474-2488, maasnursery.com

FRI., APR 20: "CAMELLIA RESEARCH – SPECIES AND CULTIVARS" with Dr. Jiyuan Li, 11:30am, free. **TOUR**, 10am, \$10. 20559 FM 359 Road, Hempstead. peckerwoodgarden.org, 979-826-3232; eventregistration@peckerwoodgarden.org

WED., APR. 24: SUMMER VEGETABLE PLANTING, 6-7pm, McGovern Centennial Family Gardens, 1500 Hermann Dr. \$20. Urban Harvest event. Register: 713-880-5540; urbanharvest.org/classes-calendar

FRI.-SUN., APR. 26-28: KINGWOOD GARDEN CLUB HOME & GARDEN TOUR, 10am-4pm Fri.-Sat.; noon-4pm Sun. Tickets: kingwoodgardenclub.org.

SAT., APR. 27: PLANTING IN GLASS CLASS by JIM MAAS & PAT CORDRAY, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$35. 281-474-2488, maasnursery.com

SAT., APR. 27: 2019 OLEANDER GARDEN FESTIVAL & GRAND OLEANDER SALE, 2624 Sealy Ave, Galveston.oleander.org

SAT., APR 27: PECKERWOOD GARDEN OPEN DAY, 10am-2pm tours, 20559 FM 359 Road, Hempstead. \$10. peckerwoodgarden.org, 979-826-3232; eventregistration@peckerwoodgarden.org

SUN., APR. 28: GINGERS-TROPICAL BEAUTIES FOR SUMMER GARDENS by Ceil Dow, 2-3pm. Klein United Methodist Church, 5920 FM 2920, Spring. Cypress Creek Daylily Club event. Free. cypresscreekdaylilyclub.simplesite.com

SAT., MAY 4: GARDENING FOR BUTTERFLIES & BEES CLASS by JIM MAAS & PAT CORDRAY, 10am, Maas Nursery, 5511 Todville Rd., Seabrook. \$40. 281-474-2488, maasnursery.com

SAT.-SUN., MAY 4-5: BROMELIAD SOCIETY / HOUSTON SHOW & SALE, Show 2 pm-5 pm Sat.; 11 am-3 pm Sun., Sale 9 am-5 pm Sat.; 11 am-3 pm Sun., Judson Robinson Jr. Community Center, 2020 Hermann Dr. Free. Bromeliad Society / Houston event. bromeliadsocietyhouston.org

TUES., MAY 7: GROWING PLUMERIAS, 7-9pm, Cherie Flores Garden Pavilion, 1500 Hermann Drive. Free. Plumeria Society of America event. theplumeriasociety.org

WED., MAY 8: TEXAS SNAKES, noon-2pm, Mercer Botanic Gardens, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

SAT., MAY 11: SQUARE FOOT GARDENING, 9:30-11:30am. Houston Museum of Natural Science, Moran Conference Room, 5555 Hermann Park Dr. \$30. Urban Harvest event. Register: 713-880-5540; urbanharvest.org/classes-calendar

SAT., MAY. 11: DAYLILY FLOWER SHOW & PLANT SALE, 1-3pm. Gethsemane Lutheran Church, 4040 Watonga, Houston, TX 77092 Free. cypresscreekdaylilyclub.simplesite.com

SAT., JUNE 8: PLUMERIA SOCIETY OF AMERICA SHOW & SALE, 9:30am-3:00 pm, Bay Area Community Center, 5002 E Nasa Parkway, Seabrook. Free. theplumeriasociety.org

WED., JUNE 12: BEHIND SCENES AT A BOTANIC GARDEN, noon-2pm, Mercer Botanic Gardens, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

TUES., July 9: GROWING PLUMERIAS, 7-9pm, Cherie Flores Garden Pavilion, 1500 Hermann Drive. Free. Plumeria Society of America event. theplumeriasociety.org

WED., JULY 10: TREE IDENTIFICATION. Noon-2pm, Mercer Botanic Gardens, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

SAT., JULY 13: TROPICAL SYMPOSIUM, 8:30am-4pm, Mercer Botanic Gardens, 22306 Aldine-Westfield, Humble. Fee. Register: 713-274-4160.

SAT., JULY 20: PLUMERIA SOCIETY OF AMERICA SHOW & SALE, 9:30am-3:00 pm, Bay Area Community Center, 5002 E Nasa Parkway, Seabrook. Free. theplumeriasociety.org

WED., AUG. 14: BIRDS OF A FEATHER IN YOUR GARDEN, noon-2pm, Mercer Botanic Gardens, 22306 Aldine-Westfield, Humble. Free. Register: 713-274-4160.

TUES., Oct. 8: GROWING PLUMERIAS, 7-9pm, Cherie Flores Garden Pavilion, 1500 Hermann Drive. Free. Plumeria Society of America event. theplumeriasociety.org

SAT. DEC. 14, 2019: CHAPPELL HILL GARDEN CLUB CHRISTMAS HOME TOUR, 10am-5pm., Chappell Hill. \$20 advance/\$25 tour day. 713-562-6191; 979-337-1200

If we inspire you to attend any of these,
please let them know you heard about it in . . .
THE LAZY GARDENER & FRIENDS NEWSLETTER!
& please patronize our Newsletter & Calendar sponsors below!

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

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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 Pablo Hernandez 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 the co-author of the book Organic Management for the Professional.

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

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 and quality control.

Pablo helps this newsletter happen from a technical support standpoint.



Confirm that you like this.

Click the "Like" button.