May-1-2024 | Issue 535

LAZY GARDENER AND FRIENDS NEWSLETTER



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Nature's Way Resources owner John Ferguson, "The Lazy Gardener" Brenda Beust Smith and Pablo Hernandez welcome your feedback and are so grateful to the many horticulturists who contribute their expertise

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Daylilies turning exotic corners! L to r: 'Tickle The Octopus", 'Get Jiggy', 'Loma Prieta', 'Bougle's Eyelashes' and 'Chaos Choreography.'

'Most species of nematodes are beneficial, some species attack/feed on pest larva in the soil such as grub worms, fleas, ticks, even fire ants, while others help cycle nutrients.' -- John Ferguson, "JOHN'S CORNER" (below)

FEEL THE ENERGY'? NOW EXCITING TO PLANT . . .

Gardeners say it all the time -- "I love being in my garden" — "I feel tired but so happy after I've worked in the garden!" — "Gardening just seems to clear my mind and make me forget all my problems at least for a short time . . ."

Scientists may think the above, but trust them to take an observation one step further -- "<u>HOW</u> does gardening make me feel better?"And then -- as scientists will do -- they researched, triggering growing interest in "dirt-deficiency" in childhood allergies, asthma, etc.

According to **Forging New Lives**, ". . . It seems that skin contact with a certain, specific bacterial microbe found in soil, Mycobacterium vaccae, may release serotonin (that) relaxes us, helps ward off depression and makes us feel happy. <u>forgingnewlives.com/blog-posts/the-science-behind-gardening-happiness</u>.

(NOTE: John delves deeper into this in his column below.)

So neighbors won't wonder, before you run outside to sniff some soil, check news of potential great "planting possibilities" below, both of which will draw daylily enthusiasts from across the nation and beyond. And read Lone Star Daylily Society's **PAUL ESKINE**'s Spotlight Article on a few of eye-popping new looks for daylilies available at Lone Star's sale.

- SAT., MAY 4: LONE STAR DAYLILY SOCIETY FLOWER SHOW/DAYLILY SALE. Sale: 8am-3pm; Show: 1-3pm, Alvin Senior Center, 309 W. Sealy, Alvin. Free. *Ionestardaylilysociety.org*, 281-331-0162.
- SAT., MAY 11: HOUSTON HEMEROCALLIS DAYLILY SHOW/ SALE. Sale: 10am-3pm. Show 1-3pm. 4040 Watonga Dr. Free. <u>Society.www.ofts.com</u>>hhs.

But first . . .

Potpourri

- WANNA KNOW WHERE MOST HUMMERS are heading from here? JOURNEY NORTH keeps track of not only hummers but butterflies, etc., throughout the year - comings and goings. And they are always looking for more reports! Great project for kids and the young-at-heart. <u>maps.journeynorth.org/map/</u> map=hummingbird-rufous-first&year=2024
- MOTHER NATURE ALWAYS LAUGHS LAST! SALLY O'NEEL in Friendswood and I share whatwe-both-thought were Peggy Martin roses that should grow huge but thornless. Both are about 4 years old, thick-growth only about 3' tall and covered with minute thorns! What's going on? (*Pictured: mine*)





NOT PEGGY MARTINS? Houston Rose Society's **GAYE HAMMOND** says our so-called "Peggy Martins" were more-likely-than-not mislabeled at the retailer. No one really knows what Peggy Martins were called before she became famous.

Usually (Mother Nature does march to her own drummer) PM roses grow quite large and have no thorns. The only way to tell for would be to do DNA testing (not economically feasible). But, this is good to know. Have questions about Peggys or other roses --- antique or modern? For truly knowledgeable answers, tune in to the nation's largest rose society's . . .

THURS., MAY 9: BEST OLD GARDEN ROSES FOR HOUSTON (virtual) 7-9pm,Houston Rose Society event. Free. https://us06web.zoom.us/j/84372499703?pwd=abhQyD5cxCCgLV

• Now -- did you notice the eye-popping new look in daylilies at top fo this column? Prepare to be wowed by even more below!

* * *

Brenda Beust Smith's column is based on her 40+ years as Houston Chronicle's Lazy Gardener --- Email: lazygardenerbrenda@gmail.com Note: This column focuses ONLY on the Greater Houston area. * * *

LONE STAR DAYLILY SOCIETY

Lazy Gardener and Friends Houston Garden Newsletter

Spotlighting . . .



Left to right: 'Gooficus' (Cascade), 'Liliana Katelyn Joy' (Crispated/Cascade), 'Adventures in Oz' (Cascade)'and "Blue Eyed Bandit' (Crispate).

DAYLILIES TAKING TURN TO EXOTIC, UNUSUAL, PATTERNED!

By PAUL ESKINE Lone Star Daylily Society

A more recent registration class of daylilies that is based on the form of the daylily is not based on size, or color, or color patterns, but exclusively on Form. The purpose of the class is to recognize daylilies that do not fit the Spider classification.

There are now **Crispates**, **Spatulates**, and **Cascades**, and combinations that have been on the market the last several years.

- **The Crispate** can have pinched, twisted, or quilled floral segments. The Pinched have sharp folds, the Twisted have a corkscrew effect and the Quilled turn upon themselves in a tubular shape.
- The Spatulate is markedly wider at the end like a kitchen spatula.
- The Cascade has narrow curling or cascading segments, resembling wood shavings.
- **The Patterned Daylily:** Although daylily flowers can have a variety of colors, the term pattern is reserved for designs beyond the basic colors.

They have different colors or variations in hue, value, or saturation is such a way that a design is formed. There can be repeating or irregular patterns. Some of the daylilies have concentric rings or feathering of color within the eyezone or elsewhere on the flower. Some have stippling or variegation within

the daylily.

EDITOR'S NOTE: All these daylilies will be available (in various quantities) at the big **SAT., MAY 4: LONE STAR DAYLILY SOCIETY FLOWER SHOW AND DAYLILY SALE**, Sale 8am-3pm, Show 1-3pm, Alvin Senior Center, 309 West Sealy, Alvin. Free, *Ionestardaylilysociety.org*, 281-331-0162.

* * *



John's Corner

NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS # 283

Subject: Healthy Soils – part 5

Continuing our discussion of what is a healthy soil, we are going to continue with the third part below.

1) Organic matter from almost fresh to totally decomposed in the form of humus (humins, humic, ulmic, and fulmic acids)

- 2) Minerals (nutrients, sand, silt, and clay)
- 3) Soil life (microbes and macrobes)
- 4) Air & water
- 5) Plant choices
- 6) Care for and do not destroy the health of the soil one has

Today we will be looking at the life in the soil from microbes to macrobes. When I was in college there was only a few paragraphs about soil biology in all my courses, the focus was the physics and chemistry of the soils.

Today we know the biology of the soil is many times more important than the physics and chemistry combined! If, we get the soil biology working correctly, the biology will tend to fix the physics and chemistry issues, given the correct resources.

This is the 3rd major component of a healthy soil, the most important, the most frequently neglected, and the most easily destroyed. One pound of healthy soil, barely a double handful, will contain over 9 billion microbes. Not million but billion, and some studies are now suggesting trillions of microbes in a pound of real healthy soil!

As these microbes live and grow, they break down silicates and other minerals releasing the nutrients. Many of these microbes can obtain nitrogen from the air which is then assimilated into their bodies in the form of proteins, enzymes, amino acids, vitamins, etc. all which are beneficial to plants, insects, wildlife and ultimately humans.

Why is this ability to obtain nitrogen from the air so important to soils? The nitrogen molecule (N_2) has what as known in chemistry as a triple bond and requires a lot of energy to break it apart and release the nitrogen atoms in a

form that can be used. This may be for the microbes to form proteins and other molecules or to be stored in the soil as a mineral till the nitrogen is needed.

Note: This is why after a thunderstorm that had lots of lightning, all our plants look fresher and greener the following day. The powerful electrical energy breaks apart this triple bond and the ionized nitrogen atom dissolved in the rain is absorbed through the leaves of our plants.

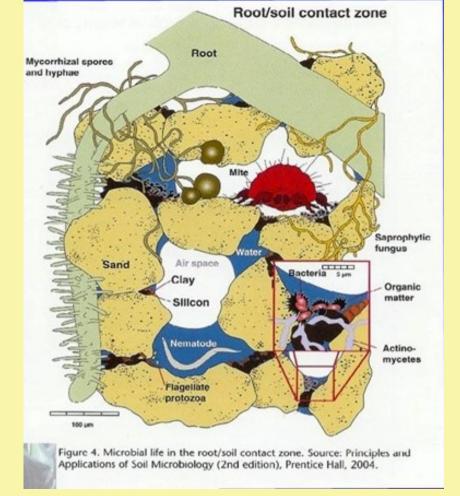
The microbes consist of bacteria, fungi, protozoa, nematodes, microarthropods, and many others. Microbes are what turns dirt into soil and even heavy clay into beautiful loam over time. They give the soil body and texture, as well as the feel and smell of healthy soil. These microbes produce chemicals that stimulate our brains that help us feel and work better. The scents they produce stimulates the production of serotonin, dopamine, endorphins, and other beneficial hormones in our bodies.

Microorganisms break down organic matter and other detritus into useful soil products like humus, releasing the nutrients in the process. Microorganisms help create soil aggregates, creating channels through which plants roots grow, soil animal's move, and water percolates.

The photo below shows soil particles in white and the dark organic matter mainly humus with lots of glomalin in it glueing the soil particles together.



The soil life by gluing the soil particles together helps create air space, improves the ability of air and water to move through the soil as illustrated in the diagram below.



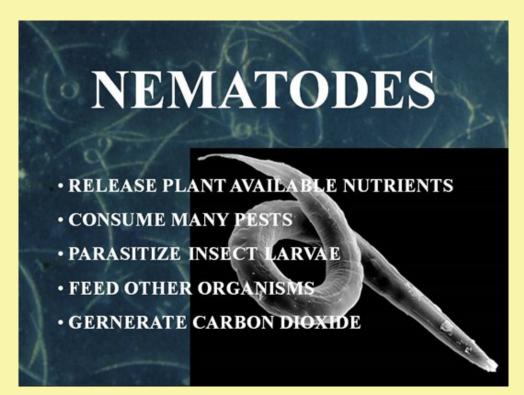
Microbes protect roots from pathogens. Mycorrhizal fungi have been shown to benefit plants by enhanced nutrient absorption, increased drought tolerance, improved transplant survival, and reduced susceptibility to root diseases.

In the slide below the pine seed has just germinated, and only has a tap root and two small spur roots. The rest of the whitish filaments is mycorrhizal fungi. The roundish white nodules are nitrogen fixing bacteria.



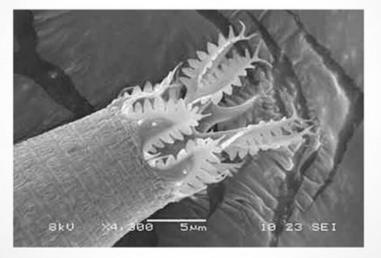
This fungus has expanded the root zone hundreds of times to collect water and nutrients for the plant.

Mycorrhizal fungi increase the effective length and mass of root systems enabling the plant to absorb nutrients better, they also convert nutrients in to a form easier for plants to use and absorb. As the root mass and size increase moisture can be absorbed from a much larger area giving plants greater drought resistance. Additionally, several species of fungus, traps, attacks, and destroys parasitic nematodes. Over 1,400 species of nematodes have been identified and only 20 are bad for plants. Most species of nematodes are beneficial, some species attack and feed on pest larva in the soil such as grub worms, fleas, ticks and even fire ants, while others help cycle nutrients.



The nematode shown below has special mouth parts that look like rakes. This allows the nematode to rake bacteria or protozoa into his mouth for food. Bacteria are the most nitrogen rich lifeform on earth and when the bacteria are eaten the excess nitrogen and other elements from the bacteria bodies are released in the nematodes poop feeding our plants.

Bacteria-eating nematode



Researchers have discovered a group of fungi that protect lawn grasses from

pests. The fungus is called endophytes and lives in a symbiotic relationship that benefits both plant and fungus. The fungi produce toxins that are harmless to the grass (and humans) but repel chinch bugs, sod webworms and other surface feeding insects. Research at Rutgers University indicates that grass plants inoculated with endophytes are more vigorous, and able to stand drought and weed invasions better.

The photo below shows a fungus degrading some organic material, turning it into humus and releasing the nutrients into the soil.



A couple other examples are microarthropods and Tardigrades or Tardigate often called water bears.



In addition to the army of microbial workers we also have the macrobes. These include earthworms, beetles, centipedes, ants, arthropods, burrowing frogs, etc. These animals churn and till the soil increasing the porosity and tilth. This burrowing action has been found to stimulate root growth in most plants.

Of this group earthworms are the most valuable and a gardener's best friend. Many species of earthworms eat many pathogenic species of bacteria and fungi. They also produce powerful plant growth hormones called auxins. It is in their castings and it is in the mucus that they line their tunnels with. If one has a healthy population of earthworms, you will never need to mechanically aerate your soil. An average population of earthworms can dig 250 miles of tunnels per acre per week

An acre of soil can be home to 500,000 earthworms

✓ Earthworms can burrow more than five feet through the soil even if it is compacted.

Earthworms can increase nutrient availability by 500%.

 Earthworms create 100 times their own weight in castings per year.

✓ Earthworms disperse mycorrhizae.

✓ And they increase gas exchange with the atmosphere.

The rich fertile soil shown below from my back yard was once hard sticky black clay known as the Beaumont clay which runs across south Houston.

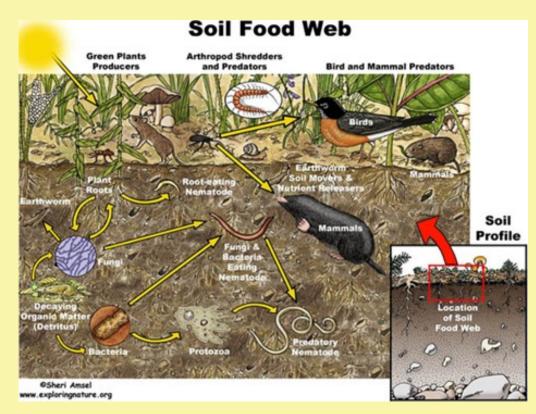


All these organisms work together to produce healthy fertile soil.

Soil Health

Type of Organis	m number/acre	pounds/acre
Bacteria 800,0	000,000,000,000,000	00,000 2,600
Actinobacteria	20,000,000,000,00	00,000 1,300
Fungi	200,000,000,000,	000 2,600
Algae	4,000,000,000	90
Protozoa	2,000,000,000,00	0 90
Nematodes	80,000,000	45
Earthworms	40,000	445
Insects /arthrop	ods 8,160,000	830
		Soil Food Web

The whole model of how soil health and fertility works is known as "The Soil Food Web."



For gardeners whom want to have a beautiful yard, save money by using modern biological methods (organic), and eliminate exposure to toxic cancercausing chemicals, the following books are written for homeowners and are excellent.

Teaming with Microbes, A Gardener's Guide to the Soil Food Web, 2nd Edition, by Jeff Lowenfels & Wayne Lewis, Timber Press, 2006, ISBN-13:978-0-88192-777-1

Teaming With Fungi: The Organic Growers Guide to Mycorrhizae, by Jeff Lowenfels, Timber Press, 2017, ISBN: 978-160469-729

Teaming With Bacteria: The Organic Growers Guide to Endophytic Bacteria and the Rhizophagy Cycle, by Jeff Lowenfels, Timber Press, 2022, ISBN: 978-1-64326-139-3

LAZY GARDENER & FRIENDS **HOUSTON GARDEN NEWSLETTER CALENDAR EVENTS**

CALENDAR SUBMISSION RULES PLEASE READ! EVENTS MUST BE OPEN TO & CAPABLE OF HANDLING PUBLIC ATTENDENCE

- Use ONLY this (3-line max) format & style for FASTER INCLUSION. DAY, DATE: TITLE by NAME (*if talk*), time, address, Fee/free. Sponsoring group (if not in title). website/phone (NO MORE!)
 Only events submitted specifically for LG&F calendar are used
 Actual gardening/plant events only.No harvesting, cooking, etc.
 No events picked up from flyers / NO PDFS! TYPE IN EMAIL
 Submit larvestore thread of grammit and Check published entryl

- Submit: <u>lazygardenerbrenda@gmail.com</u>. Check published entry!
- All events on-site and in Houston unless otherwise noted
- Making us retype to our required format opens door to errors
 ALWAYS PROOF PUBLISHED WORDING & TEST EMAIL
- YOU are responsible for telling us about cancelled events

THURS., MAY 2: HEALTHY SOIL, HEALTHY PLANTS by JOHN FERGUSON, 9am, Waller County Extension Office, 846 6th St., Hempstead, Free, RSVP 979-826-7651

SAT., MAY 4: LONE STAR DAYLILY SOCIETY FLOWER SHOW AND DAYLILY SALE, Sale 8am-3pm, Show 1-3pm, Alvin Senior Center, 309 West Sealy, Alvin. Free, lonestardaylilysociety.org, 281-331-0162.

SAT-SUN MAY 4-5: HOUSTON BROMELIAD SOCIETY SHOW AND SALE. Noon-4 pm Sat.; 11am-3pm Sun. Judson Robinson Community Center, 2020 Hermann Dr. (Hermann Park). Free. bromeliadsocietyhouston.org

SUN., MAY 5: PLUMERIAS 1:30-4:30pm Bay Area Community Center, 5002 E. NASA Pkwy. Plumeria Society of America event. Free, theplumeriasociety.org/

MON., MAY 8: PLANT PROPAGATION by HARRIS COUNTY MASTER GARDENERS, 10:30am. Tracy Gee Community Center, 3599 Westcenter Dr. Free. hcmga.tamu.edu

THURS., MAY 9: BEST OLD GARDEN ROSES FOR HOUSTON (virtual) 7-9pm,Houston Rose Society event. Free. us06web.zoom.us/j/84372499703? pwd=abhQyD5cxCCqLV

FRI.-SAT., MAY 10-11: HOUSTON CACTUS AND SUCCULENT SOCIETY SPRING SALE. Fri: 9am-5 pm, Sat: 9am-3 pm. Free. Metropolitan Multi-Service Center, 1475 W. Gray. <u>hcsstex.org</u>

SAT, MAY 11: HOUSTON HEMEROCALLIS DAYLILY SHOW AND SALE, Sale: 10am-3pm. Show 1-3pm.4040 Watonga Dr. Free. <u>Society.www.ofts.com</u>>hhs

SAT., MAY 13: SUMMER GARDENING by HARRIS COUNTY MASTER GARDENERS, 10am, Fonteno Senior Education Center, 6600 Bissonet St. Free. hcmga.tamu.edu

MON., MAY 13: IDENTIFYING "GOOD & BAD" BUGS by HARRIS COUNTY MASTER GARDENERS (virtual), 10am- 11:30am. Free. Register to receive link: hcc.idloom.events/gardening-series/register

WED., MAY 15: GARDENING FOR BEGINNERS by HARRIS COUNTY MASTER GARDENERS, 9am, Peckham Aquatic and Fitness Center, 5597 Gardenia Ln. Katy. Free. <u>hcmga.tamu.edu</u>

TUES., MAY 16: RAISED BED GARDENING by HARRIS COUNTY MASTER GARDENERS, 11am, Glazier Senior Ed Center, 16600 Pine Forest Ln. Free. <u>hcmga.tamu.edu</u>

MON., MAY 20: OPEN GARDEN DAY by HARRIS COUNTY MASTER GARDENERS, 8:30am- 11am. Free tour of Genoa Friendship Gardens, 1210 Genoa Red Bluff Rd. <u>hcmga.tamu.edu</u>

TUES., MAY 21: IDENTIFYING "GOOD & BAD" BUGS by HARRIS COUNTY MASTER GARDENERS (virtual), 11am- Noon. Facebook Live. No reservation required: <u>facebook.com/harriscountypl/events</u>

WED., MAy, 22: ASCLEPIADACEAE - MY JOURNEY WITH STINKY STARRY SUCCULENTS by PHILIP RICHARDS, PhD. 7pm. Metropolitan Multi-Service Center, 1475 W. Gray. *Houston Cactus and Succulent Society*

MON., MAY 29: PERMACULTURE GARDENING by HARRIS COUNTY MASTER GARDENERS, 10am, Fonteno Senior Education Center, 6600 Bissonet St. Free. hcmga.tamu.edu

- MARK YOUR CALENDAR FOR THESE FUTURE EVENTS! -

SUN., JUNE 2: GROWING BEGONIAS IN HOUSTON???? 2-4pm, Plants for All Seasons - 21328 State Hwy 249. Houston Astro Branch Begonia Society. begoniahouston.org: facebook.com/BegoniaHouston

TUE., JUN. 4: RAINWATER HARVESTING by **HARRIS COUNTY MASTER GARDENERS**, 6pm, Pasadena Public Library, 4330 Fairmont Pkwy. Pasadena. Free. <u>hcmga.tamu.edu</u>

SAT., JUNE 8: PLUMERIA SALE #1 , 9 am -1:30pm Bay Area Community Center, 5002 E. NASA Pkwy , Seabrook, Texas 77586 Free access to sale. <u>*theplumeriasociety.org/*</u>

MON., JUN. 10: SEED SAVING AND STARTING by HARRIS COUNTY MASTER GARDENERS (virtual), 10am- 11:30am, Free. Register in advance to receive link: <u>hcc.idloom.events/gardening-series/register</u>

WED., JUN. 12: RAINWATER HARVESTING by HARRIS COUNTY MASTER GARDENERS, 10:30am, Tracy Gee Community Center, 3599 Westcenter Dr. Free. <u>hcmga.tamu.edu</u>

THURS., JUN. 13: COMPOSTING by HARRIS COUNTY MASTER GARDENERS, 1pm, Katy Branch Library, 5414 Franz Rd. Katy. Free. <u>hcmga.tamu.edu</u>

MON., JUN. 17: GENOA FRIENDSHIP GARDEN- OPEN GARDEN DAY, 8:30am- 11am, Free tour of Genoa Friendship Gardens, 1210 Genoa Red Bluff Road. <u>hcmga.tamu.edu</u>

TUES., JUN. 18: SEED SAVING AND STARTING by HARRIS COUNTY MASTER GARDENERS (virtual), 11am- 12pm. *facebook.com/harriscountypl/events*

WED., JUN. 20: RESIDENTIAL RAINWATER HARVESTING by HARRIS COUNTY MASTER GARDENERS, 10am, Glazier Senior Ed Center, 16600 Pine Forest Ln. Free. <u>hcmga.tamu.edu</u>

TUE., JUN. 25: COMPOSTING by **HARRIS COUNTY MASTER GARDENERS**, 10am, Steve Radack Community Center, 18650 Clay Rd. Free. <u>hcmga.tamu.edu</u>

WED., JULY 13: TROPICAL PLANT SYMPOSIUM, Mercer Botanic Garden, 22306 Aldine-Westfield. . <u>friendsofmercer.com/</u>

If your event didn't get in right away, one possible reason is you didn't submit it in our EXACT - NEVER CHANGING format. These usually take longer to be re-formatted and open doors to errors. Your choice! SEE TOP OF CALENDAR FOR DETAILS.

* * *



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!

If you are interested in becoming a sponsor, please contact us at 936-273-1200 or send an e-mail to:<u>lazygardenerandfriends@gmail.com</u>









Complete Organic Solutions

About Us

BRENDA BEUST SMITH

WE KNOW HER BEST AS THE LAZY GARDENER ...

but Brenda Beust Smith is also:

- * a national award-winning general feature 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 -started in the early '70s as a fun side-project to reporting -- it became ranked as the longest-running, continuously-published local newspaper column in the Greater Houston area. The name, she says, is not just fun, it's true.

Brenda's gradual sideways step from general reporting into also doing gardening reporting led first to an 18-year series of when-to-do-what *Lazy Gardener Calendars*, then to her *Lazy Gardener's Guide* book which morphed into her *Lazy Gardener's Guide on CD*, which she now emails free upon request.

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

For over three decades, Brenda served as Assistant Production Manager of the **GARDEN CLUB OF AMERICA'S "BULLETIN"** magazine. Although still an active 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 Humble, TX, and is married to the 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.

About her column, Brenda says: "I don't consider myself a 'garden writer." I started out 50+ years ago as a very lazy "gardening reporter." I still feel that way today. I hope my columns inspire/help newcomers, but I do not write to them. I write to very experienced gardeners who want to expand their horizons.

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.

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.



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