



January 30, 2015

Dear Friends,

Here is the 92nd issue of our weekly gardening newsletter for Houston, the Gulf Coast and beyond. This is a project of The Lazy Gardener, Brenda Beust Smith, John Ferguson and Mark Bowen (both 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. . . Email your thoughts to: lazygardenerandfriends@gmail.com. Thanks so much for your interest.

Please or sign yourself up to receive this newsletter by clicking the "Join Our Mailing List" link just below. We will never sell or share our mailing list to protect the privacy of our subscribers.

Enjoy!

[JOIN OUR MAILING LIST!](#)

BY BRENDA BEUST SMITH



Recognize this flower at left? If you want its fruit, need to pick these blooms off! Center, Want to harvest healthy foods as Glazier Senior Education center community garden participants are pictured doing here? Better plant now. And that goes for, right, tomatoes too!

AVOCADOS . . . STARTING SEEDS . . . "HEIRLOOM" ROCKS! . . . GET GOING ON TOMATOES NOW!

What is it suddenly with avocados? In our area, they're a staple of life, but . . . advertising on the Super Bowl? Touted as mood-lifters, great sources for protein?

And then . . . oops! shortage! Avopocalypse! Prices going up! Seems they're all over my internet headlines.

Remember when we used to poke toothpicks in avocado seeds and started them in water? It was such fun to watch them split and grow - provided, of course, you could remember which end went up!

The "lazy" among us started them in pots. That way, you could lay them on their sides. Didn't seem to bother the seeds which usually sprouted anyway. We'd put 3-4 seeds to a pot and produce a nice little green plant. No one expected them to actually bear fruit or to even make it through winter.

It was in 2005 that I saw my first avocado-on-a-tree in the Greater Houston area. A Chronicle reader said it was growing from an avocado seed from Mexico. Now we know varieties from Mexico are the ones that do best here.



The blooms at top of this column were photographed on this avocado tree at left (variety 'Fantastic') at Nature's Way Resources' nursery. They currently carry 'Opal' and 'Wilma' but will have others coming in. Center: point goes up if you're going to start one in water. Right, fruit may be green or black, depending on the variety.

Recommended avocado varieties best for the Greater Houston area gardens include 'Brazos Belle,' 'Don Juan,' 'Joey,' 'Pancho,' 'Lila,' 'Mexicola' and 'Mexicola Grande.' The remaining upcoming Master Gardener fruit tree sales will each carry some, but not all, of these avocado varieties. Check our Calendar, below, for more details on each sale and the "Details:" link for which ones will be at which sale:

- * Sat., Jan. 31: Harris County MG Sale in Bear Creek Park
- * Sat., Feb. 7: Galveston County MG Sale at Wayne Johnson Community Center in Carbide Park
- * Sat., Feb. 14: Harris County MG Fruit Tree Sale at Campbell Hall, Pasadena Fairgrounds, 7600 Red Bluff Rd., Pasadena. Details: hcmga.tamu.edu/Public/pubSales.aspx.
- * Sat., Feb. 21: Brazoria County MG Sale at Brazoria County Fairgrounds, 901 Downing, Angleton

* * *



Need ideas on how to celebrate the "[Year of The Soil](#)"? The Soil Science Society of America offers some great (edible!) "[dirt](#)" [dessert recipes](#), including, left, cakes and, center, puddings. And Land's End is offering "[I Love Soil](#)" T-shirts.

* * *



START THOSE SEEDS NOW! Left to right, Hortense, Irene, Steven, Ron and the other 55+ participants who volunteer at the Glazier Senior Education Center Community Garden have already started their heirloom seed varieties. These will be transplanted into outdoor gardens when weather permits.

Thanks to Glazier Community Garden Organizer Ron Ritcher for this insight on heirloom seeds:

Seeds that have been saved and passed from one generation to another due to the quality, taste and proven track record year in and year out are known as Heirloom Seeds. Most go back over 100 years providing a consistent source for seeds will perform in a garden or farm arena. They are open-pollinated which means the same plant will come up the next growing season.

GMOs (Genetically Modified Organisms) and hybrids can be saved and replanted but all

bets are off in getting the same plant the next growing season. Quality of taste is sacrificed for uniformity and yield.

At Glazier, for the Spring Community garden, we select eight varieties of Heirloom Tomato, based upon color, size and number of days from planting to harvest. We selected Black Prince 70 , Purple Russian 75, Green Zebra 75 , Glacier 55, Moneymaker 80, Tommy Toe 75 , German Lunchbox 80 and Yellow Pear 78. All tomatoes are started inside, 3 per container, using a grow lamp so the light and temperature can be controlled. Once the plants germinate and the real leaves come out, we will be transplanting to another container to allow more space for each plant. As the weather gets warmer, plants will be taken outside so that they can get used to the wind and sun before going to their home in the garden.

A Harris County Precinct 3 and Commissioner Steve Radack project, the Glazier Center at 16600 Pine Forest Lane (713-274-3250) welcomes all seniors (55+) for its many free programs (See Calendar below). If you have extra plants to share, Glazier will hold a Plant and Seed Swap Thurs., March 5, 10-11 am on the patio. Donated plants should be already prepared for distribution. Details: (713) 274-3250; email: glaziersec@hctx.net. Located South of Clay and Hwy. 6 in West Houston.

* * *

SKIP ON TOMATOES! If your tomatoes aren't already started in protected pots, then you can't claim to be a Serious Tomato Grower. Get started now, and you'll probably still be way ahead of your neighbors. Below, Harris County AgriLife horticulturist Skip Richter shares tips on producing great tomatoes.

** Brenda's GROUP LECTURES include: "How to Reduce the Size of Your Front Lawn to Save Water Without Infuriating Your Neighbors," "Landscaping for Security," "10 Commandments of Lazy Gardening," and "What's Blooming in the Lazy Gardener's Garden." Details: lazygardener@sbcglobal.net. * Brenda's "LAZY GARDENER'S GUIDE" - a when-to-do-what in Greater Houston area gardens - is now available on CD only (pdf file). \$20. Checks payable to Brenda B. Smith and mailed to: Lazy Gardener's Guide on CD, 14011 Greenranch Dr., Houston, TX 77039-2103.*



"Six Steps to Great Spring Tomatoes"

Robert "Skip" Richter, M. Agr.
Harris County Extension Agent - Horticulture
email: rrichter@ag.tamu.edu

Picture your garden with large healthy plants loaded with ripe tomatoes, plump and bursting with flavor. Here are five simple steps to help you grow the crop of your dreams.

1) Select a Sunny Location. Sun is essential for productive plants with tasty fruit. Sun makes carbohydrates which are needed to set flower buds and which make the fruit tasty and sweet. At least 6 hours of sun is needed.

2) Prepare the Soil Well. Mix in several inches of well decomposed organic matter prior to planting. Raised beds may be needed to help drain away excess water. If you are growing your plants in containers don't use garden soil. Select a quality growing mix for best results.

3) Choose Adapted Varieties. Everyone has their favorite tomatoes and there are dozens of great choices. Select varieties with days-to-harvest intervals of 65 days or less. Those with over 75 days to harvest are less likely to produce a good crop in our climate.

Select varieties that are disease resistant. The letters after the variety name indicate disease resistance. For example, "VF1F2NTA" indicates resistance to Verticillium Wilt, two strains of Fusarium wilt, Root Knot Nematodes, Tobacco Mosaic Virus and Alternaria. A few suggestions:

* slicing type tomatoes : First Lady, Celebrity, Tycoon, Tygress, and Bush Early Girl. * small fruit types: Juliet (grape type), Sweet Million, Sun Gold, and the large cherry type Sweet Chelsea.

4) Plant Early. We have a very short spring growing season before the blazing heat of summer arrives and production drops. Start with varieties that set fruit quickly, plant them early and grow them fast. Cherry types are better about continuing to set fruit in the summer heat, but the skin can get tough during hot weather.

You can plant several weeks before the last frost date if you wrap clear plastic around your tomato cages and fold the top over to form a mini greenhouse around each plant. Just open the top of the wrapped cages during the day to allow heat to escape.

5) Give Proper Care and Feeding. Water new transplants in with a starter fertilizer solution or fish emulsion and seaweed. Then feed them every few weeks using a product with a 4-1-2 or 3-1-2 ratio of nutrients. When they begin to set fruit you can increase the feeding to keep the plants vigorous and healthy. Keep the soil moist to avoid moisture stress. Keep an eye out for pests and diseases. Early detection and control is important.

* * *

Mark your calendar for the upcoming Saturday, Feb. 28, Harris County Master Gardener Tomato & Pepper Sale & Symposia at the AgriLife Extension office, 3033 Bear Creek Dr. Details: <http://hcmga.tamu.edu/Public/pubSales.aspx>

WEEKLY GARDENING EVENTS & ANNOUNCEMENTS

CALENDAR

Gardening events only. Events listed are in Houston unless otherwise noted. Events must be written in the format used below, specifically earmarked for publication in the "Lazy Gardener & Friends Newsletter." Email to lazygardener@sbcglobal.net

Sat., Jan. 31: Harris County Master Gardeners Fruit Tree Sale and Symposia. 9am-1pm, County Extension Office, 3033 Bear Creek Dr. Preview at 8am. Details: hcmga.tamu.edu/Public/pubSales.aspx

Sat., Jan. 31: Winter Tree ID Walk, 10am & 2pm, Jesse H. Jones Park & Nature Center, 20634 Kenswick Dr., Humble. Free. Details: www.hcp4.net/jones or 281-446-8588

Sat., Jan. 31: Growing Great Tomatoes (Part 2) by Ira Gervais, 9-11:30am, and **Growing Blueberries** by Dr. David Cohen, 1-3pm, Galveston County Agri-Life Extension in Carbide Park, 4102 Main, La Marque. Free but reservations required at 281-534-3413. Details: www.aggie-horticulture.tamu.edu/galveston

Sat., Jan. 31: Fruit Tree Basics, by Dany Millikin, 9-11:30am, University of Houston Campus, 4361 Wheeler. \$35. Details: 713-880-5540, www.urbanharvest.org/classes-calendar

Sun., Feb. 1: Basic Propagating: Seeds & Cuttings by Angela Chandler, 1:30-3:30pm, Wbush Feed & Garden Store, 5701 Washington Ave. Free. Details: <http://wabashfeed.com>; 713-863-8322

Wed., Feb. 4: Bonsai Repotting Round Table, 7:30pm, Hermann Park Garden Center, Houston. Houston Bonsai Society event. Details: www.houstonbonsai.com

Thurs., Feb. 5: 30th Annual Fort Bend Vegetable Conference, 8am-3:30pm, Fort Bend County Fairgrounds, Buildings B&C, 4310 Hwy 36 S, Rosenberg. \$25 (\$20 before Jan. 26). Sponsored by Fort Bend, Austin, Brazoria, Colorado, Galveston, Harris Waller and Wharton Counties. Details/registration: agriliferegister.tamu.edu/FortBend or 979-845-2604.

Fri.-Sun., Feb. 6-8: Houston Cactus & Succulent Society Plant Sale, Texas Home & Garden Show, NRG Center, 1 Reliant Parkway. Details: <http://texashomeandgarden.com/show-info/attendee-info-houston-spring-2015>

Sat., Feb. 7: Galveston County Master Gardeners Annual Fruit, Citrus Tree and Vegetable Sale, Wayne Johnson Community Center in Carbide Park, 4102 Main, La Marque. 8am - Preview of Sale Plants by John Jons; 9am-1pm - Sale. Details: www.aggie-horticulture.tamu.edu/galveston; 281-534-3413.

Sat., Feb. 7: Compost Class, 10-11am, The Woodlands Township Parks, Recreation and Environmental Services Campus, 2801 Millennium Forest Drive, The Woodlands. Free. Co-sponsored by The Woodlands Township, Montgomery County Master Gardeners, Nature's Way Resources and Waste Management. Details: <http://thewoodlandstownship-tx.gov> or 281-201-3800

Sat., Feb. 7: Starting Transplants for Your Garden by Dr. Joe Novak, 9-11am, White Oak Conference Center, 7603 Antoine. \$20. Near Northwest Management District event. Details/registration: www.nnmd.org or 713-895-8021.

Sat., Feb. 7: 7th Annual Texas Camellia Show, 1-4pm, Katy and E. Don Walker Sr, Education Center, 1400 19th St Huntsville. Hosted by Coushatta Camellia Society. Free. Details: Don Marcotte, funny-fam2@sbcglobal.net; 936-661-1101

Sat., Feb. 7. Water Wise Your Landscape. 9 a.m. to noon. The Woodlands Township, 2801 Technology Forest Dr., The Woodlands. A Gardening 101 Seminar. Free, but registration is required at [Gardening 101](http://Gardening101.org) or call 281-210-3800

Thurs., Feb. 12. 7 p.m. Local Snakes 101. 7 p.m. McCullough Jr. High School, 3800 S. Panther Creek Dr., The Woodlands. A Walk in the Woods Nature Lecture. Free. [Walk in the Woods Nature Lecture](http://WalkintheWoods.org) or call 281-210-3800

Sat., Feb. 7: Real Food, Fruits in the Garden, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Mon., Feb. 9: Building Healthy Soils Saves Money Now, 6:30pm, Multi-Service Center, 1475 W. Gray. Free. Houston Urban Gardeners (HUG) event. Details: www.houstonurbangardeners.org

Thurs., Feb.12 : Rose Pruning Demonstrations, 7:30pm, St. Andrews Episcopal Church Parish hall, 1819 Heights Blvd. Free. Houston Rose Society event. Details: www.houstonrose.org

Thur., Feb. 12, Spring Vegetables - Harvesting Know How by Harris County Master Gardeners. 6:30-8:30pm, Barbara Bush Library, 6817 Cypresswood Dr., Spring, TX. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Sat., Feb. 14: HarrisCounty Master Gardener Fruit Tree Sale, 9am-1pm, Campbell Hall, Pasadena Fairgrounds, 7600 Red Bluff Rd., Pasadena. Details: hcmga.tamu.edu/Public/pubSales.aspx

Sat., Feb. 14: Make Your Garden Grow - Really! by Dr. Joe Novak, 9-11am, White Oak Conference Center, 7603 Antoine. Near Northwest Management District event. \$20. Details/registration: www.nnmd.org or 713-895-8021.

Sat., Feb. 14. Spring into Vegetable Gardening. 9 a.m. to noon. The Woodlands Township, 2801 Technology Forest Dr., The Woodlands. Free, but registration is required at [Vegetable Gardening](http://VegetableGardening.org) or call 281-210-3800.

Sat., Feb. 14: Growing Great Tomatoes by Jean Fefer, 9-11:30am, University of Houston Campus, 4361 Wheeler. \$35. Details: 713-880-5540, www.urbanharvest.org/classes-calendar

Sat., Feb. 14: Create a Valentine Memory, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Tues., Feb. 17: Plant a Diverse Garden by Chris LaChance, 10am, Knights of Columbus Hall, 702 Burney Road, Sugar Land. Sugar Land Garden Club event. Details: <http://sugarlandgardenclub.org/>

Tues., Feb. 17: Spring Vegetables-Harvesting Know How by Harris County Master Gardeners, 6:30-8:30pm, 930 Corbindale. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600

Thur., Feb. 19: Spring Vegetables - Harvesting Know How by Harris County Master Gardeners. 6:30-8:30pm. Freeman Branch Library, 16616 Diana Lane, Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Thurs., Feb. 19: Registration deadline for the Sat., Feb. 21: Backyard Basics: The Food Garden, 9-11am, Bud O'Shieles Community Center, 1330 Band Rd, Rosenberg. \$15. Fort Bend AgriLife Extension and Fort Bend Master Gardeners event. Details/Registration: fortbend.agrilife.org/backyard-basics or 281-342-3034.

Fri., Feb. 20: Rose Pruning by Baxter Williams, 10-11am, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Free. Details: 713-274-3250; <http://www.pct3.hctx.net/senior/glaziersec.aspx>

Sat., Feb. 21: Brazoria County Master Gardeners Fruit and Citrus Tree Sale. Details: brazoria.agrilife.org

Sat., Feb. 21: Composting for the Home Garden Garden by Dr. Joe Novak, 9-11am, White Oak Conference Center, 7603 Antoine. Near Northwest Management District event. \$20. Details/registration: www.nnmd.org or 713-895-8021.

Sat., Feb. 21: Texas Tuff landscape Plants - Blooming and Beautiful by Sandra Duvall, 9-11:30am, and **Kitchen Gardening" by Mary Demeny**, 1-3pm, Galveston County AgriLife Extension in Carbide Park, 4102 Main, La Marque. Galveston County Master Gardener event. Free. Reservations: 281-534-3413; galv3@wt.net. Details: www.aggie-horticulture.tamu.edu/galveston

Sat., Feb. 21: Organic Gardening and Landscaping Seminar by Mike Serant, John Ferguson and Dany Millikin. 9 a.m. to noon. The Woodlands Township, 2801 Technology Forest Dr., The Woodlands. An Organic Horticulture Benefits Alliance regional seminar. Free, but registration is required [Organic Gardening and Landscaping Seminar](http://OrganicGardeningandLandscapingSeminar.org) or call 281-210-3800

Sat., Feb. 21: Spring Vegetables - Harvesting Know How by Harris County Master Gardeners. 10am-Noon. Maude Smith Marks Library, 1815 Westgreen Blvd. Katy, TX. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Sat., Feb. 21: Earth-Kind Gardening for Texas, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Sun., Feb. 22: Constructing the Home Vegetable and Fruit Garden by Dany Millikin, 9-11:30am, Westbury Community Garden, 12581 Dunlap St., \$35. Details: 713-880-5540, www.urbanharvest.org/classes-calendar

Tues., Feb. 24: Harris County Master Gardeners Open Garden Day, Spring Vegetable Gardening: 9am- noon: 10am adult workshop, children's activities. Free. AgriLife Extension Office, 3033 Bear Creek Dr. Details: <https://hcmga.tamu.edu>

Tues., Feb. 24 "The ABC's of Home Composting" by Ken Steblein, 9-11am, Galveston County AgriLife Extension in Carbide Park, 4102 Main, La Marque. Galveston County Master Gardener event. Free. Reservations: 281-534-3413; galv3@wt.net. Details: www.aggie-horticulture.tamu.edu/galveston

Thurs., Feb. 26: Preview of Fort Bend County Master Gardeners Feb. 28 Vegetable-Herb Plant Sale, 9-11am, Bud O'Shields Community Center, 1330 Band Road, Rosenberg. Free. Details: www.fbmg.org or 281-341-7068

Sat., Feb. 28: Harris County Master Gardener Tomato & Pepper Sale & Symposia. AgriLife Extension office, 3033 Bear Creek Dr. Details: <http://hcmga.tamu.edu/Public/pubSales.aspx>

Sat., Feb. 28: Fort Bend Master Gardeners Vegetable-Herb Plant Sale, 9am-noon or sell-out, Agricultural Center Greenhouse, 1402 Band Road, Rosenberg. Details: www.fbmg.org or 281-341-7068.

Sat., Feb. 28: Soil Management for the Home Garden by Dr. Joe Novak, 9-11am, White Oak Conference Center, 7603 Antoine. Near Northwest Management District event. \$20. Details/registration: www.nnmd.org or 713-895-8021

Sat., Feb. 28: Successful Organic Gardening by Michael Serant, Suzanne Chapman and Danny Milikin, 9am-noon, Kingwood Community Center, 4102 Rustic Woods Dr., Kingwood. \$5. [Register here](#). Details: [281-855-5600](tel:281-855-5600)

Sat., Feb. 28: Spring Vegetable Gardening by Ray Sher, 9-11:30am, University of Houston Campus, 4361 Wheeler. \$35. Details: 713-880-5540, www.urbanharvest.org/classes-calendar

Sat., Feb. 28: Make Your Lawn Luxuious-Spring Lawn Care, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Mon., Mar. 2: Citrus Gardening with a Harris County Master Gardener, 1-2pm, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Free. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Thurs., Mar. 5: History of Shangri La Botanical Gardens by Joseph Johnson, 9:30am, Municipal Utility Building, 805 Hidden Canyon Drive, Katy. Free. Nottingham Country Garden Club program. Details: nottinghamgardenclub.org; o713-870-5915 or 979-885-6199

Thurs., Mar. 5: Plant and Seed Swap, 10-11am, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Free. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Fri.-Sun., Mar. 6-8: 2015 80th Annual Azalea Trail. River Oaks Garden Club event. Details: <http://www.riveroaksgardenclub.org>

Sat., Mar. 7: Compost Class, 10-11am, The Woodlands Township Parks, Recreation and Environmental Services Campus, 2801 Millennium Forest Dr. The Woodlands. Free. Co-sponsors The Woodlands Township, Montgomery County Master Gardeners, Nature's Way Resources & Waste Management. Details: <http://thewoodlandstowship-tx.gov> or 281-201-3800

Sat., Mar. 7: Pest ID and Management in the Home Garden Garden by Dr. Joe Novak, 9-11am, White Oak Conference Center, 7603 Antoine. Near Northwest Management District event. \$20. Details/registration: www.nnmd.org or 713-895-8021

Sat., Mar. 7: Successful Organic Gardening by Michael Serant, Boone Holladay and Danny Milikin, 9am-noon, Harmon Center, 226 Matlage Way, Sugar Land. \$5. [Register here](#). Details: [281-855-5600](tel:281-855-5600)

Sat., Mar. 7: Starting a School or Community Garden Series, #1 of 2 by Becky Blanton, 9-11:30am, Urban Harvest, 2311 Canal St., \$50. Details: 713-880-5540, www.urbanharvest.org/classes-calendar

Sat., Mar., 7: Real Food, Garden-Grown Vegetables, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Sat.-Sun., Mar. 7-8: Spring Branch African Violet Club 35th Annual Show and Spring Sale, Judson Robinson Jr., Community Center, 2020 Hermann Park Drive. Sat.: Show 1-5pm, Sale 9am-5pm. Sun.: Show & Sale 10am-3pm. Details: Karla Ross, 281-748-8417, kjwross@yahoo.com

Thurs., Mar. 12, Documenting Your Garden by Harris County Master Gardeners. 6:30-8:30pm. Barbara Bush Library, 6817 Cypresswood Dr., Spring Free. Details: <http://harris.agrilife.org/hort>. Register [281-855-5600](tel:281-855-5600).

Sat., Mar. 14: Growing Vegetables in Containers Garden by Dr. Joe Novak, 9-11am, White Oak Conference Center, 7603 Antoine. Near Northwest Management District event. \$20. Details/registration: www.nnmd.org or 713-895-8021.

Sat., Mar 14: Fashionista Flower Design, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Sat.-Sun., Mar. 14-15 Galveston Home & Garden Show, Convention Center, 56th street at Seawall Blvd. Horticulture speakers: Saturday 10:30am-Rainwater Harvesting-Jim Jahnke; 11:30-Tree Conservancy-Priscilla Files; 1-Roses-Baxter Williams; 2:30-Lazy Gardening-Brenda Beust Smith. Sunday 11:30-Growing Peppers-Gene Sepler; 12:30-Plumeria-Loretta Osteen. Other speakers, fees, hours: www.galvestonhomeandgarden.com

Tues., March 17: Hummingbirds! Allen or Rufous, it's all Selaphorus to Me. Details: <http://sugarglandgardenclub.org>

Tues., Mar. 17, Documenting Your Garden by Harris County Master Gardeners, 6:30-8:30pm, Spring Branch Memorial Library, 930 Corbindale. Free. Details: <http://harris.agrilife.org/hort>. Register [281-855-5600](tel:281-855-5600).

Thurs., Mar. 19: Providing Homes for Outdoor Wildlife by a Texas Parks and Wildlife Urban Biologist, 11am-noon, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Thur., Mar. 19, Documenting Your Garden by Harris County Master Gardeners. 6:30-8:30pm. Freeman Branch Library. 16616

Diana Lane, Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Sat., Mar. 21, Documenting Your Garden by Harris County Master Gardeners. 10am-Noon. Maude Smith Marks Library 1815 Westgreen Blvd. Katy, TX Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Sat., Mar. 21: Save Water and Money with Drip Irrigation, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Fri., Mar. 27: Plant Propagation by Jean Fefer Ph.D., 1-2pm, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Sat., Mar. 28: Nottingham Country Garden Club Annual Plant Sale, 10am-1pm, Villagio Courtyard, Westheimer Pkwy. @ Peek Rd. Details: nottinghamgardenclub.org; 713-870-5915 or 979-885-6199.

Sat., Mar. 28: Secrets to Spectacular Roses, 10:15am, Cornelius Nursery, 2233 S. Voss. Details: corneliusnurseries.com/events.

Tues., Mar. 31: Vegetable Container Gardening by Robert "Skip" Ritcher, 1-2pm, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Wed., Apr. 1: Orchid Gardening by John Stubbing, 11am-noon, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Wed., Apr. 8: Hibiscus gardening by Marti Graves, 2-3pm, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Thurs., Apr. 9: Basic Irrigation & Rainwater Harvesting by Harris County Master Gardeners. 6:30-8:30pm. Barbara Bush Library, 6817 Cypresswood Dr., Spring. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Sat., Apr. 11: White Oak Garden Spring Plant Sale, 9-10am Presentation on featured plants by Heidi Sheesley, 10am-2pm Sale; White Oak Conference Center, 7603 Antoine Dr. Details: www.nnmd.org

Thurs., Apr. 16: Harris County Master Gardener Green Thumb Lecture on Basic Irrigation & Rainwater Harvesting. 6:30-8:30pm. Freeman Branch Library, 16616 Diana Lane. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Sat., Apr. 18: Basic Irrigation & Rainwater Harvesting by Harris County Master Gardeners. 10am-Noon. Maude Smith Marks Library, 1815 Westgreen Blvd., Katy. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Mon., April 21: What's Blooming in the Lazy Gardener's Garden by Brenda Beust Smith, 10am, Walden on Lake Houston Clubhouse. Lake Houston Ladies Club event. Non-member reservations required: Carol Dandeneau, 832-671-4475

Tues., Apr. 21: Basic Irrigation & Rainwater Harvesting by Harris County Master Gardeners. 6:30-8:30pm. Spring Branch Memorial Library, 930 Corbindale. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Thurs., Apr. 23: Plants of the Bible by Jean Fefer Ph.D., 1-2pm, Thomas A. Glazier Senior Education Center, 16600 Pine Forest Lane. Details: 713-274-3250; www.pct3.hctx.net/senior/glaziersec.aspx

Thurs., May 14: Basic Pest Control for Gardeners by Harris County Master Gardeners. 6:30-8:30pm. Barbara Bush Library, 6817 Cypresswood Dr., Spring. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Sat., May 16: Basic Pest Control for Gardeners by Harris County Master Gardeners. 10am-Noon. Maude Smith Marks Library, 1815 Westgreen Blvd., Katy. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Tues., May 19: Basic Pest Control for Gardeners by Harris County Master Gardeners. 6:30-8:30pm. Spring Branch Memorial Library, 930 Corbindale. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

Thur., May 21: Basic Pest Control for Gardeners by Harris County Master Gardeners. 6:30-8:30pm. Freeman Branch Library, 16616 Diana Lane. Free. Details: <http://harris.agrilife.org/hort>. Register 281-855-5600.

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

WANT YOUR EVENT IN THE LG&F CALENDAR? YOU HAVE TO SEND IT TO US!

EVENTS WILL NOT BE PICKED UP FROM OTHER NEWSLETTERS OR GENERAL MEDIA RELEASES.

Events submitted in the exact format used above will receive priority in inclusion in the calendar.

Events NOT submitted in our format take longer to get published as someone has to reformat and retype them. Email to: lazygardener@sbcglobal.net

Need speakers for your group? Or tips on getting more publicity for events? Brenda's free booklets that might help: "Lazy Gardener's Speakers List" of area horticultural/environmental experts, and "Lazy Gardener's Publicity Booklet" (based on her 40+ years of her Houston Chronicle "Lazy Gardener" coverage of area events) Email specific requests to: lazygardener@sbcglobal.net. Please help us grow by informing all your membership of this weekly newsletter!

JOHN'S CORNER

Organic Fertilizers and Nutrients - 24

COMPOST





One of the earliest fertilizers mankind used is still the single best and most valuable organic fertilizer is called compost. We have talked about the benefits of compost as a soil amendment and as a mulch, today we are going to focus on the nutrient aspects of a good compost.

Have you ever wondered why experienced gardeners and professional horticulturalists call a good quality compost "Black Gold"?

Compost is like any other product we buy and use, there is a huge variation in price, quality and value. So how does one determine the value of compost? How does compost compare to other products like fertilizers, seaweed, fish emulsion, humates, beneficial microbes, etc?

About ten years ago I was talking with a group of Master Gardeners whom had stopped by and they asked me to explain "Why" compost works so well in the garden as a fertilizer. As a result I went to the USDA website and looked up values for different items that contribute to soil health and fertility for an AVERAGE compost.

To start, a cubic yard of finished compost weighs between 1,200-1,400 pounds depending on the moisture content and maturity. If we remove all the moisture we have about 700 pounds of solid material left over (minerals). The next step is to look at what is in these 700 pounds of material.

First using the USDA test data a cubic yard (cy) of good compost will contain the same amount of nitrogen, phosphorous and potassium (N-P-K) as \$150 worth of a good fertilizer. Or to put it another way, a gardener would have to purchase at least \$150.00 worth of organic fertilizer to get the same amount of these major nutrients in just one cubic yard of compost.

Second let's look at the minor nutrients. Similar to the above, to get the iron, calcium, sulfur, magnesium, zinc, copper, boron, manganese and molybdenum in a cubic yard of compost it would require another \$7.00 worth of minor nutrient fertilizer.

Next we want to look at trace elements. Compost will easily contain over 65 trace elements that are naturally found in plants. If we look at a common source of trace elements like fish emulsion, it would require over \$50.00 worth of fish emulsion to get the same amount of trace minerals in just one cubic yard of compost.

As we learn more and more about the importance of soil biology we recognize that all the life forms in the soil require energy. For the life in the soil (bacteria, fungus, earthworms, etc.) the energy comes from the carbon it contains. If dry molasses is used as a carbon source to provide the energy found in one cubic yard of compost it would require over \$150.00 worth of dry molasses.

As gardeners we know the importance of organic matter in the form of humus which is critical for healthy fertile soil. Compost has a lot of humus compounds in it. If Humates are used as the source of organic matter to provide the same amount of humus (organic matter) in a cubic yard of compost it would cost at least \$100.00

To grow healthy plants we must have healthy soil and healthy soil is full of good microbes. Compost is teeming with beneficial microbes. It would require over \$100.00 worth of microbial inoculants to provide the same amount of beneficial microbes and would not even be close to providing the same value or diversity.

In horticulture we have known for years that certain hormones (like auxins and others) help plants grow stronger and faster. Compost naturally contains many plant growth promoting hormones. It would require at least \$5.00 of commercial hormones to provide a similar benefit as found in one cubic yard of compost.

When one adds it all up: One cubic yard of average compost provides over the same benefits as \$562.00 worth of other products combined! This is why a good compost is called "BLACK GOLD". Remember that this was ten years ago and prices have increased a lot, hence in today's dollars the value is even more.

However, the story does not end there as other factors come into play. Over time the microbes in the compost will collect nitrogen (N) from the atmosphere and fix it into the soil and provided it to the plants as needed. This is additional and free nitrogen. Also the nitrogen release from compost does not pollute our waterways or create toxic nitrate in our foods (fruits and vegetables).

If we look at the energy aspect a little closer we find that dry molasses is an excellent energy source as it contains many types of complex sugars that provide fuel for soil life. The energy in dry molasses is available immediately but is quickly used up versus compost where the energy takes a few days to be available but lasts for months to even a couple years.

Let's look at the organic matter aspects a little closer. Organic matter affects everything from water retention, soil structure and tilth, to aeration and much more. Without organic matter in the soil all plants suffer and have many problems. Humates are often used as a source of organic matter. The family of molecules called humates is composed of many types of organic molecules from short and simple to long and complex, with each type providing different benefits. Mined Humates commonly sold by the bag provide organic matter, nutrition, food for microbes; increase the water holding capacity of soils, and many other benefits and are a great tool for gardeners as we have discussed. They are quick acting but due to the short chain (small) humus molecules they do not last long, hence they must be applied frequently and they are relatively expensive. Studies have shown that a good mature compost will contain up to 70% humic substances that are both short and long chain molecules! These humic substances are composed of three types of humus;

- 1) An active fraction that will last 1-5 years
- 2) A slow fraction that will slowly degrade over 20-40 years
- 3) A passive fraction which is resistant to microbial decay with a life of 200-1500 years (real long term benefits and

provides sequestering of carbon). These humic substances are a mix of humins, fulvic acid, humic acid and other beneficial components. *A cubic yard of compost can easily contain over 300 pounds of humic substances!*

Let's look at the microbial aspects in more detail. In recent years we have begun to understand that all life on Earth is dependent on microbes. For plants it is the microbes that live in the soil and live on the roots, leaves and stems. Research has shown that microbial inoculants can have a tremendous benefit on plant growth and health. The best inoculants on the market have only 100-200 species of bacteria and 20-30 species of fungi and very few protozoa, nematodes, arthropods or other beneficial life forms. By comparison good compost will easily have 25,000 species of bacteria, 10,000 species of fungus, many species of protozoa and beneficial nematodes to cycle nutrients, prevent disease, fix nitrogen and create soil structure. The microbes found in compost provide disease suppression (competition, inhibit, consume), they improve nutrient retention in soil, they mineralize nutrients and make them available to plants, they improve soil structure allowing water and oxygen to move into the soil, they decompose toxic materials (phenols, tannins, pesticides), they produce plant growth promoting compounds, and they improve crop quality (flavor, nutrients, yield). In addition, the good microbes in compost prevent diseases which save additional value through cost avoidance of purchasing expensive toxic fungicides and pesticides.

We mentioned growth hormones above. Research is just beginning to identify and understand the many substances in good compost that promote plant growth. These range from enzymes and hormones to vitamin like substances. Numerous studies have shown that compost helps all plants grow better (faster, stronger and healthier).

Other Value Added Benefits of Compost:

- Compost holds water in the soil and helps create soil structure so that rain fall and irrigation water soaks into the soil
- Plants use far less water when compost is used, and with some turfgrass, 50-70% less water is required.
- Compost stimulates disease and insect resistance in plants so expensive toxic chemicals are no longer required and eliminates this expense
- Compost enriched soil holds in nutrients from fertilizer better. This means less fertilizer runs off to pollute our waterways.
- Compost buffers the soil, neutralizing both acid and alkaline soils, bringing the pH levels to the optimum range for plants.
- Compost helps sandy soil retain water and nutrients
- Compost loosens tightly bound particles in clay or silt soil so roots can spread, excess water can drain out, and air can penetrate the soil
- Compost alters soil structure, making it less likely to erode, and prevent soil spattering on plants reducing the spread of disease.
- Compost can hold nutrients tight enough to prevent them from washing out but loose enough that plants can easily take them up as needed.
- Compost makes any soil easier to work
- Compost enriched soils have a lot of beneficial insects, earthworms and other organisms that burrow through the soil keeping it aerated (no need to rent expensive aerators wasting time and money).
- Compost encourages healthy root systems which decreases runoff (less flooding)
- Only a 5% increase in organic material in the soil from compost quadruples its water holding capacity.

Every time we use a good compost it is like making a deposit in a bank account called "soil fertility"!

SUMMARY:

Compost is like any other product we can purchase, there are huge swings in quality and value, mis-labeling and outright deceit since we do not have labeling laws. Just like in buying a car, one can get a Yugo for \$10,000 or a Lexus or Mercedes for \$60,000, they are both cars but is there a difference? The old gardening proverb is one tool a gardener can use to help tell the difference: "I have no quarrel with a man whom has a lower price, whom better knows what his product is really worth". A good compost is really black gold for a gardener.

PROS:

- good source of major nutrients
- contains minor and trace elements
- contains and feeds soil microbes
- contains plant growth hormones
- buffers soil acidity or alkalinity
- aerates heavy tight clay soils
- helps light sandy soils hold moisture
- increases soil organic matter
- contains and encourages microbes that fix nitrogen from the air into the soil
- adds organic matter to the soil

CONS:

- there are no labeling laws in Texas hence many products sold are not a true compost
- many compost products are made from cow manure which is high in salts, antibiotics, and other chemicals from the feedlots
- many compost products contain poultry manure which is high in salts and arsenic

References:

THE SCIENCE OF COMPOSTING, Eliot Epstein, PhD, 1997, Technomic Publishing, ISBN 1-56676-478-5

COMPOST ENGINEERING (The Practical Handbook Of...), Dr. Roger T. Haug, 1993, Lewis Publishers, ISBN 0-87371-373-7

SCIENCE AND ENGINEERING OF COMPOSTING: Design, Environmental, Microbiological and Utilization Aspects, Harry Hoitink, PhD, Ohio State University, 1993, Renaissance Publications, ISBN 0-936645-15-6

MICROBIOLOGY OF COMPOSTING, Heribert Insam, Nuntavun Riddech, and Susanne Klammer, Springer Press, ISBN 3-540-67568-X, 2002

- COMPOST UTILIZATION IN HORTICULTURAL CROPPING SYSTEMS, P. Stoffellea and B. Kahn, Lewis Publishers, 2001, ISBN: 1-56670-460-x

- HUMUS CHEMISTRY-Genesis, Composition, Reactions, 2nd Edition, F.J. Stevenson, 1994, John Wiley & Sons, ISBN 0-471-59474-1

- Humic Substances in Soil and Crop Sciences: Selected Readings, American Society of Agronomy and Soil Science Society of America, ISBN: 0-89118-104-0

- HUMIC MATTER IN SOIL AND THE ENVIRONMENT, Kim h. Tan, CRC Press, 2014, ISBN: 978-1-4822-3445-9
SOIL BIOLOGY:

- Soil Microbiology: An Exploratory Approach, Mark Coyne, 1999, Delmar Publishers, ISBN 0-8273-8434-3 (Excellent)

- Soil Microbiology, Ecology, and Biochemistry 3rd Edition, E. Paul, Editor, Elsevier Press, 2007, ISBN 13: 978-0-12-546807-7

- Modern Soil Microbiology 2nd Edition, J. Elsas, J. Jansson, J. Trevors Editors, CRC Press Taylor & Francis Group, 2007, ISBN-13: 978-0-8247-2749-9

- Sustainable Soils- The Place of Organic Matter in Sustaining Soils and Their Productivity, B. Wolf & G. Snyder, Hawthorn Press (Food Products Press), 2003, ISBN: 1-56022-916-0

- Handbook of Processes and Modeling in The Soil-Plant System, D. Benbi & R. Nieder Editors, Hawthorn Press, ISBN: 1-56022-914-4

Numerous articles and research papers from many Universities and State Agricultural Extension offices published in scientific journals and from the internet.

THIS NEWSLETTER IS MADE
POSSIBLE BY THE FOLLOWING SPONSORS





<http://natureswayresources.com/>

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 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 article contributor.

MARY BOWEN

Mary is a Realtor with Coldwell Banker United and an avid volunteer with the Montgomery County Animal Shelter.

With respect to the newsletter, Mary came up with the idea for the Garden Tails column and co-writes it. Mary is the newest addition to our group of contributors. We will expand her bio as we go.

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.



COUPON: BUY ONE OLD GARDEN ROSES & GET A SECOND FREE At Nature's Way Resources

www.natureswayresources.com . (Offer good for retail purchases at Nature's Way Resources (101 Sherbrook Circle, Conroe TX).

Offer Expires: 02/15/15