

THE BUGGETTE



Bare in Mind by Josh Bare

Recently, I did something a wee bit out of the ordinary. I toured the F. Wayne Hill Water Treatment Plant in Gwinnett County. The tour was part of a Gwinnett networking and learning program that I'm participating in called Leadership Gwinnett. It really was a learning experience, and now you could say I'm quite the connoisseur!



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Give Mosquitoes the Boot from Your Yard

There are so many things to enjoy about spring and summer. Dealing with mosquitoes isn't one of them. Give 'em the boot with our Mosquito Treatment add-on service. Applied once a month from May through October, our treatment targets both larvae and mature mosquitoes and is safe for your pets and children.

Call us today for your free estimate.

Watch Out for Leaf Scorch in Trees & Shrubs

The beauty of ornamental trees and shrubs is one of the joys of spring and summer. So it's heartbreaking when leaf scorch strikes. The condition, as its name suggests, turns leaves brown and can be caused by several things, including excessive heat, drought, and compacted soil. Sometimes the culprit is a bacterial infection introduced by insects, such as leafhoppers, sharpshooters, and treehoppers.

Leaves usually turn brown due to lack of water, but that does not mean giving affected trees and shrubs more water will cure leaf scorch. In bacterial leaf scorch (BLS), for instance, bacteria damage the plant's vascular tissue, or xylem, and prevent water and nutrients from being transported throughout the plant. If left untreated, BLS can persist for years and seriously damage or even kill affected plants.

What's a tree and shrub lover to do?

If you see brown leaves on any of your ornamentals, request a free service call. We'll come out to diagnose the problem and discuss your treatment options.



Is Thatch Good or Bad?

Thatch is that layer of dead and living organic matter that sits on the surface of the soil and is visible between individual blades of grass. Homeowners who care about their lawns often ask whether thatch is good or bad. The answer depends on how much thatch there is.

Less than a half-inch of thatch is beneficial for lawns. It insulates the soil and roots from extreme temperatures, buffers turf from the effects of foot traffic, helps soil retain moisture, and even makes it harder for weeds to take root.

More than a half-inch and you could start seeing problems. Excessive thatch prevents air, water, and the products we apply from reaching their intended targets. It also serves as a breeding ground for pests and diseases. And the thicker the layer, the more likely you are to scalp your lawn when mowing.

If your lawn feels spongy when you walk on it, it could be a sign of excessive thatch buildup. Talk to your tech or contact our office. We can advise on the best measures to control thatch in your lawn.

Application #3 – May/June Care

Application 5 & 6 for Silver Plus, Gold Plus and Platinum customers

Lawn Treatments

Weed Control

All Programs. Lawns received an application of three herbicides to control broadleaf weeds.

Silver Plus, Gold Plus, Platinum Program Customers. In addition to broadleaf weed controls, these three programs include treatment for nutsedge and other grassy weeds.

Note: Some weeds, such as wild violets and Virginia buttonweed, are extremely difficult to control and require treatment with specific herbicides. Please contact us for a free analysis and estimate if you have these or any other stubborn weeds.

Fertilization

All Programs. We applied Arbor-Organics fertilizer to nourish turf until our next visit.

Pest & Disease Control

Silver Plus, Gold Plus, Platinum Program Customers. We did a fungicide treatment to prevent brown patch and dollar spot.

Gold, Gold Plus, Platinum Program Customers. We applied our Outdoor Pest Control to target fire ants, fleas, ticks, and spiders.

Mosquito Treatment Add-On. Customers who have requested this service got their first of six once-a-month treatments.

Aeration

Platinum Program Customers. Aeration will be completed for all Platinum customers by the end of May. Aeration loosens soil so that oxygen, water, and the treatments we apply can travel down into the soil, where they are needed most.

Ornamental Tree & Shrub Treatments

Pest & Disease Control

Gold, Gold Plus, Platinum Program Customers. We applied a fungicide to control powdery mildew, leaf spot, and other fungal diseases, as well as an insecticide to control aphids, lace bugs, and leafhoppers.

What You Can Do Until Our Next Visit

Leave Grass Clippings After Mowing: Make mowing easier for yourself and give your lawn a treat by leaving clippings. They recycle back into the soil and provide nutrients for your turf. Mowing after one of our treatments is fine; just be sure that any wet applications have dried.

Mow Fescue at the Highest Blade Setting: Letting this cool-season grass stay a bit taller helps keep the soil temperature lower.

Watch for Brown Spots on Grass: This is the time of year when the fungal disease brown patch is most active, especially in Fescue lawns. If you notice brown circular patches, contact our office for a free analysis and quote.

Trim Shrubs: Routine trimming encourages them to grow fuller.



Questions about your lawn, trees, shrubs or our service?

Call us Monday – Friday, 8 am – 5 pm at **770.447.6037** or email us at **info@arbor-nomics.com**. Our office is extremely busy this time of year, so sending us an email is the best way to avoid waiting on hold.

Your Number One Role in Having a Beautiful Lawn Is Watering

It takes a team effort to have the great-looking lawn you want. Our part is applying our treatments effectively, alerting you to any issues we see, and advising you on options for addressing them. But that gets you only so far if your lawn isn't also getting enough water. That's where you come in.

💧 **Grass needs one inch of water each week to stay green and healthy.** When rainfall doesn't supply that inch, it's up to you to make up the difference. A simple tool for measuring, whether from rainfall or irrigation, is a tuna can. When you water, place a tuna can in the area. When the can is full, you've given your lawn an inch of water. If it rained a couple of days ago, you can stop watering before it's full.

💧 **If you don't have a sprinkler system, talk to us.** We'll be happy to offer guidance on how to select one for your yard. And if you're wondering why we continue to treat during a drought, bear in mind that your lawn is a living organism that needs nutrients and weed control even when it is going through a dry period.



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Congrats to Lee Hayes & Our Other Standout Employees



It's never easy to pick just one person for our **Employee of the Year Award**. (And we at Arbor-Nomics know we're lucky to have such a problem!) Having said that, we are happy to give **Lee Hayes** the special honor. Aside from being an all-around good guy, Lee has eagerly embraced the ongoing education and training we require of our techs and has grown tremendously in skill and knowledge the past year.

"The job is very challenging," says Lee, "but the more I learn, the better I get at my job, which is what the company is all about. I enjoy new challenges and being able to find ways to meet a need for my customers and the company. Plus I really like the people I work with."



Kudos also go to **Angie Jefferson, Joanne Vaughn, Caroline Nichols, Chris Griffin, Daniel Prince, Daniel Sparks** and **Shane South**, whose outstanding customer service has earned them an **Above & Beyond Award**.

Bare in Mind CONTINUED

The plant is located on 700 acres in the northern part of the county, in the fork between I-85 and I-985. There are some spots on each highway where you can glance through the trees and see the facility. A number of large round tanks stand out, and with their pointed tops, they resemble giant turnips or onions.

The wastewater from about 80 percent of America's households goes to a treatment plant. The other 20 percent are served by septic systems. When I was growing up, our home had a septic tank, and I recall there being a need from time to time to pump it out. A burly fellow would come by with a giant tank truck and a backhoe. He'd go around probing the back yard with a metal rod till he found the concrete lid on the septic tank about a foot down. Then he'd hop on the backhoe and scrape off our pretty green fescue lawn along with the dirt.

I remember peering over the edge of the hole and being impressed with how large the tank was and how deep it went – not to mention how bad everything smelled. Septic tanks are sized by bedroom count and house square footage – that tank was probably about 1,000 to 1,250 gallons.

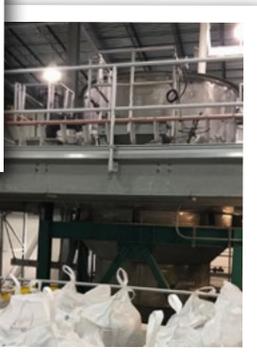
My current house is on the city water system, but there are cast iron pipes in the slab under the house. When we first moved in, there was a time or two that I had to rent a 75-foot electric plumbing snake from Home Depot to clear an obstruction – not a pleasant experience! It certainly raised my level of respect for the work that plumbers do.

I didn't have really high expectations for the "fun" factor of touring a water treatment plant, but it turned out to be very eye-opening! The doors opened for "business" in February 2001. Nearly a billion dollars was spent on the initial construction, and several updates have been made since. It has the capacity to process 60 million gallons a day but is currently processing 40 million.

Apparently – at least in Gwinnett County – poop does run uphill. Roughly 200 pumps run 24/7 every day of the year to bring wastewater to the plant. All of the pumps are on backup generators just in case the power goes down. Our tour guide told us that during the tropical storms that rolled through Atlanta last September, 186 of their pumps had switched over to emergency power. I had never considered how a power outage could affect my ability to flush the toilet! (And of course, to be accurate, the plant processes all wastewater, not just what gets flushed.)



After an initial overview of the hoops they put the sewage through, the staff loaded our group onto a trolley to show us each individual stage of



processing. The initial stage, screening for debris and grit, is really bad-smelling, but a special air-handling process keeps the odor from seeping out of the building.

The plant uses a lot of bacteria to break down the waste. Some need oxygen and some don't. Giant fans force air through the sewage from the bottom to create an optimal environment for the oxygen-loving bacteria. This plant adds a few phases to the processes used in most sewage plants. One involves many noodle-like tubes with very tiny holes, smaller than a human hair. The water is drawn into the tubes, but the contaminants can't fit. Occasionally, they back-pressure the system to flush out the dirt left on the outside of the tubes. The tubes have to be replaced every 10 years, which can cost as much as 12 million dollars.

In another section, phosphorus, nitrogen, and other nutrients are collected to create a plant fertilizer called Crystal Green. It has a makeup of 5-28-0 plus 10 percent magnesium. The Milwaukee Metropolitan Sewerage District makes a similar product called Milorganite. You might have seen it at Home Depot or Lowe's. It is a great slow-release fertilizer that we recommend in some situations for lawns and gardens.

The anaerobic bacteria are in the onion-shaped tanks, which are sealed rather than open. These bacteria release methane gas that is harvested from the top of the tank by special equipment. In the past, the methane was burned off, but now it is used to power a 2.2-megawatt power plant that provides 30 percent of the facility's electricity.

The water that emerges at the end of processing is in theory safe to drink. However, there wasn't a line of folks at the end of the tour begging to try it out! The water is continuously and automatically tested before it is pumped away through a 48-inch line and deposited into Lake Lanier. If the testing criteria aren't met, the water is diverted into giant holding tanks to be re-treated. The whole facility is so well-engineered and automated that only four people are required to staff it around the clock.

As we wrapped up the tour, I had a whole new appreciation for what happens to the water we use. There is so much infrastructure around us that it is easy to take it all for granted and forget how vital something like a water treatment plant is for our quality of life. On the way out, I suggested a new motto for the F. Wayne Hill Water Treatment Plant: "Our Doody Is Clear!"

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