

June 2024

Gardening in North Texas

The Damaging Effects of Too Much Rain

By Margaret Ghose, Dallas County Master Gardener

It has been a very wet spring for gardening. In May alone, some areas of Dallas County received up to 10 inches of rain, leaving us with soggy soils. And soggy soils can be a problem for plants.

Plant roots require oxygen to function properly, and they get that oxygen from the open pore space within the soil. If the soil space is completely filled with water, oxygen cannot pass through and reach the plant roots. Soils that are completely saturated with water are said to be waterlogged, and plant roots will begin to die from lack of oxygen. Damaged roots cannot take up water and nutrients effectively, and the plant may begin to show signs of deficiencies.

Not only do waterlogged soils prevent oxygenation, activity of anaerobic bacteria in the soil increases because of the lack of oxygen, which leads to an accumulation of toxic substances and "robbing" the soil of nitrogen that would otherwise be available to the plant. Nitrogen is also washed away from the soil by floodwaters, contributing to nitrogen deficiency. A weakened root system and a wet environment makes a plant more susceptible to



root rot and other plant diseases. Waterlogged soils can then become compacted, making it even harder for plants to recover.

What a domino effect excessive rain and moisture can have for our landscapes! It may take a while to determine if your plants have suffered long-term damage because some damage is delayed until the soil dries out and oxygen is once again available. Toxic compounds formed during the waterlogged period can then react with the oxygen and form even more

damaging compounds. This means root damage may continue to increase even after the soil is no longer waterlogged.

Symptoms of root damage may be visible immediately or appear later in the growing season when the plant's metabolic demand is higher. One of the first things gardeners often notice is the wilting and yellowing of foliage, especially during the heat of the day. This is usually a temporary problem, and plant roots are able to recover as long as the soil dries out within a day or two. Other signs of root injury to look for include leaf curl or deformity, leaf drop, reduced leaf production and an overall slowing of plant growth. Wet, humid conditions are also conducive to the development of foliar diseases so monitor for signs of leaf spot diseases and stem and crown rots.

What Can You Do?

Although we cannot reverse the damage done to root systems, we can take steps to create a favorable environment while your plants recover.

· Going forward, irrigate with care. Overwatering or underwatering will place additional stress on the plants.

• Consider pulling mulch away from low-lying or soggy areas to help soil dry faster. You can replace the mulch when conditions return to normal.

• Plants that look wilted even when the soil is moist may indicate compacted soil and might benefit from aeration in their root zones. Dan Gill of LSU Ag Center recommends "using a garden fork, drive the tines straight down into the soil and pull straight out in numerous places around the shrub. Do not dig with the fork. This provides air to the roots and encourages the soil to dry faster."

• To combat foliar diseases, avoid practices that contribute to wetting of foliage. Try hand watering or drip irrigation rather than overhead sprinklers. Prune and space plants to promote good air circulation and to help them dry out after a rain. Avoid working with wet plants and remove any severely affected plants and properly discard them. If you notice leaf spotting or other signs of disease, the <u>Texas Plant Disease Handbook</u> can assist you in diagnosis.

• Over time, plants may begin to exhibit signs of nitrogen deficiency or other nutrient imbalances. Many sources caution against immediately adding fertilizer to plants with root stress. For trees and woody ornamentals, it is not recommended to fertilize until the following growing season. For vegetable crops, many sources recommend applying organic or slow- release forms of nitrogen to replace soil losses once the soil has dried.

A word of caution. Floodwater can be contaminated with a variety of things including sewage, farm run-off, industrial runoff and other pollutants. Do not harvest produce that is at or near harvest, and has been exposed to flood waters. Fresh produce that was submerged by flood waters should be discarded.

Resources:

Soggy Soil Can Make Plants Sick Waterlogged Soils and Plant Growth Heavy Rains Cause Problems for Gardeners Excess Water Problems on Woody Ornamentals Warm, Rainy Weather Brings Vegetable Plant Diseases Dealing with Waterlogged Soils Managing a Garden After a Flood

Need Help Identifying Plants?

Try These Free Smart Phone Apps

By Georgeann Moss, Dallas County Master Gardener



How many plants can you identify by sight? Since you're reading this article, it's likely that you can identify more than the average person because you already have an interest in gardening and horticulture. However, one <u>Swiss study</u> of several thousand children aged between eight and 18 found the participants could only identify on average five plants.

Our indigenous ancestors knew a great deal about their local plants and ecosystems. They passed on to their children the extensive knowledge they gained from a lifetime of observation and experience. But as society, science and technology has raced forward, parents and

educators have found less time and resources to teach children about the plants that sustain us in so many wonderful ways.

"Civilization is dependent upon plants for survival. Yet, despite the significance of plants and the critical role they have played in shaping ecosystems, civilizations, and human cultures, many people are now disconnected from the botanical world," said the authors of the National Library of Medicine Journal article titled <u>The Botanical Education Extinction and the</u> <u>Fall of Plant Awareness</u>. An obvious solution is to reintroduce plant and ecosystem education into the classroom. But there are other things we can do.

The first is to become more knowledgeable ourselves. The second is to teach our children and grandchildren what we know about plants, just as our ancestors did.

Technology Can Help

Fortunately, now technology can provide us with instant access to knowledge that took our ancestors a lifetime to acquire. There are three, highly-rated and free smart phone apps that you can use to identify and learn about the plants. None of the apps are perfect, and some are more imperfect than others, so you must do some due diligence in confirming their results. But these applications generally performed well according to a British Ecological Society (BES) research article *Assessing the Accuracy of Free Automated Plant Identification Applications.* "Subject to some caveats," researchers concluded, "free, phone-based plant identification applications are valid and useful tools for those wanting rapid identification and for anyone wanting to engage with the natural world."

They noted three free plant identification apps and their overall accuracy at genus level (i.e. genus correctly identified as the top suggestion):

<u>Pl@ntNet</u> = 97% accurate <u>LeafSnap</u> = 95% accurate <u>iNaturalist Seek</u> = 93% accurate

All of these apps can operate on smart phones with IOS (Apple) or Android platforms.

Don't want to download an app?

You don't necessarily have to download an app if you own an iPhone. Just take a photo of the plant and then go to the camera roll and open that photo. If you slide the image upward, you will see an option to "Look Up Plant," where you'll be shown a suggestion and web images to identify the plant. Apple claims this app has 95% accuracy, which is better than

Lantana Camara Named as Newest Texas Superstar®

Lantana camara varieties were named the latest <u>Texas</u> <u>Superstar</u> plant for their showy, full-season flowering, versatility as an ornamental and ability to tolerate the Texas heat.

Paul Winski, <u>Texas A&M AgriLife Extension Service</u> horticulture program specialist in the <u>Texas A&M Department of Horticultural</u> <u>Sciences</u>, says, "*Lantana camara* varieties have a long-established reputation as a performer in Texas. Their versatility and ability to provide color to landscapes and containers while tolerating heat and drought make lantana a go-to ornamental plant."



Lantana camara are available in many flower colors and growth habits, Winski said. There are compact varieties, or they may have a spreading-mounding habit. Plants produce clusters of tubular flowers throughout the season in shades of red, orange, yellow, pink, white or purple, and clusters often show more than one color. <u>Read more here ...</u>



June 18, 2024 2:00 pm to 3:00 pm Sex in the Garden Juliette Fowler Communities, 1234 Abrams Rd., Dallas. This entertaining and educational talk describes what really goes on in our gardens: pollination. Learn how flowers lure insects to help with their reproduction and how they reward the pollinators. You will never look at the garden in the same old way again. Speaker is Janet D. Smith.

June 19, 2024 7:00 pm to 8:00 pm <u>Containers That Grow</u> The Jewish Community Center, 7900 North Haven, Dallas. This talk covers tips for creating attractive container gardens in large pots or containers for the out-of-doors. You will learn what to look for when searching for flowers or plants and how to position and plant them so your containers become the envy of your friends and neighbors. Speaker is Carolyn Hicks.

June 20, 2024 10:45 am to 11:45 pm <u>Gardening in Small Places</u>. Network of Community Ministries, 1500 International Parkway, Suite 300, Richardson. Apartment patios or urban courtyards can produce a bountiful stand of plants if you make the proper choices. Everything from containers to reclaimed grassland can be the basis of a pocket garden. Speaker is Barbara Gollman.

June 20, 2024 3:30 pm to 4:30 pm What's Bugging You? Dallas Public Library - Fretz Park Branch, 6990 Beltline, Dallas. Geared to children. This presentation explores which insects are pests and which are beneficial. The basics of insect development are identified. How the assassin bug got its name and other unusual facts about insects are

presented. Speaker is Carolyn Rozier.

June 25, 2024 6:30 pm to 8:00 pm Composting Neil Kaufman, Asst. Director Sustainability of Urban Agriculture at Dallas College will present a program about composting and how it is important in our efforts to sustain life and protect the environment. This will be a 1 hour program that qualifies for CEU credit. Free to all attendees. Plenty of parking in several lots at park.

View More at the DCMGA's Current Calendar of Events



July

It's getting hot, and your plants know it! They will begin shutting down to protect their roots.

Planting

- Continue to plant warm-season turf grasses (Bermuda, St. Augustine, and Zoysia).
- Continue to plant ground covers, tropical, and warm-season annuals.
- Plant sweet and hot peppers, okra, and tomatoes (first half of month) for fall harvest.

Plant Care

- Pay attention to the water needs of lawns, ornamental plants, and vegetables in the typically hot dry days of midsummer, being attentive particularly to new plants with undeveloped root systems and to outdoor potted plants, which can dry out quickly. Water in the early morning hours (3:00 AM to 8:00 AM) to minimize fungal problems and evaporation.
- Continue to check crape myrtles for aphids.
- Continue to check ornamentals, flowers, and vegetables for spider mites.
- Inspect broadleaf evergreen shrubs such as euonymus and hollies for scale insects, and treat as necessary.
- Watch for lace bugs on azaleas, pyracantha, cotoneaster, and lantana.
- Fertilize chrysanthemums if needed.
- Mow turf grasses every 5 to 7 days, maintain Bermuda at 1 to 1 ½ inches and St. Augustine at 2 ½ inches full sun and 3 to 3 ½ inches semi-shade.
- Continue to check for chinch bugs and gray leaf spot fungus in St. Augustine lawns.
- Check lawn for grub worms by digging in several places. Grub treatments, if needed, are recommended if you find more than four grubs per square foot.

- Fertilize hanging baskets and other container plants regularly if needed.
- Harvest vegetables as they ripen.
- To reduce mosquito pests, check house gutters and any containers for standing water. For mosquito larva control, use Bti (Bacillus thuringiensis, israelensis) as a larvicide.

Pruning

- Prune out any dead or broken branches of woody ornamentals (trees and shrubs), but avoid major pruning during the heat of summer.
- Cut back spent flowers of annuals and perennials to encourage new blooms.

New this month on our DCMGA Website:

MASTER GARDENER TEXAS ANN AGRILLEE EXTENSION Gardener Association

Why You Should Let Insects Eat Your Plants

By Chris Baraniuk



Renegade gardeners across the world are embracing a new philosophy: gardening that prioritises insects, not plants. <u>____Read</u> more ...

Why Do My Coneflowers Look So Strange

By the DCMGA Help Desk Team, Margaret Ghose



Aster yellows is a disease caused by a bacteria-like organism known as a phytoplasma. These organisms live in the vascular tissue of the plant and disrupt plant growth and development. <u>Read more ...</u>

Cooking with Flowers

By Lauren McMinn



For centuries, humans have been harvesting plants for food. But did you know that there are many edible flowers that can be grown, harvested, and cooked with your meals? <u>Read more ...</u>

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