



the Hedgelines

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Post-Hurricane Idalia

After severe weather, take action! Inspect your trees and take nothing for granted. If something looks wrong, chances are something is wrong.

From structural tree pruning to developing a post-storm clean-up plan, it is essential for business owners, property managers, and homeowners alike to proactively take steps to reduce the risk of damage to their property. LMP's expertise, combined with our intimate familiarity with the Florida landscape, has proven pivotal in helping advise and prepare our clients for hurricane season.

Having assisted with innumerable post-storm clean-up efforts and witnessed first-hand the force of hurricanes, LMP is well-positioned to quickly mobilize equipment and deploy crews to aid emergency responders, open roadways, and keep essential services running, regardless of where storms strike.

LMP has been and continues to be an essential resource and trusted partner in our partners hurricane preparation and recovery plans. If there is any question as to the safety and health of a tree where you live, work, or play, consult with our certified arborist.

The delivery of high-quality commercial landscape maintenance is accomplished a result of the incredible tenure and experience of our crews and management. People want to feel like they are part of something bigger than themselves, and the LMP culture has enabled our success for over 32 years.

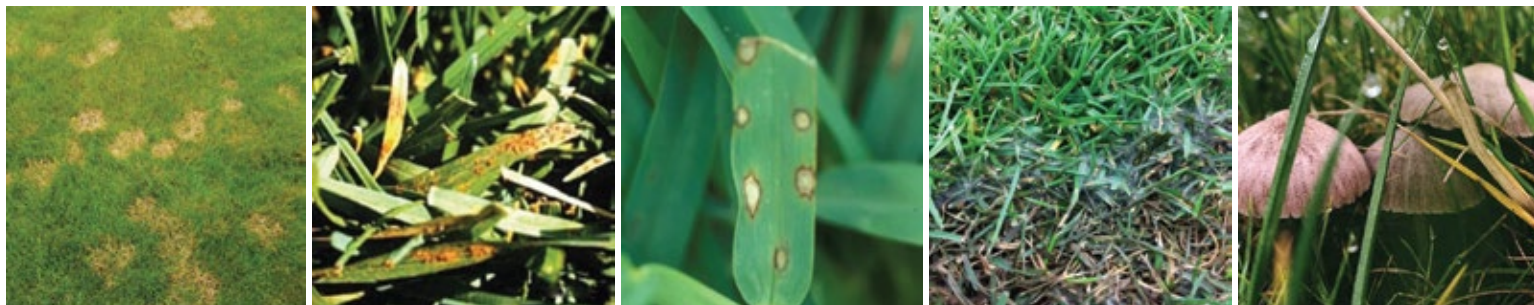


Jetty Villas ♦ Venice ♦ Palms down and Sea Turtle eggs blown all over the beach. ☹️

Limestone from the road bed prevented the roots from penetrating.

Idalia Brings Potential for Insect & Disease Issues

Even if erosion does not occur, improper drainage can still ruin your property by collecting in the soil, creating standing water that can drown your grass and other plants. This excess moisture in the soil can also cause plant roots to become susceptible to fungus and mold. Perhaps more importantly, these puddles of still water can become a breeding ground for unwanted insects like mosquitoes.



A wet landscape creates the perfect breeding ground for pests. The larvae of many insects, such as mosquitoes, roaches, and termites, require stagnant water to develop. Most foliar fungal leaf spot diseases require only a 12- to 14-hour period of wetness to germinate, infect, and colonize our plants. The spores of most fungi that infect leaves need only a film of liquid water on the leaf to sprout and cause an infection.

Wet soil conditions also encourage water molds to attack the roots or crowns of plants and cause rot. Affected plants may exhibit wilting, scorched or brown leaves, leaf drop, dieback, or even death.

Diseases may not be apparent right now, but once the rains subside, be on the lookout for plant diseases. Wilting, leaf spots, or dieback may all be symptoms of disease problems.

Ensuring good drainage will prevent all these dangers, protecting the health and longevity of your landscaping. LMP has many options for installing effective drainage solutions without detracting from your property's overall attractiveness.

Good Drainage is Important

A good drainage system may not always be as prominent or attractive as an eye-catching landscape design, but it's integral to keeping it attractive and functional. Without proper drainage, all the time, effort, and money spent on landscaping can be wasted if erosion or drowning occurs due to improper drainage.

Erosion is the biggest problem resulting from failing to stay on top of your drainage situation. Every season brings rainfall and other precipitation that can cause soil runoff in your yard. If precautions aren't taken, and problems aren't resolved, this runoff can destroy your landscaping. Erosion can decrease the attractiveness and the value of the property, as it lessens the overall yard area. Over time, this can cause foundation issues, creating an unsafe environment and expensive and extensive repairs.



Avoid Walking on Water-Soaked Turf

Not only will trudging through a swampy lawn ruin your shoes, but it can also damage your landscape. When you walk in a water-soaked area, your weight compacts the soil. This limits the air pockets in the soil, making it hard for plants to get the oxygen they need to stay healthy.

The Miraculous Resurrection Fern

If you've ever gazed at an old live oak, you probably noticed delicate green fronds creeping up and curling around the massive trunks and branches, carpeting the trees in a lush green coat. This is one of the most widespread ferns in the southern U.S. It is found in urban settings, forests, and wetlands. Well adapted to and not just surviving but thriving in the wet and dry seasons common to Florida.



Resurrection fern, known as *Pleopeltis polypodioides* var. *michauxiana* to horticulturists, received the common name due to its habit of drying and turning brown when the weather is dry and renewed green growth when it rains. It is a creeping epiphyte and a true fern. Epiphytes are defined as plants growing on other plants but not deriving nourishment from the host plant. Ferns are plants without flowers; they primarily reproduce via spores. Resurrection fern is commonly found on large trees such as oaks and cypress trees, creating a sanctuary for insects on the massive limbs of the oaks.

Creeping resurrection fern prefers shade and is a plant with many well-branched stems that grow in patches, sometimes only a few inches long and wide to large mats covering

whole oak branches. Because it grows on other plants, resurrection fern is classified as an epiphyte, like bromeliads, Spanish moss, and orchids. It has no true roots but clings to the bark. It is not a parasite and receives only limited nutrients from the bark upon which it lives.

The miracle and beauty of this fern reveals itself in lush, vivid greens against the backdrop of the deep brown bark of Florida's oaks. While we call the plant "resurrection," it never actually dies during the process. It has evolved so that as it loses water, its cells fold up to a grayish-brown clump of leaves in a way that enables them to unfold, undamaged, when water is once again available. Some plants will die when they lose 8% of their water, but the resurrection fern can lose up to 97% and still be alive. This plant will survive without water in droughts and again turn green and lush after a rain shower. Even more miraculous, it is thought that this native can live as long as 100 years without water.

It would be easy to overlook this small fern, especially when it is all crispy brown or gray and curled up on itself. There is an amazing little world in those tiny green fern fronds.

Native Tree Dwellers that Keep Hangin' On – *continued*

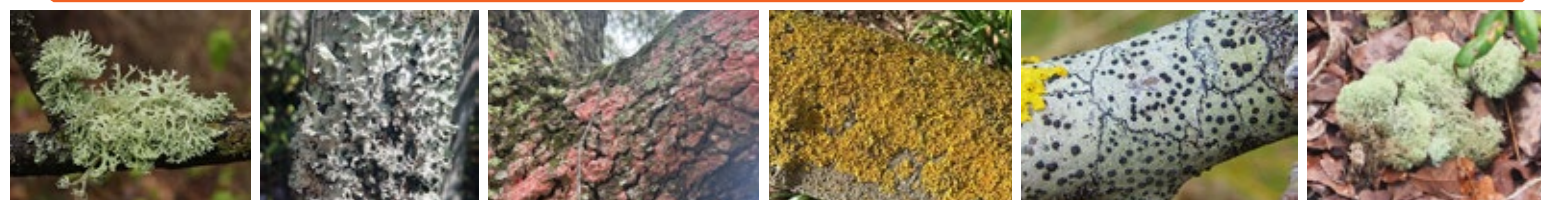
For the Love of Lichens

Lichens are a moss type often mistaken for a fungus, but they pose no threat to a tree. Lichens form a symbiotic relationship between algae and fungi. The algae provide the lichen with food, while the fungi offer shelter and protection. Lichens come in many different colors, including green, yellow, orange, and red.

Lichens come in three different forms, grow very slowly, and live for a long time. **Crustose** is encrusted on the plant bark. You cannot pull them off if you tried. **Foliose** look like they have small leaves. You can pull this off gently. **Fruticose** can be found on the ground or on tree limbs. They appear to have a more spiked structure and are often the most loosely attached.

The majority of Lichens grow on deciduous tree and shrub branches. The lichens' ability to shade the tree's leaves during the growing season is because they are exposed to sunlight during the warm weather growing season, but they do not shade the leaves the same way as the tree's leaves.

While lichens don't directly harm trees, they can indicate poor air quality. This is because they absorb pollutants from the air and hold onto them within their cells. If you want to remove lichens, you can brush them off the tree.



Aphids & Ants: Mutual Allies

Aphids are a very common garden pest. They feed by piercing leaves and sucking out the juices. This can cause leaves to crinkle and curl, especially on new flushes of growth.

Ants and aphids share a well-documented symbiotic relationship, which means they benefit mutually from their working relationship. Aphids produce sugary food for the ants; in exchange, ants care for and protect the aphids from predators and parasites. When an infestation appears, ants arrive soon after to protect and manage the aphids in return for the honeydew they produce. Ants also act as shepherds, moving aphids from fully harvested food sources to fresh areas to eat, also known as the healthy parts of your plants. This complex manner of cooperation among tiny insects is quite impressive.

Not Exactly a Love Story

Ant-Aphid relationships are not exactly a love story. Ants will take active measures to prevent their herds from leaving, which can involve injury and disfigurement. For example, most aphid species do not have wings, but environmental triggers can cause them to develop wings. This allows the aphids to fly away when their food source is depleted. Obviously, ants do not want their aphid herds flying away. The ants will literally tear the wings off aphids to prevent them from flying away. There is also some evidence that ants force aphids to ingest certain chemicals that prevent them from developing wings in the first place.



Types of Aphid Damage

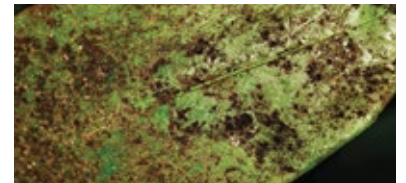
Leaf Dots

Silver spots on the top will appear as aphids suck the sap out of leaves and stems. As they feed, they secrete a sticky waste known as honeydew. Dark-colored sooty mold often develops on the honeydew, which reduces the plant's ability to photosynthesize on the underside as holes in the leaf underlayer where aphids linger. The spots become weak and brown. Eventually holes appear in the leaves as the plants try to protect themselves by "jettisoning" the damaged cells (it diverts resources from the damaged cells!).



Sooty Mold

Sooty mold is a byproduct of aphid secretions mentioned above. When aphids are abundant, so is their waste. That waste is made of sugar and water, which is a perfect breeding ground for mold!



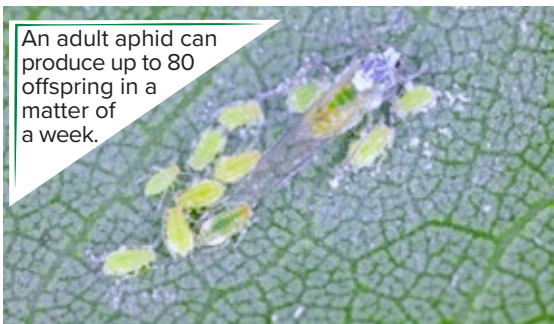
Leaf Curl

Leaf curl happens as the leaves lose fluids from the incessant sipping by the aphids. Unable to achieve the proper osmotic pressure to hold the leaves out flat and catch the sunshine, the leaf curls in on itself.



Leaf Blight

Leaf blight is a more advanced form of the leaf spot. At this stage of infestation, large swaths of the leaves turn yellow as the plant fights to keep fluids in the leaves and continue photosynthesis, and the aphids keep draining the plant's lifeblood.



How to Get Rid of Aphids Naturally

If you catch them early, aphids are easily controlled. You can make your own aphid spray by mixing a few tablespoons of a pure liquid soap in a small bucket of water. Apply with a spray bottle directly on aphids and the affected parts of the plant, making sure to soak the undersides of leaves where eggs and larvae like to hide. The soap dissolves the protective outer layer of aphids and other soft-bodied insects, eventually killing them. It doesn't harm birds or hard-bodied beneficial insects like lacewings, ladybugs, or pollinating bees.

Native Tree Dwellers that Keep Hangin' On



The Ubiquitous Spanish Moss

Contrary to common belief, it does not harm trees and generally does not need to be removed. Spanish moss is not a true moss, but a member of the bromeliad family. It's a perennial plant that grows in long, greyish-green strands with a fast growth rate, doubling in size within a month to 6 weeks. It is completely rootless and comprises hundreds of tiny plants clinging together to make its recognizable long chains. It has nearly invisible green flowers that bloom in the springtime.

Many animals use Spanish moss for protection, taking cover in the thick masses. The zebra longwing, Florida's state butterfly, will cling to Spanish moss at night to sleep. Bats use moss strands for nest building, and some species of birds use the moss to create a unique style of hanging-sack nests in which eggs are deposited and young birds are reared.

Regardless if you love it or hate it, Spanish moss is an important part of the ecosystem. It's native to the area, so it's as natural as the laurel and live oaks that often host them. They've had this relationship long before people were around with opinions.

If you have areas that are really thick, it may compete with the tree for sunlight, but if it is that thick, something else is probably seriously affecting the tree. Since the leaves of Spanish moss require sunlight to produce its own food, it thrives in trees that are in a state of decline or have less vigorous growth. A healthy, vigorous tree is not affected by Spanish moss.

In those situations where Spanish moss removal is the best option, let the LMP team handle the removal and ensure the preservation of the tree's overall health. Attempting to remove the moss can have negative consequences if not done correctly.

Ball Moss Be Gone

Ball Moss is a small epiphyte commonly found clinging to limbs of healthy and sickly live oaks and other trees. The air plant is easier to spot in the sickly oaks, leading to a common misperception that ball moss harms the trees.

A benefit of ball moss is that it takes in nitrogen from the atmosphere and converts it into a nutrient. The nutrient is added to the soil at the tree's base. This benefits the oak and all surrounding vegetation. However, an infestation of ball moss can indirectly kill an oak tree by weakening it and making it more susceptible to disease and pests.

Ball moss typically grows on the dead interior limbs, so removing them removes most of the ball moss. Thinning opens the canopy to more light; ball moss prefers low light, discouraging further moss growth. Controlling Ball Moss is not easy. However, trees that are pruned correctly regularly seldom accumulate Ball Moss. Neglected trees, such as those in a pasture, will naturally accumulate Ball Moss on the lower limbs, as the dead wood is seldom removed. You will often see fallen dead limbs with irregular breakage points on the tree. These breakage points are ideal for insects and diseases to enter. The health of a tree is directly impacted by the regular pruning of dead limbs at the appropriate location. This allows the tree to compartmentalize any disease and heal over the wound. Done regularly, Ball Moss is removed with these dead limbs and is less likely to have a chance to re-establish.



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Hurricane Related Tree Care

Right After a Storm

Right after a storm it is important to sort out trees into priority groups, acting immediately in situations that require urgent attention and selecting trees to be monitored and treated later on. Remember that even though hurricanes can be devastating to communities and urban forests, not all storm-damaged trees need to be removed and many trees can be treated and saved. When assessing damage, think about it in terms of tree function and your objectives. Management actions will depend on observing the interrelated points below when deciding what trees to remove or restore:

- 1 Soil space and soil properties
- 2 Tree health, size and age
- 3 Previous cultural practices
- 4 Previous tree structure
- 5 Amount of damage



Right-of-Way Tree roots have surfaced with no place to go. This tree is at high risk to fall in a storm hazard and no remediation is possible, it must be removed.



Above Left: Oak struck by lightning. Not visible is the decay happening inside. Above Right: Root pruning is not an option for this tree, it would have no roots left to keep it standing. During heavy soil saturation and sustained high winds, healthy trees like this one can succumb and fall under these conditions.



Preparing Trees for Hurricane & Storm Season

It is important to prepare your trees for tropical storms BEFORE hurricane season. Proper pruning will help trees weather a storm and will help to minimize any damage to the tree and any neighboring property. There is a right and wrong way to prune trees, so hiring a certified arborist who can assist you is crucial. Much of the worst damage to trees can be prevented with proper care.

Your trees surviving the next severe weather event may depend on the actions you take early in the season. The most significant factor in your tree's survival, however, is its health. Healthy trees can sustain minor and moderate damages and quickly recover from severe weather events.

Preventing Tree Damage & Catastrophic Loss

Loss prevention begins when you take proactive measures to avoid catastrophe. Know where you are planting, the species, and how it will grow as it reaches maturity. The importance of root integrity and health cannot be over-emphasized. In addition to absorbing water and essential elements, roots anchor the tree. If roots are damaged in any way, the likelihood of failure increases.

Health of the tree prior to the hurricane will affect its ability to recover. Healthy trees recover faster than those in poor health. Old trees with decayed root systems, stem decay, and large dead branches are more likely to decline or die than recover. These preexisting conditions might make it more appropriate to remove the tree instead of restoring it.

For the trees that have reached maturity on your property, keeping them healthy, well-pruned, and thinned will keep them solid and durable when necessary. Proactive care for your trees will only help them grow stronger each season.

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