The Negative Impact of Excess Rain on Landscapes

It seems like in Central Florida there is no balance between too much rain and drought; we have quickly moved from one extreme to the next. Just a few weeks ago the Governor of Florida declared a state of emergency for a few central Florida Counties that were experiencing extended drought. Then came the month of June which frequently has more than its fair share of rain.

Too little water in the soil is just as bad as too much water. For instance, turfgrass needs only about an inch of water per week. Excess water in the soil will encourage root diseases, foliar diseases, depletes oxygen in the soil, and limits the uptake of nutrients by plant roots. In addition, excess water also causes nutrients to leave the root zone (leaching) moving down into the ground water resulting in water pollution. Flooding can cause contamination to vegetables which can lead to food borne illnesses. Regrettably, trees can easily be blown over as their roots lack support when there is oversaturation of the ground. On the other hand, plants growing in soil that is lacking water may experience wilting and eventually die.

It is recommended by UF/IFAS Extension Green Industry Best Management Practices not to apply fertilizer or pesticide to turf if there is rain in the forecast within the next 24 hours. It is a common practice for homeowners who do not have an irrigation system to fertilize the lawn just before a rain event so that the product can be watered in. This practice is not advisable because an intense shower will wash freshly applied fertilizer in water bodies such as ponds and move it down into the ground water resulting in pollution. It is equally important not to apply pesticides just before rain. This will cause pesticides to wash away from the intended site thereby causing pollution. Do not apply fertilizer or pesticides to saturated soil as doing so can lead to water pollution. It is important to mention that it is not recommended to mow wet grass. Mowing when wet will not provide a uniform cut, the mower blade gets clogged, unsightly clumps of clippings are left on the lawn, and wheel marks from a heavy riding mower are left in the landscape which consequently results in soil compaction.

Finally, in many Florida counties, during the summer there are bans that have been in placed on fertilizer application containing nitrogen and phosphorus. Those local authorities believe restricting fertilizer use will minimize the negative effect of nitrogen and phosphorus on the water source. There is no doubt that nitrogen and phosphorus facilitate algae bloom which depletes oxygen in water, thereby resulting in poor water quality especially for aquatic life. The University of Florida research does not support a summer fertilizer restriction; summer is when warm season grass is actively growing and needs the nutrients most. To minimize water pollution caused by nutrients, the University of Florida implemented the Green Industry Best Management Practices (GI-BMP) program (https://gibmp.ifas.ufl.edu) which teaches environmentally safe landscaping practices that help conserve and protect Florida's ground and surface waters. For more information on this and any other horticulture related topics, contact Grantly Ricketts at 321-697-3000 or email gricketts@ufl.edu.