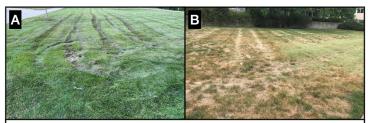
Issue: 24-08 July 12, 2024

THE PURDUE LANDSCAPE REPORT

Don't Mistake Activity for Achievement

By: Lee Miller, turfpath@purdue.edu



When sitting on the couch is better than sitting on a mower.

A) **Too wet:** Leaving wheel ruts from mowing increases compaction, reducing root depth and increasing soilborne disease potential.

B) **Too dry:** Mowing during drought stress injures the plant further. If the grass isn't growing, you shouldn't be mowing.

Figure 1. When sitting on the couch is better than sitting on a mower

Bill Walton, the legendary basketball player, sports announcer and perhaps the most outspoken and famous Grateful Dead fan, passed away in May leaving behind enough quirky quotes and euphemisms to make Yogi Berra proud. In a now viral clip since his passing, Mr. Walton reflects on teachings from his legendary coach and former Purdue basketball player John Wooden, and in under three minutes throws out many quotes such as "it's ok to disagree, just don't be disagreeable" that strike quickly with their simplicity, meaning and purpose. One of these echoes often and resoundingly when assisting homeowners and turfgrass managers with declining lawns – "never mistake activity for achievement".

When a plant show signs of stress, our nature is to go into emergency mode despite oftentimes not knowing the true cause of the decline. In these cases, we can do too much and unknowingly become the plant's enemy instead of gently nurturing it back to health. This "killing with kindness" sometimes stems from the erroneous thought that if a little is good, a little or even a lot more should be better. Remember the dose makes the toxin, and even needs such as water (as explained below) can act as lifesaver or poison, depending on the status of the recipient.

Don't let any of this message portend that managing the health of lawns, or any plant, is best whilst sitting carelessly on the front porch drinking a glass of iced tea. Plants do require care and some elbow grease, but purpose and timing are key to providing help or harm. Below are the foundations for lawn management and how going overboard can be a detriment.

Mowing

The tedious and monotonous task of mowing is required on a frequency that reduces scalping and mounds of clippings. This frequency, in most cases once a week during normal to high growth rates, needs to be adjusted based on site conditions. To reduce the potential for burn from hot mower tires, mowing should be restricted during the height of a hot summer day. In periods of rainfall scarcity, if the turfgrass isn't growing due to drought dormancy then the lawn should not be mowed. After a wet 2024 spring, high temperature and just a few weeks of low rainfall caused a 'flash drought' (explained more below), causing stress and slowed turfgrass growth. Mowing at this time exacerbated browning and led to traffic damage. On the flip side, mowing when the soil is saturated after an intense rain storm, like we just had with Beryl, can leave unsightly mower ruts which compact the soil, restrict root growth and encourage soilborne disease activity (see photo above). While a delicate balance, implementing an adaptable schedule that allows for site assessment and taking a day or few days off from mowing during the summer stress period can greatly enhance turfgrass health. Additionally, mowing height on cool-season lawns should be as high as most mowers will go, normally in the 3-4" range.

Irrigation

At the time of writing, tropical storm Beryl has just barreled through, and yet some irrigation heads on home lawns are still spinning. In ground irrigation controllers are not a 'set it and forget it' device. The extra water fills the precious pore space of most heavy clay yard soils and replaces air, which is necessary for deep, healthy root growth. When roots can't develop due to persistent soil saturation, this sets up a 'flash drought' when rainfall or irrigation are in short supply. Excess soil moisture also sets up the mowing + compaction scenario noted above and more disease activity. For these reasons, we tend to see more

samples in the diagnostic lab with significant decline from irrigated lawns than from non-irrigated.

"Well, the golf courses are watering, why shouldn't I?" is a poor comparison. Golf putting greens are mowed at a much mower height and in most cases are sand-based, which will require water far quicker than a home lawn. During drought conditions, allowing the lawn to go a bit brown and reacting to it with irrigation is preferred as opposed to watering it to keep it perfectly green.

Fertilization

When lawns go dormant or are stressed from the heat of summer, dumping a heap of food on the plate isn't suggested. This being said, nitrogen (N) is often limiting in a turfgrass situation since N is mobile, moves to the youngest leaf tip and is summarily mowed off. Spoon feeding lawns once or twice during the summer with a low amount of nitrogen (i.e. 0.25 lb N/1000 sq ft) can increase turfgrass health, and is a practice done on higher amenity golf courses and sports fields. To help make this important calculation, since overdoing it can potentially be detrimental, know your lawn size and use a fertilizer calculator like this one – Purdue Turf Fertilizer Calculator.

The adage "an ounce of prevention is worth a pound of cure" is a valued assertion in pest control, but only if that pest is present and needed prevention in the first place. Certain pests, such as crabgrass, can be counted on to occur annually, but in many instances, pests occur ephemerally over longer periods of time. When even a short-lived pest epidemic takes hold, the lasting impression can lead to the thought that annual, monthly or even weekly pesticide applications are necessary to ensure it doesn't happen again.

In a recent example, a homeowner started applying fungicides in early March on a two-week schedule to "get ahead" of a disease problem. In reality, the first four applications were too early for the disease to be active and provided no benefit, and the homeowner was still frustrated with decline from drought and other issues in early June. If the lawn has a history of disease identified correctly by a diagnostic lab, prevention can be employed but should be done judiciously and with an additional focus on cultural controls such as reducing irrigation, fertilizing properly or amending poor soils. In home lawns maintained at appropriate mowing heights, noticing a disease early and then applying a fungicide will normally result in short-lived symptoms and quick recovery. For lawn diseases, fungicide intervention should be the exception and not the rule.

Pesticide Application

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Purdue Landscape Report © Purdue University - www.purduelandscapereport.org