THE PURDUE LANDSCAPE REPORT

The Annual Drought Article

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About ten years ago I was listening to a talk by a climatologist. She indicated that data is trending towards more floods and more droughts in the Midwest. At first listen this made absolutely no sense. How can a place simultaneously have more flooding and more drought? Well, if you've paid attention over the last several years, this is exactly what we've experienced. In fact, the Purdue Landscape Report has an article from earlier in the year addressing the flooding conditions that most of the state experienced in the spring. Those days seem long ago right now as much of the state is in abnormally dry or moderate drought conditions (Fig. 1). As of July 7th, 94% of Indiana was in either abnormally dry or moderate drought, with 40% of the western counties in moderate drought.



Figure 1. The July 7th, 2022 drought monitor update. Map courtesy of the National Drought Mitigation Center. https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor. aspx?IN

Some parts of the state have received much needed rainfall since the last drought update, but other locations haven't received much or any. Being in a water deficit right now is interesting due to the amount of rainfall that occurred in the early part of the growing season.

Remember some key steps concerning your landscape during extreme dry periods:

- Don't wait until leaves begin dropping to start watering.
- Trees should receive the 5+5 rule.
 - o 5 gallons, plus 5 gallons per caliper inch.
- Ideally watering should occur in the early morning to prevent foliar diseases.
- Mulching to 3" can conserve moisture and reduce temperature in the upper root zone.
- Watering during dry conditions will help prevent future insect, disease, and other stress issues going into the fall and the following year. In fact, plants going into the winter that are stressed due to water deficiency will reduce the cold hardiness and therefore will be more likely to suffer cold injury and/or death.
- If a plant isn't receiving enough water, the amount of nutrient uptake will not be sufficient and will experience deficiency from nutrients the following year.

The Purdue Landscape Report has many articles that address drought and watering issues. Some of those links are provided below.

Is it Time for Drought Proof Plants in the Midwest?: https://www.purduelandscapereport.org/article/4727/

Drought Resources:

https://www.purduelandscapereport.org/resource/drought/

Trees in Peril:

https://www.purduelandscapereport.org/article/trees-in-peril-2/

How Do Trees Use Water:

https://www.purduelandscapereport.org/article/how-do-trees-use-water/

Summer Tree Care:

https://www.purduelandscapereport.org/article/summer-tree-care/

Landscape Plants are Struggling Due to Precipitation Extremes: https://www.purduelandscapereport.org/article/feast-or-famine-landscape-plants-are-struggling-due-to-precipitation-extremes/

Urban Trees and Climate Change:

https://www.purduelandscapereport.org/article/urban-trees-and-climate-change/

Dog Days of Summer:

https://www.purduelandscapereport.org/article/dog-days-of-summer-barking-early-this-year/

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