

How Much Water Does Your Lawn Use?

By Derek Arndt

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NORMAN - Did you know that one-third of an inch or more of water could be lost from a Bermuda lawn in a single day? The culprit is EvapoTranspiration (ET) - the combination of evaporation and transpiration.

The "E" part of ET is evaporation. Evaporative demand increases dramatically during daylight hours due to increased heating from the sun. That increased evaporative demand is why residents are encouraged to water between dusk and dawn - so more of that water can percolate into the soil and reach a plant's root system. The "T" in ET is transpiration, which is the release of water vapor from plants and their organic processes.

ET is a supply-and-demand process, meaning the surface isn't always able to surrender water at the rate the atmosphere demands it. This time of year, warm air, a high sun, and breezy winds can really add up to tax near-surface water at a rate of 10 inches per month! Considering that Oklahoma's normal monthly rainfall during the summer is two to four inches, it's obvious the atmosphere can't always get what it wants.

Finally, the Oklahoma Mesonet operates the Oklahoma Evapotranspiration Model, which was adapted at Oklahoma State University. The model generates daily output for several grasses, based on local Mesonet data. Also, there is a lawn irrigation schedule to help folks deliver the right amount of water to their lawn at the right time!

You can check out the Oklahoma Evapotranspiration Model at the Mesonet's AgWeather pages: <http://agweather.mesonet.ou.edu/>. Click on "Models", then "Oklahoma Evapotranspiration Model".

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