

BIOLOGICAL EFFECTS OF DROUGHT ON PLANTS

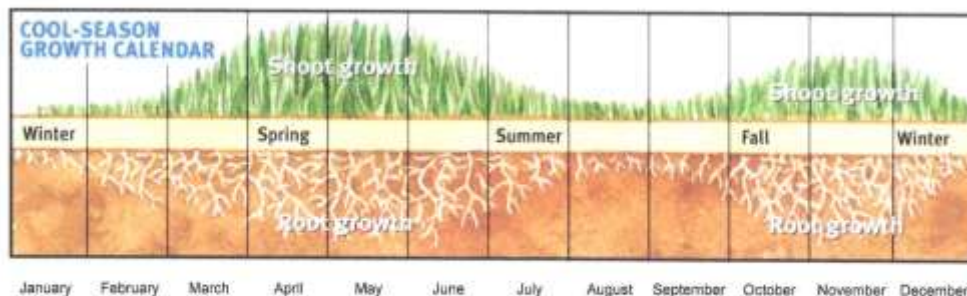
Turf and Trees

Quick analogy: Turf and trees are like bears, bears must have sufficient food stores to survive hibernation or they die, turf and trees also need sufficient food stores to survive their “hibernation” through the winter months (during dry winters it is a good idea to water occasionally). If bears were required to “hibernate” longer than normal they would die as would perennial plant life such as grass and trees, there is a very thin line between dormant and dead so please do not attempt to allow dormancy during the summer.

What happens during the winter months DOES affect all plant life during the growing months. The 2012 growing season was particularly difficult for trees and turf because the 2011-2012 winter was very dry and mild. These conditions were compounded by an extremely hot and dry growing season. During these conditions weeds are especially abundant and difficult to control.

FACTS

- Plants breathe and need oxygen, standing water during the season and ice during the winter chokes root systems.
- Plants (not weeds) sweat and must replenish lost moisture just like us;
 - weeds close pores during periods of heat and make it almost impossible to kill them. They are most vulnerable during cooler periods (spring and fall).
- Plants store carbohydrates and need extra going into “hibernation” (dormancy) and this “food” is stored in the blade not the root.
- Grass roots need plenty of water to stay alive especially when actively growing
 - grass roots are only actively growing immediately following winter thaw from mid March through May and just prior to dormancy in October. the more water the deeper the growth and the easier to maintain during hot months.



HELPFUL TIPS FOR A HEALTHY LAWN

- Water once a week for 45-60 minutes beginning in April when roots are growing. Remember grass needs 2” per week. If watered properly in early spring less water will be required during the summer months saving time and money.
- Water deeper but less often, water once or twice per week but for longer periods. Call us for instructions on how to set your sprinkler systems to achieve this without wasting water. (Watering multiple days a week for 10-20 minutes does almost nothing for the root zone.)
- Provide appropriate amounts of fertilizer, heavier in spring and fall.
- Apply weed control during cooler weather when weeds are vulnerable because they will not absorb the weed control during hot months and therefore are harder to kill.
- Because grass stores it’s food in the blade mowing properly is critical.
 - Keep mower blades sharp or you “beat” the grass.
 - The taller you mow the more food the grass can store.
 - Never mow off more than 1/3 of the blade, this starves the grass.