Grass 101

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Grass Makes It's Own Food

- What the grass does-
- Photosynthesis is the name of the process of food production for plantlife. Nature made grass to manufacture its own food. When conditions are favorable, the green leaves capture energy from the sun converting water, fertilizer, and other elements into carbohydrates (simple sugar). Grass consumes sugar as food. During cool months of the year, grass will make food and store it away to be used during the warmest and freezing months.
- How to use this information-
- Your lawn will react to each season of the year according to the soil temperature. The cooler the weather, the safer it is to fertilize. We recommend fertilizing with a nitrogen, phosphate, potash combination (ex- 16-6-8 or 15-15-15) once a year at or around Halloween. To go the extra mile, fertilize using the same fertilizer at or around Presidents Day. Important* During summer months DO NOT apply a nitrogen fertilizer, instead use only Ferrous Sulfate (Ironite).

How to Water

- Water is essential to all plant life.
- Rainwater is the best water for plants (Pray for rain!)
- People who use a garden hose or water manually to water plant life will use less water than those who rely on a programmed timer/clock.
- A timer/clock must be adjusted as needed with the seasons for best water economy.
- The best watering is deep and thorough. To water deeply and thoroughly irrigate early morning, 30 minutes twice a week. To avoid run off water, break up the 30 minute watering into 3, 10 minute times, 4 am, 5 am & 6 am during the Summer.
- An example of water savings-
- 10 min. X 7 Days = 70 minutes/week.
- 30 min. twice a week = 60 minutes/week *and you have encouraged the grass to have deeper roots!

What to Fertilize With

What is Fertilizer?

Fertilizer are small pellets, comprised of percentages each of Nitrogen (N), Phosphate (P), and Potash (K). An example of common fertilizers you will see at a store may be 16-16-8 or 9-9-9-11 Fe. The 1st # is the Nitrogen (N) content. The 2^{nd} # is the Phosphate (P) content. The 3rd # is the Potassium (K) content. When a fourth # is listed the package will specify the element. In the Western region it is usually Iron (Fe) or Sulfur (S).

How to Use Fertilizer.

- Our soil fertility is usually poor so the lawn will need fertilizing at least once a year at or around Halloween.
- Never miss Halloween! A 2nd application around Presidents Day is always beneficial too!
- Know the square footage of your yard and apply the product according to package directions.
- It is best to apply fertilizer over the area evenly. Two applications at a ½ rate are better than one application.
- Apply (N) during Fall & Winter, and only (Fe) during summer months

What is Fungus?

- Fungus is a vital component in the soil ecosystem. Fungi are living organisms that feed on dead "stuff" helping to decompose them. Fungi will decompose the clippings from mowing, increasing your soil fertility. Eventually, the dead "stuff" will vanish into the soil. All the decompositioned "stuff" becomes nutrition for future plant life. The more fertile soil, the healthier your turf.
- Heat and fungus conditions combine to stress a lawn, even damage it.
- The presence of Mushrooms and "Dog Vomit" indicate that fungus is active.
- During hot weather (August), humidity, and *<u>excess</u> nitrogen, fungi populations get out of control. The life cycle, baby to adulthood to reproduction (by the millions) can be as short as 18 hours!
- During Winter, the cold weather will slow the life cycle of fungus.
- Fungi requires two things- *<u>excess</u> Water and *<u>excess</u> Nitrogen. We cannot avoid watering during the summer but we can avoid the <u>excess</u> Nitrogen during summer. Do not apply a nitrogen Fertilizer during warm summer months! You can apply Ferrous Sulfate and you can aereate the lawn during summer.

Avoiding Trouble-Fungus

- Eliminate excess nitrogen. Do not fertilize with nitrogen from mid May until mid September. Instead monthly Applications of Ironite (ferrous sulfate) is best.
- Irrigate deep throughout the year. The main idea is <u>do not water daily</u>, rather water as needed. The interval goal between waterings is weeks apart in winter months and possibly as close as twice a week during hot summer months.
- Find a way to water deep. Tip- To help your soil take on more water, aereate your soil to reduce compaction. Aereation involves making holes in the lawn. These holes create pockets that hold water. This will reduce runoff.
- Find a way to water deep. Tip- break up an irrigation cycle time into smaller times. Example a 30 minute block could be made to be three 10 minute times. This can be done by setting a water timer/clock to have three start times (4am, 5am, 6am for 10 minutes each) This will reduce runoff.
- Applying a Fungicide product does not usually kill fungus. The chemical reaction of a fungicide will generally serve to increase the plant's immune system. The grass will usually recover from stress (if) applied early enough.