

**STORMWATER MANAGEMENT PROGRAM  
O & M STAFF TRAINING WORKSHOP  
PUTNAM VALLEY CENTRAL SCHOOL DISTRICT  
MAY 14, 2013**

**I – GRASS CLIPPINGS INTO OUR LAWN IMPROVES THE ENVIRONMENT**

- **Excess fertilizer**, specifically phosphorus and nitrogen, is **bad for the environment**: It washes into streams and lakes, **clogging them with algae**
- It's simple...**grass clippings left on the lawn will decompose and act as a natural organic fertilizer**
- **A ton of grass clippings contains more than 1,700 pounds of water**
- According to a University of Connecticut research scientist, **clippings left on the lawn can increase the organic content of the soil and lead to increased earthworm activity**
- **Earthworms improve soil aeration and water movement through the soil**, providing a better environment for plant growth

**II – GRASS CLIPPINGS REDUCES FERTILIZER NEEDED IN YOUR LAWN**

- Clippings left on the lawn **recycle nutrients, saving about 25% of your annual fertilizer costs**

- According to Dr. Norman Hummel, Jr., Turfgrass Specialist at Cornell University, "**one ton of fresh clippings contain approximately 15 pounds of nitrogen, 2 pounds of phosphorous and 10 pounds of potassium** -- the three major nutrients -- and smaller quantities of the other elements essential for plant life."
- This significantly **reduces the amount of commercial fertilizers** to be applied onto our lawns

### III – RECYCLING GRASS CLIPPINGS INTO YOUR LAWN SAVES TIME & MONEY

- Did you know that a **1/2 acre lawn produces over 3 tons or nearly 260 bags of grass clippings each year**
- Think of all the **time and effort** it would take to **bag all those clippings, collect and dispose those clippings**
- Recycling clippings back into the lawn requires less effort than disposing of them as waste.
- No one has to **handle the clippings** – not you, not your **lawn care professional** and not the **waste management crew**
- You can **reduce your mowing time by nearly 33% to 40% by not bagging**
- You **save money by reducing the amount of fertilizers** you apply and **by not needing trash bags for collection of clippings**
- Leaving clippings on the lawn **saves tax dollars spent for labor, fuel costs and dumping fees** that are incurred to dispose of this moisture-laden material

### IV - MOWING TECHNIQUES & TIPS

- Simply **remove the grass catcher**
- Ask your lawn mower dealer if a special safety plug or adaptor kit is needed **to convert your mower into a "recycling" mower**
- You can also have a **mulching blade installed**

- Keep your grass mowed to **2"- 3" tall**
- **Do not remove more than 1/3 of the grass blade** in any single mowing
- Mow when the **grass is dry**
- Keep your **mower blade sharp** because dull mowers tear the grass blade, injuring the plant, and create a brownish cast to the turf
- If the grass gets just a **bit too high, simply mow over the clippings a second time** to further shred and scatter them
- If excessive growth occurs between mowings, **raise the mower height**, mow and then gradually lower it over a span of several mowings. This will help prevent shock to the plants
- When it's time to replace your mower, **consider buying a mulching, recycling, or a non-polluting reel mower**. All of these do a good job of shredding and scattering grass clippings

#### V - FERTILIZER APPLICATION TIPS

- **Proper fertilizer application** is important
- And remember, when it comes to fertilizer, **more is not better**
- Research shows that most grasses require only **modest levels of nitrogen** for good color and controlled growth
- **Too much fertilizer will make your lawn grow faster**, resulting in more mowing and more clippings
- Apply fertilizer to your lawn in **late April and again in September**
- If a **third treatment** is needed, apply in **late May**
- Apply **only 1/2 pound of nitrogen per 1000 square feet of lawn** at each application
- For slower, more uniform growth, choose fertilizers containing sources of **slow-release nitrogen** such as methylene urea, ureaformaldehyde or sulfur coated urea
- The bag may also read "**water insoluble nitrogen**" or "slow release nitrogen"

## VI - WATERING PRACTICES

- Remember, the **more** you water your lawn, **the faster it's going to grow and the more you will have to mow it**
- Conserve resources by **not watering unless the grass really needs it**. Let Mother Nature water your lawn
- If you **choose to water, 1 inch of water is adequate to wet the soil to a depth of 4"- 6"**
- Place an empty can under the sprinkler to **measure when an inch has been applied**
- If **water begins to run off the lawn** before an inch is applied, **turn off the water** and let it soak in for an hour or so, then resume watering until 1" is applied
- Water deeply and **less frequently to encourage deep** root growth
- **Light, frequent watering** encourages shallow roots and **may lead to increased disease and stress injury**
- **The best time to water is in the morning** because less water is lost through evaporation and transpiration
- **Avoid watering during mid-day** and try not to **water in the evenings** since a lawn that remains damp during the night is more prone to disease