## A Guide to Yard Waste and Lawn Care

Lawn maintenance can make your house and yard more beautiful, but what we do to maintain our lawns can affect the environment around us.

When it rains, water flows off our yards, streets, and parking lots directly to our streams without ever being cleaned. As it flows to storm drains, storm water can pick up pollutants in its path including things like oil, dirt, litter, pet waste, and yard chemicals.

### **Fertilizers**

Fertilizers are essentially nutrients used by plants to live. Most fertilizers contain nitrogen, phosphorus, and potassium but can contain other elements as well.

Just like humans, plants can only use so much food. Fertilizer not used by the plant is available to mix with rain and becomes storm water pollution.

Nutrients from fertilizers, such as phosphorus and nitrogen, promote algae blooms and excessive plant growth. Algae depletes oxygen making it unavailable to fish and other aquatic life. Algae blooms and excessive plants limit much needed sunlight.

- Improve the health of your soil by adding compost and using organic mulches.
- Use fertilizers sparingly.
- Leave grass clippings on your lawn as a natural fertilizer.
- Store fertilizers in areas that are covered to avoid mixing them with rain.

## **Soil Testing**

A soil test report gives you precise nutrient requirements for the soil type and plant type in your situation. Soil testing takes the guess-work out of lime and fertilizer purchases.

- Soil test your yard before applying lime or fertilizer.
- Test kits can be obtained at the Penn State/County Extension Service

#### **Pesticides**

When it comes to pest control, the best defense is a strong offense – building healthy soil, selecting appropriate plants, watering effectively, and using mulch. An ounce of prevention is better than a pound of pesticide.

- Apply pesticides exactly where you want them.
- Consider physical control such as barriers, traps or handpicking instead of pesticides.
- Avoid spraying pesticides onto driveways or sidewalks.
- Store pesticides in areas that are covered to avoid mixing them with rain.
- Use pesticides sparingly.
- Avoid chemical applications when rain is forecast.
- Protect beneficial insects by avoiding broad-spectrum pesticides.
- Read pesticides labels carefully.
- Be sure to identify the pest plant or insect so as to purchase the correct product.

#### **Yard Waste**

Not only does yard waste cause blockages to the drainage system which leads to localized flooding, it can also quickly super-fertilize streams which leads to algae blooms and fish kills.

- Sweep up yard debris from streets and sidewalks instead of washing it away.
- Never dump grass clippings and other yard waste into storm drains or on creek banks.
- Curb bagged yard compost it.

### **Erosion Control**

Sediment is a major contributor to storm water pollution. Sediment adds suspended solids to water, clogging the gills of fish, blocking sunlight, and affecting photosynthesis of aquatic plants and phytoplankton. The best way to control erosion is with vegetation. The roots of plants hold soil particles in place. The larger the root system the less likely soil will erode.

- Replant bare areas to avoid soil erosion
- Direct down spots away from paved surfaces.
- Sweep up soil from paved surfaces instead of washing it away.
- Keep areas adjacent to streams, lakes, and ponds heavily vegetated with large root systems.

Fiction: Grass clippings aren't a problems because they are natural and can biodegrade.

Fact: As grass clippings and other organic material decompose, the chemical reaction uses available oxygen to produce carbon dioxide. Grass clippings and other organic materials, when introduced to creeks and lakes, remove oxygen from the water which suffocates fish and other aquatic animals. Grass clippings can be left on the lawn to biodegrade.

Fiction: Organic fertilizers are not harmful to the environment.

Fact: All fertilizers have the potential to be harmful when improperly applied. Fertilizers are essentially nutrients that plants need to survive. Whether a fertilizer is organic or synthetic (chemical), if over-applied the excess nutrients can be transported in storm water runoff to nearby creeks and lakes. Organic fertilizers are much more sustainable sources of nutrients, but a soil test will help prescribe the proper amount of fertilizer that should be applied.

Fiction: My yard care habits can't possibly have that much impact on water quality.

Fact: Research shows that an average 1,000 square foot lawn can generate up to 500 pounds of grass clippings each year. Grass clippings are full of nutrients that have been applied as a fertilizer. In a metropolitan area the cumulative impact of our community on the water quality of our creeks and lakes is quite large.

# **Things To Discuss With Your Yard Care Service**

If you use a professional yard care service, it is still up to you to make sure that your landscaper does not contribute to the storm water pollution problem. Here are some things to consider when using a yard care professional.

- Ask them to grasscycle (leave clippings on the lawn).
- Make sure they sweep up stray clippings and dispose of them properly instead of leaving them in the street.
- Know which pesticides are being used, that they are only used when necessary and that they are not applied on a set schedule.
- Check to make sure staff are properly trained and licensed to apply pesticides.
- Know how often fertilizers are used.
- For more information concerning protection of our streams please visit the municipalities website and look under "stormwater management."