

WHAT IS FERTILIZER?

Material that delivers required nutrients for increased plant growth, yield or nutritive value is considered a fertilizer. Fertilizers contain nutrients that are used in large quantities by all plants. Commercial fertilizers typically supply nitrogen, phosphorus and potassium. The content of each is expressed as a ratio of three numbers. A 12:2:6 fertilizer contains 12 % nitrogen, 2 % phosphorus and 6 % potassium.

ORGANIC vs INORGANIC FERTILIZERS



Organic fertilizers are by-products of everyday life, such as manure and plant refuse. They provide a slow-release form of nutrients that stay in the soil longer. Typically the nitrogen component is a complex organic form that is not readily soluble in water. You can create your own source of organic fertilizer from compost.

Inorganic fertilizers are manufactured from diverse sources and are usually much more concentrated than organic fertilizers. The available

nutrients are typically very soluble, and if not applied properly, can leach rapidly from the soil.

HOW CAN FERTILIZERS IMPACT SURFACE WATERS?

Nitrogen and phosphorus contained in fertilizer not only help the grass to grow, but also help algae and aquatic weeds to grow. Excess or poorly bound nitrogen and phosphorus can become soluble during rain storms or while irrigating a lawn. Once these nutrients are in waterways they travel long distances to lakes and our intracoastal waterway. Too much of either of these nutrients will result in the excessive growth of weeds and algae. As the plants overproduce and die, oxygen is depleted from the



water causing death to marine life. Such an overly productive lake is referred to as EUTROPHIC.

Lawn Mowing Tips

Changing mowing habits can reduce the need to fertilize and water a lawn. Try the following:

- Cut grass as high as possible, at least 3 - 3.5 inches high. This shades out weeds, reduces water evaporation and reduces soil runoff due to raindrop impact.
- Leave clippings on yard to increase organic content of soil. (note - old roots are the cause of thatch, not grass clippings). Cut frequently (no more than 1/3 the length of your grass) so that clippings may easily fall to the soil. If piles develop, don't bag it, compost it or spread it out on your lawn.

For more information, go to <http://extension.missouri.edu/p/G6958>



CREATE YOUR OWN COMPOST PILE

Make your own fertilizer that won't harm streams and rivers. Here's a way to make a simple compost pile.

- Select a site away from surface water that would be adversely affected by runoff from the compost pile. Start the pile once you have a ready supply of leaves, twigs, etc..

- Place a 3" layer of twigs or other coarse material on the bottom of the pile to provide for air flow and drainage. Cover this with a 6-12" layer of leaves, other plant material and kitchen refuse (no meat).
- Cover this with a nitrogen rich layer (e.g. fresh manure or a thin layer of grass clippings). Top this with a 1" layer of top soil for each 6" layer of leaves. Repeat layers and water until moist, but be sure not to over water. Use grass sparingly as it is better left on your lawn when you mow and may deter worms and increase time of composting.
- If you smell ammonia, the pile is packed too tight or is too wet. Turn the pile and add coarse material. Turn the pile every 30 days to aerate it. Place outside materials inside and vice-versa.
- Cover the pile with plastic during the winter to conserve heat and moisture.
- Finished compost will be black and crumbly. Compost should be ready in six months with proper turning and adequate water.
- See <http://compostguide.com> for a more in-depth information on composting.

WHAT ELSE CAN I DO?

- If you use a commercial fertilizer, be sure to

use only as much as your lawn or plants actually need. Don't over apply and clean up fertilizer from hard surfaces. The excess



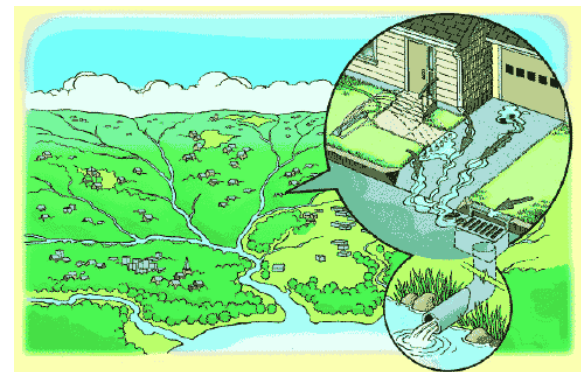
only ends up in lakes and streams. Try having your soil tested to evaluate the proper amount of nutrients needed for your particular soil. The Cooperative Extension Agency supplies soil testing kits.

- Don't apply fertilizers or pesticides right before a storm.
- Use naturalistic vegetation, especially adjacent to a stream, lake, or river. Landscape with wildflowers, shrubs and other types of low maintenance vegetation. This will decrease your use of fertilizers and pesticides. Use vegetation native to the area and is used to local climate conditions.

**This brochure is provided by the
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(336)703-2440**

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PROTECT OUR PONDS, LAKES, AND INTRACOASTAL WA- TERWAYS



Reduce Fertilizer Runoff From Your Yard



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