

Garden Update

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How The Misuse of Lawn Fertilizer Affects Water Quality

As I walk through the neighborhood close to my office, I see white granules that have accumulated along the street's gutter. Up ahead, there is a lawn care company busily at work, making its way down the block from client to client. How does the lawn fertilizer end up in the street? It could be the spreader the applicator is using, or it could be the worker using the leaf blower, pushing granules onto the street as he clears off the sidewalk. Upon questioning them, the lawn care people are aware the fertilizer in the street is from their work, but they confess to being unaware of the harm this poses to water quality and aquatic life.

If you're shrugging your shoulders at this point and asking, "What's a few fertilizer pellets in the street really going to harm?" let me draw a connection for you.

Fertilizers washed into storm sewers end up in creeks, streams, ponds, and lakes. This nutrient enrichment promotes algal growth, some of it highly toxic to wildlife and pets that drink from surface water. Abundant algae growth leads to eutrophication, a condition that depletes water of oxygen and leads to fish kills. Water with high nutrient loads smell bad, reducing recreational value for fishing, boating, and swimming.

The N-P-K ratio found on the fertilizer bag is the percent by weight it contains of nitrogen, phosphorus (as phosphate), and potassium (as potash). Of these, nitrogen and phosphorus are the biggest problems in lakes and streams. Best case scenario is that the fertilizer applications are made to growing turf roots to take up fertilizer nutrients. Things that get in the way of root uptake are drought stress, plant dormancy, erosion, and frozen soil. Anytime fertilizer isn't in plants, then conditions for nutrient movement into lakes and streams becomes a probability.

Fertilizers left on hard surfaces are easy to spot and the most easily corrected. Sweeping or blowing fertilizer and turf clippings, which are also a source of nutrients, from paved surfaces onto lawns is a simple solution. Whether you do your own or hire a lawn care company, the final step before putting away/ loading the lawn equipment is to clear paved surfaces of any fertilizers, pesticides, and lawn clippings, returning these materials to the lawn where they'll do the most good.

Water quantity is uppermost on many peoples' mind these days as the drought deepens, making it paramount that we take care of the water we have. Water quality affects us all.

Source: [Purdue Extension](#)