

5-10-13 Phosphorous, for us or against us?

Oh, I've been getting way off the track reading up on phosphorous. We have it. We need it. We use it. And, we have too much of it; at least in our water bodies, where it is causing algae to have a party!

Do you remember checking out detergents maybe ten to fifteen years ago for phosphorous content? I do. And I remember seeing the changes to "no phosphate". Those detergent companies had heard the rumblings and they paid attention!

Now, the spotlight is on it again, that chemical element with the symbol P, atomic number: 15. It is an element, meaning it won't break down. It is what it is. You gotta respect that!

Boy, do we ever! Last August 29, 2012, our Governor Deval Patrick signed legislation restricting the use of phosphorous in lawn fertilizers. The legislation was intended to reduce the phosphorous currently ending up in storm-water, which then finds its way into our wetlands and water bodies.

But, wait a minute; makes us change the way we take care of our lawns? Can they do that? I mean, isn't that an "American" way of life? Seed it, fertilize it, water it, mow it and begin again; forever and ever. It is meant to remind us of European royalty, I think, but not on a conscious level; just make us feel proud.

Now we are being shaken awake with this jolting news of perhaps too much phosphorous is not a good thing. What's a person to do and why should we change our ways?

The Environmental Protection Agency (EPA) has sent down the decision that phosphorous needs to be reduced, as it is being discharged into wetlands, streams, lakes and ponds; in many cases directly from roads where rain runoff is collected by the street and funnelled out through catch-basins into those bodies of water. EPA says we are collecting so much, we need to reduce it by sixty five percent in many areas. They are also advising us that preventing is less expensive than treating.

If we don't prevent the phosphorous, then we have to treat for it. Highway departments may have to filter and even treat catch basins. I've even read that if we don't reduce the phosphorous in our waters, EPA may order us to build treatment plants! Heck, we don't even have the resources to build a wastewater treatment plant for our toilets. And when you think about it, we have fewer choices about toilet use than we do how about how our lawn looks.

Currently, municipalities and private communities are spending thousands on studies and then tens of thousands per pond/lake per year to treat for phosphorous overload by applying chemicals such as aluminium sulphate or purchasing circulating machinery to prevent algal blooms.

While I understand the desperation in treating the algae, as people have been waiting for years for something to be done, it also makes sense to reduce the phosphorous feeding the algae in any way can. That reduction can be accomplished by you and me, in addition to better designs for catch basins and detention basins. You and I need to understand our connection to the water bodies, even if we don't live next to one. All the waters are connected and we all have catch basins nearby collecting all the water from the roofs, driveways, lawns, and roads into the basins from where the water travels directly to wetlands, streams and lakes.

It is time to make sure that the hose-water, irrigation-water and rainwater are not a delivery system for algae-feeding phosphorous. Enough already! It is time to change our ways and we can!

We can begin by purchasing fertilizer with No Phosphate. See; that was easy. There are three numbers on fertilizers. The first is for nitrogen (N). The middle is for phosphorous (P). The third is for potash (K₂O). Look for a Zero in the center on this phosphorous issue.

But you might still be worried. Just because I say your soil probably has enough naturally occurring phosphorous isn't going to make you sleep at night. There are two things you can do to rest at ease. First of all, know that the phosphorous is for root production. If your lawn is already established, then you don't need it. That's why new lawns (and turf farms) are exempt from this phosphorous reduction requirement legislation.

Still not sure? You can have your soil tested for only ten dollars. Now, that's a bargain. Contact the UMass Soil and Plant Tissue Testing Lab, located in the West Experiment Station, North Pleasant Street, Amherst, MA. Visit their web site at <http://soiltest.umass.edu>

For additional information, call the UMass Soil and Plant Tissue Testing Lab at (413) 545-2311. The sample will be tested for pH, Buffer pH, Extractable Nutrients (P, K, Ca, Mg, Fe, Mn, Zn, Cu, B, S), Extractable Aluminum, Cation Exchange Capacity, Percent Base Saturation. Also Included, Extractable (and Estimated Total) Lead.

May I repeat? That's a bargain!

Let's do this and do it right! Are you for us?

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