LAKES FIGHTING TO LIVE

PHOSPHOROUS FERTILIZER FEEDS ALGAE BLOOMS

Source: Iowa State University

By Craig Johnson/The Register

Iowa water-quality workers say homeowners who spread phosphorous fertilizer – often unnecessarily – are contributing to the early death of Iowa lakes. That's especially true of homeowners who spread phosphorus fertilizer on lakeside lots.

In Iowa lakes, the amount of phosphorus in the water controls how much algae and plants grow. In oceans, nitrogen controls that growth.

When phosphorus, which occurs naturally and is found in many fertilizers, is spread on lawns and spilled onto driveways and sidewalks, rain washes some of it down storm sewers and into rivers and lakes.

The phosphorus then causes a large algae bloom that turns lakes green and makes them smell bad. When the algae die and decompose, oxygen is robbed from the water.

Over time, the fertilizer-rich environment promotes high levels of bacteria that can harm swimmers and cut the number of fish species in the lake.

Though phosphorus applied to farm fields accounts for the majority of the minerals in many lakes, the applications to yards is significant. Iowa State University encourages homeowners to test their soil and to use no-phosphorus fertilizer if the yard already has enough phosphorus.

LAKE-FRIENDLY FERTILIZERS

By PERRY BEEMAN

REGISTER STAFF WRITER

Iowa State University horticulture professor Nick Christians said many Iowa lawns don't need phosphorus, a common ingredient in many fertilizers. He recommends people have their lawn's soil tested to see if phosphorus is needed.

If it isn't, the homeowner could buy a no- or low-phosphorus fertilizer through a local co-op or garden, farm or hardware store. Examples: Milorganite, Lake 'N Lawn Saver, Renaissance, ammonium nitrate, urea, corn gluten and soybean meal.

Organic fertilizers, including the no-phosphorus versions, can cost several times more than the more common synthetic ones like Scott's.

In general a fertilizer that is less than 3 percent phosphorus is considered low-phosphorus. Fertilizer bags carry numbers giving the proportion of nitrogen, phosphorus and potassium in the mix. For example, a 20-10-5 mixture has 20 percent nitrogen, 10 percent phosphorus and 5 percent potassium. So if the middle number is zero, there is no phosphorus.

ON THE WEB

For information on clearer lakes:

Okoboji Protective Association
www.okobojiprotectiveassociation.org

Clear Lake Enhancement and Restoration Project
www.clearproject.bizland.com

Iowa Turfgrass Industry
www.iowaturfgrass.org

Iowa State University Extension
www.extension.iastate.edu

Iowa State University Turfgrass Central
Turfgrass.hort.iastate.edu

SOIL TEST IS $7

Want to have your lawn's soil tested? A basic test costs $7 at Iowa State University 's soil lab. Contact Iowa State University agronomy Extension at (515) 294-3076 or esoiltest@iastate.edu

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COMMENTS/FEEDBACK FROM JANUARY ARTICLE

I read the article on no-phosphorous fertilizer in the latest Anchor with interest. There is another alternative to products like "Weed and Feed" that is grown all across Iowa, and is totally harmless to pets and other animals, children and even grass-eating adults (in case there are any in this area).

It is Corn Gluten Meal, a by-product of the corn used in making ethanol. It can be purchased in my area (Waterloo/Cedar Falls) for about $15 per 50 pound bag purchased from local feed mills. Farmers use it as feed supplement for chickens, cows, etc. The price will be higher if purchased from fertilizer suppliers – they package it differently and have higher markups.

The consistency of corn gluten can be anywhere from that of flour to granules to small dried-up kernels, depending on your source, that's why I use the Corn Gluten Meal – which is like flour.

How does it work? Corn gluten, applied properly, prevents seeds from growing. Therefore, seeds from crabgrass, dandelions and other weeds left in the yard from the previous year are inhibited.

Corn gluten also consists of about 5% nitrogen so that there is some fertilization quality to it. That 5% will most often be sufficient because we tend to over fertilize our yards to begin with. And at the lake all of that extra fertilizer ends up in the water when we get heavy rainfalls.

You do have to be patient when using gluten. It may take two or three years to see good results in the elimination of crabgrass and dandelions. And you will probably want to apply it several times a year. But it is about as environmentally friendly as any lawn care product can be.

Mike Atkins

Lake Ponderosa Resident