Van Buren County ban on phosphorus fertilizer aimed at protecting water

By Lynn Turner | Special to the Kalamazoo Gazette April 12, 2010, 6:00AM



Special to the Gazette | Erik HolladayJennee McCormick, of Adam's Hardware in Lawton, talks with David Cornish, president of the Lawton Village Council, about phosphorus-free fertilizer sold at the store. A ban on phosphorus fertilizers took effect this year in Van Buren County.

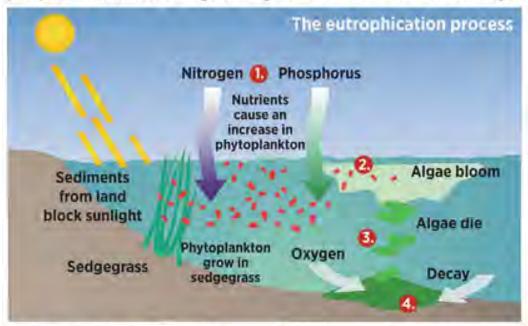
LAWTON — Dave Cornish has been using a five-step fertilizer system on his lawn for years. But this year, when he stepped into Adam's Hardware to purchase his first bags of the season, store personnel told him he had to get the packages without phosphorus.

Van Buren County banned the use of lawn fertilizer with phosphorous in most cases, starting Jan. 1. Its ordinance is similar to a measure that took effect last year in Allegan County, which followed Ottawa County in banning lawn fertilizer containing phosphorus in 2008. Local governments and, in Wisconsin's case, entire states have imposed such bans in recent years over environmental concerns.

As president of the Lawton Village Council, Cornish knew the Van Buren County ban was coming, and went ahead and bought the non-phosphorus fertilizer.

The death of a lake

Nitrogen, phosphorus and potassium are essential nutrients needed for plant growth. They can be found in fertilizers, pesticides, animal waste and detergents. However, excess nutrients are a problem. Among these nutrients, phosphorus is the most damage-causing element in area lakes and waterways.



Fertilizers high in phosphorus are frequently used in home lawn care. When applied incorrectly, lawn fertilizer can easily spill onto driveways and sidewalks, get washed into storm drains and eventually into waterways and lakes. This excess phosphorus greatly speeds up the eutrophication process, and if not controlled, can cause a lake to "age" more rapidly. To combat this problem, many communities have adopted ordinances specifically forbidding the application of phosphorus to established lawns unless a soil test confirms a deficiency.

The eutrophication process

- Phosphorus (fresh water) and nitrogen (salt water) in the water system contribute to phytoplankton and algae growth
- Excessive amounts of either element speed up this aquatic growth and result in algae blooms.
- The excess algae and phytoplankton decrease the availability of dissolved oxygen needed for aquatic life.
- The dying algae and phytoplankton decompose, also contributing to the death of fish and other organisms.

Source: Van Buren County Community Center; Two Rivers Coalition

GAZETTE

Cornish, like Lawton resident Dick Festerling, said they have a "wait and see" philosophy about how non-phosphorus fertilizer will work for them on their lawns.

Festerling said he understands the reasons for reducing the use of phosphorus: It can promote excessive algae and water plant growth, which can choke off needed oxygen to other plants and animals living in or near the water.

Most customers have been understanding once store personnel explain the new county rule, said Tim McCormick, sales floor manager.

"When you explain that most lawns don't need phosphorus because it's naturally occurring ... and why you have to have the phosphorus-free, which is cheaper in the long run, they're fine with it," he said.

"(The ban) hasn't affected us whatsoever."

Phosphorus, while a necessary element for plant growth, occurs naturally in most soil used as lawns, said Dave Foerster, president of the Two Rivers Coalition, an environmental group that introduced the idea of the ban to Van Buren County officials.

"It's OK to sell it (fertilizer with phosphorus) because there is a need for it in gardens, but we should encourage people to not use it if it's not necessary," Foerster said. "You don't need to spend money for it unnecessarily and have it run off into the waterways. There's where we start having problems."

Anyone in Van Buren County can legally use fertilizer with phosphorus if a soil test done within the past three years shows it is needed, according to the ordinance. Soil tests can be done at local Michigan State University Extension offices for a small fee and free tests are being offered at several locations April 24.

Exemptions are also allowed for farmland, vegetable and flower gardens and application to trees and shrubs, as well as compost piles. New lawns within the first year of establishment are also exempt from the ban.

Anyone found violating the ordinance at their home is subject to a fine of \$250 to \$500 for a first offense and up to \$1,000 for a subsequent offense.

Van Buren County Drain Commissioner Joe Parman, whose office is in charge of enforcement of the ordinance, said he was trying to educate local residents about the ordinance, not driving around checking fertilizer content.

"We're working to put together some stickers and rack card displays," Parman said. "We'll work with (conservation groups) to put on some classes letting people know (the rule) is out there and why you need to be aware of it.

"Most lawns have enough from the breakdown of grass and leaves," Parman said of phosphorus. "I guess some people like that really bright green you can get from (phosphorus fertilizer) but the grass isn't going to use it. It's kind of a waste of money. Then it gets into the lakes.

"It encourages the growth of nuisance plants and causes algae blooms, which is not good for amphibians and other animals that live around the lake."

Free soil-testing for lawns

Homeowners can have their soil tested for free to determine the type of fertilizer they need for their lawns.

"Don't guess – soil test," said Beth Clawson, Michigan State University Extension educator for natural resources in Van Buren County, reciting the Extension office's mantra.

"We do highly recommend people test their soil because they really don't know what their soil needs are."

There's no economic sense in buying fertilizer that contains products the lawn doesn't need

– or what local ordinances allow, conservation officials say. Van Buren and Allegan counties have implemented bans on the use of phosphorus fertilizers on lawns unless soil tests indicate they are needed. Excess amounts of phosphorus, nitrogen, potassium and other nutrients end up local waterways where it can lead to environmental hazards such as pollution and algae blooms.

Free soil testing will be done at several locations in Allegan and Kalamazoo counties from 9 a.m. to 1 p.m. April 24 by volunteers from the Kalamazoo Master Gardener's program. The locations are:

- Allegan: Rylee's Ace Hardware, 558 Water St.
- Delton: Delton Floral & Greenhouse, 10120 M-43.
- Kalamazoo: Farm 'n Garden, 1003 Staples Ave.; and Menards, 6800 W. Main St.
- Plainwell: Heavens Petals, 130 N. Main St.
- Portage: Lowe's, 5108 S. Westnedge Ave.
- Otsego: Home Depot, 1227 M-89.
- Richland: Richland Home Center, 8108 N. 32nd St.

Extension officials say the way to get the best results is to collect 10 soil samples from the yard using a clean trowel and pail. Avoid soil near road edges and next to concrete foundations and walkways.

Take samples from about four inches under the surface. Do not include roots, thatch, plant materials, rocks or gravel in the sample. Mix together the 10 samples in a nonmetal pail.

Place 1 cup of the well-mixed soil in a clean plastic bag or container. Dry or damp soil is okay, but soggy soil should be allowed to air dry.

Only one lawn soil sample per person is allowed.

Those unable to bring in samples April 24 may still have their soils tested for a fee through the MSU Extension office in their county.

In Kalamazoo County, the cost is \$15. The office is located in the County Health & Community Services Building, 3299 Gull Road, Wing 2, fourth-floor, Room 410.

In Allegan County, the cost is \$13. The office is located in the Human Services Building, 3255 122nd Ave., Suite 101.

In Van Buren County, the cost is \$13. The office is located at 219 E. Paw Paw St., Suite 210, Paw Paw.

MSU Extension personnel ask that soil samples be dropped off at the offices. Samples should not be sent by mail.