

## Ames Parks & Recreation Commission

In its efforts to protect water quality in Ames including our park system, the Ames Parks and Recreation Commission encourages residents to consider using phosphorus-free lawn fertilizer.



### Lawn Friendly Tips

1. Avoid letting fertilizer wash off the turf.
2. Don't fertilize when the soil is saturated with moisture.
3. Avoid getting fertilizer on driveways, sidewalks and storm drains.
4. Use a mulching mower to leave the grass clippings on the turf.
5. Cut no more than the top third of the grass. Leaving about 3 inches height shades the roots and helps reduce erosion and runoff.
6. Rake and recycle your leaves in the fall. Don't let them blow into the streets.



### Parks & Recreation Commission Members

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For more information about using phosphorous-free fertilizer, contact either the City of Ames Department of Parks and Recreation at 239-5357 or Public Works at 239-5160. You may also visit the City of Ames Website: [www.cityofames.org](http://www.cityofames.org).

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# Using Phosphorus-Free Fertilizers



“Why not preserve now at a small cost what cannot be replaced at any cost?” — Ada Hayden, 1919



# Questions and Answers about the use of phosphorus-free fertilizers

## **Q. Why use lawn fertilizer without phosphorus around lakes or streams?**

**A:** It is estimated that just one pound of phosphorus in the water will produce 500 pounds of blue-green algae (cyanobacteria). As little as 30 microliters of phosphorus per liter of water can cause unwanted algae blooms. Most soils in Iowa naturally provide all the phosphorus your established lawn needs. Much of the phosphorus (phosphate) you apply actually runs off the lawn before penetrating the soil. That means it gets into the lakes and streams, contributing to the blue-green algae blooms and growth of other undesirable aquatic plants. For this reason, Minnesota now has a statewide ban on the use of lawn fertilizer with phosphorus except on newly seeded lawns and where soil tests show it is needed. Unfortunately, Iowa law does not allow local governments to ban phosphorus.

## **Q. Why use lawn fertilizer without phosphorus in the City of Ames?**

**A:** Rain and lawn sprinklers can cause the excess phosphorus on city lawns to run off



into the storm sewer system. From there it

flows into the constructed wetlands in Ada Hayden Park. Some of the phosphorus is deposited with sediment in the bottom of the wetland ponds. But some of the phosphorus remains suspended in the water which eventually flows into the lake. Studies in Madison, Wisconsin estimate that about 10-13% of the phosphorus applied to lawns flows into lakes.

## **Q. How do I know there's no phosphorus in my fertilizer?**

**A.** Check the second number on the package formula. 15—0—10, for example, means zero phosphate. The first number is the nitrogen content, the middle number is the phosphorus content, and the last number is the potassium content. Make sure the middle number on the bag is 0, indicating it is phosphorus free.

## **Q. What if I use a commercial lawn fertilizer service?**

**A.** Ask your applicator service not to use phosphorus on your lawn. If they are unwilling to remove the phosphorus, contact another dealer or consider applying the phosphorus-free fertilizer yourself.

## **Q. Does my lawn need phosphorus?**

**A.** No. Unless you have a newly seeded

lawn, most soil provides all the phosphorus an established lawn needs. If you are in doubt, have your soil tested before you apply any phosphorus.

## **Q. How does phosphorus damage a lake, stream or pond?**

**A.** Phosphorus encourages the growth of blue-green algae and increased growth of filamentous green algae that many Iowa lakes experience each summer. Blue-green algae not only stinks but can be toxic to animals and children. When the algae bloom decays, it reduces the oxygen in the water and can cause fish kills. Phosphorus run-off from feed lots, agricultural land and lawns is the main contributor to phosphorus in lakes.

## **Q. What's the best way to use a phosphorus-free fertilizer?**

**A.** Follow the instructions on the package and don't be afraid to use somewhat LESS than is recommended. Many lawns are over-fertilized.

## **Q. When should I feed my lawn?**

**A.** The best time to fertilize is in May and early June and again in September or early October.

## **Q. If I want to use nitrogen, what is recommended?**

**A.** Apply no more than one pound per 1,000 square feet of turf area during each feeding. In shade, use half that amount. If you allow grass clippings to decompose on your lawn you can eliminate one application of fertilizer as the decaying grass gradually releases nitrogen into the soil. This saves you both money and time and reduces nitrate pollution. Remember, while nitrogen is needed to produce a thick turf, too much nitrogen will only contribute to pollution of the ground and surface water.

