

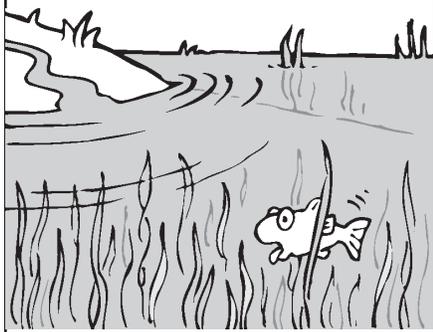


# Using Fertilizer

## Why be concerned?

Excess fertilizers can wash into waterways, stimulating nuisance weed and algae growth. Excessive plant growth can choke slow moving waters and take up oxygen in the water needed by fish and other aquatic life.

Most commercial fertilizers contain phosphorus, a major water pollutant. High phosphorus levels can stimulate nuisance weed and algae growth.



In addition, slow-release fertilizers provide plants with a lower concentration of nutrients released over a longer period of time. Fast-release fertilizers do the opposite.

- Use slow-release fertilizers on sandy soils, to ensure that concentrated amounts of nutrients aren't available for leaching.
- Use fast-release fertilizers on heavy, clay or compacted soils - the longer a fertilizer granule remains undissolved, the greater its chances of being washed into waterways.

If a slow-release fertilizer is required, consider using an organic fertilizer such as manure or bone meal. Compared to synthetic fertilizers, most organic fertilizers contain relatively small concentrations of nutrients and release these nutrients more slowly. If manure is applied in hot weather, till it well into the soil to avoid ammonia volatilization.

*Since phosphorus is a pollutant of concern, avoid the use of phosphorus unless it's specifically recommended based on soil testing.*

## Fertilizing Lawns

Lawn fertilizing programs should begin in early October, rather than in spring. Spring applications can actually harm lawns by promoting more top growth than root growth. Shallow root systems do not sustain lawns through a drought or harsh winter. Fall fertilizing promotes deep, healthy root systems and hardy lawns.

By leaving clippings on the lawn, nitrogen applications can be reduced by up to 50%. Contrary to popular belief, grass clippings *don't* cause thatch. Thatch is the woody remains of grass (roots, stems, and sheaths), which can build-up due to compacted soils and improper insecticide use.

## Fertilizing Shrubs and Trees

Healthy trees and shrubs do *not* require annual fertilizing. If woody plants appear unhealthy, it may be due to poor soils, insects, disease or current weather patterns. Fertilizers should be applied only when a tree or shrub does not thrive and the problem can't be traced to other causes. For help diagnosing problems before applying fertilizer, contact UGA Cooperative Extension.

If trees or shrubs do require fertilizer, apply it when the plants are dormant, in late fall or early spring. Fertilizing in *early* fall or *late* spring stimulates growth that depletes stored food supplies and weakens the plants ability to survive harsh winters and summers.

## Applying Fertilizers

When applying fertilizers, follow the label directions *exactly* and keep fertilizers off paved areas. If you use a liquid fertilizer, be careful to avoid overspraying and drift. The fertilizer may land on an area that drains straight into a storm drain or stream.

## Combining Fertilizers and Pesticides

Using fertilizer-pesticide mixes usually leads to unnecessary pesticide applications. For more information about using fertilizer-pesticide combinations, see **Series #5, Fact Sheet 5.1.**

## Soil Testing: The 1st Step

Before applying fertilizer, have your soil tested by UGA Cooperative Extension. An Extension Agent can then tell you the exact types and amounts of fertilizer your soil will need to support the desired use. Depending on the plantings and use desired, your soil may not require *any* fertilizer.

## Choosing the Right Fertilizer

In general, nitrogen promotes leafy top growth, phosphorus promotes root growth and potassium improves overall plant durability.

## GETTING HELP

UGA Cooperative  
Extension Service for  
Cobb County ..... (770) 528-4070  
Community Partners for  
Healthy Streams..... (770) 528-1482