

# How to use fertilizers efficiently in your lawn and garden

Recent concern for our environment focusses attention on fertilizers and other chemicals commonly used in our lawns and gardens.

Fortunately, The University of Tennessee Agricultural Extension Service is in the business of helping to ensure that lime and fertilizers are efficiently used by homeowners and farmers alike. The University of Tennessee Soil Testing Laboratory in Nashville provides homeowners and farmers with lime and fertilizer recommendations based on the results on a soil test. A soil test identifies when these materials are not needed, thereby conserving natural resources and reducing the potential for environmental harm.

When soil testing does identify a need for fertilizer, only amounts needed to meet plant requirements are recommended.

Plant nutrients being utilized for growth and development are not likely to cause environmental harm.

On the contrary, they become a part of the solution in providing Tennessee homeowners with nutritious garden produce and/or healthy, attractive lawns and ornamentals.

Always avoid over-application or indiscriminate application of lime and fertilizers to your lawn or garden.

For example, more lime than needed can cause micronutrient imbalance or result in an increased loss of topdressed nitrogen to the atmosphere by a process called volatilization. This is especially true when urea-containing nitrogen fertilizers are used for lawn or garden maintenance or sidedress applications.

Another good example is nitrogen when supplied in excess of plant requirements. High amounts of nitrogen may promote vege-

tative growth at the expense of setting fruit or may enhance disease problems of lawns or ornamentals. Nitrogen not used by the plants has greater potential for ending up in our ground or surface waters. Most nitrogen fertilizers can greatly contribute to an increase in soil acidity when used in large amounts. This results in increased need for lime to counter the effects of low soil pH.

With each soil test report, the University of Tennessee Soil Testing Laboratory makes appropriate lime and fertilizer recommendations for any of your lawn and garden crops.

For more detailed information of how, when and why to soil test, request a copy of the University of Tennessee Extension Service Publication (PB1061) "Soil Testing" from your local Extension office.

Don't guess about your lime or fertilizer needs. Join us as a part of the environmental solution. Avoid over-fertilization by closely following established fertilization guidelines based on soil testing.

Soil sampling boxes, information sheets and other educational materials are also available at your county Extension office. Take advantage of the benefits of soil testing.

## Heat pump heats, cools, and makes hot water

Home heating and cooling takes a lot of energy. Add in water heating, and you've got almost two-thirds of your annual energy bill, according to the Edison Electric Institute and the National Rural Electric Cooperative Association, two national electric utility trade associations.

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Dean Woolley  
 Landscape Architect

**Q: Is it difficult to add a water feature to my landscape?**

**A:** A water feature may be as familiar as a swimming pool or as progressive as a wetland. It could be a dramatic waterfall or dignified lily pond. Whatever your water vision, it must be carefully planned by an experienced professional.

Considerations should include the safety of users, the location of the feature and the style of the design. New technology and products have allowed Landscape Architects to create water features that go beyond the basics.

Many consumers and even some contractors are under the misconception that water features are unsafe for kids and pets. They also believe water only runs downhill and still water becomes stagnant. These are obstacles we can easily overcome. Waterfalls and streams allow parents to have peace of mind without deep water ponds. Energy efficient pumps can produce spectacular water effects indoors or out. Water doesn't just run downhill anymore.

Water adds life to a garden and energy to a room. Indoor ponds may be used to purify the air and entertain the soul. The importance of water to our everyday existence cannot be overstated. As you look outside and watch the melting snow think of what you can do when you just add water!

Article supplied by Dean Woolley, Landscape Architect, MacKinnon Waterfalls and Ponds.

Contact MacKinnon Waterfalls and Ponds to reserve your place at our free April workshops and seminars. Most seminars are Thursday evenings and Saturday mornings.

Bringing energy into your life