

Responsible Lawn Care

Healthy Lawn, Healthy Environment

Healthy grass provides feeding ground for birds, who find it a rich source of insects, worms and other food. Thick grass prevents soil erosion, filters water contaminants and absorbs many kinds of air pollutants. Grasses are highly efficient at converting carbon dioxide to oxygen to help clean the air. You do not have to be an expert to grow a healthy lawn. The secret is to work with nature by creating conditions for grass to thrive and resist damage from weeds, diseases and insect pests. A healthy lawn is likely to have some weeds and insect pests. But it will also have beneficial insects and other organisms that help keep pests under control.

Set Realistic Expectations

Which is more important to you, the health of your environment and children or an immaculate lawn? A truly healthy lawn can look quite attractive, but will probably not be the dark green, close cropped, weed-free lawn you long for. Excess nitrogen causes the dark green color and continued spraying of pesticides is common in pursuing the weed-free ideal. Closely cropped lawns will need more chemical defenders to keep up the appearance of health.

Develop a Healthy Soil

A healthy soil requires a good texture, some key nutrients, and the right pH, or acidity/alkalinity balance. Clay is common in the central Missouri area and organic matter helps to lighten it. If your soil is heavily compacted, it may need to be aerated several times a year. This involves pulling out plugs of soil to create air spaces so water and nutrients can penetrate to the roots. Most lawns need to be fertilized once a year. Nitrogen, phosphorous and potassium are the primary ingredients found in most lawn fertilizers. Use a slow-release fertilizer and apply in the fall. Over fertilizing can do more harm than good. Check the pH of the soil. Grass grows best in a slightly acidic soil, with a pH of 6.5 – 7.0. Lime can be used to raise the pH. Sulfur can be used to lower the pH. Test, or have someone test, your soil periodically. Your county extension agent, local nurseries or alternative soil labs specializing in organic farming should be able to help you. Keep in mind; grass cannot grow well in certain spots. You may need to use wood chips around trees or use plants that are shade loving.

Use a Grass That Thrives in Your Climate

A good choice for Missouri is tall fescue.

Mow High and Use a Sharp Blade

Mowing high and keeping your lawn a bit long will produce stronger, healthier grass with fewer pest problems. It will grow thicker and develop a deeper root system allowing it to survive drought, tolerate insect damage and fend off diseases. Taller grass also shades the soil to keep it cooler, which helps it retain moisture, and makes it difficult for weeds to germinate and grow. Mow tall fescue when it is over three inches tall. Check your mower by cutting a swath and measuring the grass for the height of the cut. Most people set their mowers too low. Use a sharp blade to make a clean cut instead of tearing and injuring the grass with a dull blade. General rule: mow often enough that you never need to cut more than one-third of the grass blade. Leave short clippings on the grass where they recycle nitrogen rather than sending them in bags to the landfill. Using a mulching attachment will reduce the cut grass to smaller pieces allowing faster decomposition. This will also save you work and time, as well as producing

a healthier lawn. Most rotary mowers will do a better job of mulching by simply covering the exit port with a plate, widely available as an accessory. Move the mower slowly in thicker grass to increase mulching.

Water Deeply but Not Too Often

The best rule is to water only when the lawn begins to wilt from dryness-when the color dulls and footprints stay compressed for several seconds. Even in dry areas, no established home lawn should require daily watering. Water slowly, imitating a slow rain by using a soak hose or other water-conserving methods. The best time to water is early in the morning. Apply about an inch of water, and then let the lawn dry out before watering again. Use a rain gauge to estimate how long you must water to apply one inch.

Correct Thatch Buildup

All grasses form a layer of dead plant material on top of the soil called thatch. Overuse of fertilizer can create a heavy layer of thatch. Thatch can be reduced by raking the lawn or using a machine that slices through the thatch layer. In a healthy lawn, microorganisms and earthworms help keep the thatch layer in balance by decomposing it.

Encourage Wildlife as Lawn Caretakers

Creative landscaping with native or locally adapted trees and shrubs can produce a wonderfully unique lawn that draws birds and other wildlife. This can cut down on unwanted pests, in addition to providing you with wildlife viewing.

Pest Control

Before you use any pesticides, consider whether you really need them. Most problems will disappear in a short time while nature takes its course. Most can be solved by insuring you have a healthy lawn. Remember, using a correct fertilizer and mowing procedures will decrease the need for pesticides. If you feel that pest control is needed, you may be able to solve the problem using non-toxic means that are available. Alternatives to pesticides include using mechanical means for removing or discouraging pests. See the selected reading for more information. Never apply pesticides that are used regularly in lawn care programs, those mixed with fertilizers. This is the shotgun approach and not only wastes money, but you are introducing pesticides to your lawn and home. The pesticides may eventually end up in your drinking water, especially if widely used. Also keep in mind that pesticides will kill many beneficial organisms and upset the ecological balance of your yard.

Before using poisons, you should consider the following:

- Be sure you accurately identify the pest so you can use the best pesticide for the job.
- Read the entire label, follow the instructions, and use only the amount instructed.
- Spot treat whenever possible. In most cases, it isn't necessary to treat the whole lawn.
- Wear protective clothing with long sleeves and long pants. Wash separately.
- Protect yourself by wearing gloves.
- Cover your eyes with safety glasses and wear a mask (most paper or cloth masks may not do a good job). To be safe, use one of the more expensive masks designed for using with pesticides. Remember, it's your lungs.
- Keep children and pets away from pesticides.
- Be sure no one goes on the lawn for at least the time prescribed by the pesticide label. Walking on a treated area can result in the poison being carried into your house.

- Do not apply to sidewalks, streets, your neighbor's property or any place where it is not needed.
- Follow all state and local requirements for posting your treated lawn or notifying your neighbors that a pesticide has been applied.
- Store and dispose of pesticides properly according to the label and state and local regulations.

Choosing A Lawn Care Service

If you choose to hire a professional company to treat or maintain your lawn, you should ask the following questions:

- Is the company licensed?
- Does the company have a good track record? Ask friends. Call the Better Business Bureau to see if they have received complaints.
- Is the company affiliated with a professional lawn care association?
- Does the company offer a variety of pest management approaches? Do they apply pesticides on a set schedule (unnecessary, costly and bad for you environment) or only when really needed?
- Is the company willing to help you understand your lawn's problems and solutions?
- Will the company tell you what pesticides it applies to your lawn, why they have selected this product and the health and environmental risks?

For More Information

Cape Girardeau County Extension Center

684 W. Jackson Trail

P. O. Box 408

Jackson, Mo 63755

Phone: 573-243-3581

<http://extension.missouri.edu/index.aspx> then check Lawn & Garden tab at the top.

National Pesticide Telecommunications Network

1-800-858-7378

<http://ace.orst.edu/info/nptn>