Taking Care of Your Yard
The Homeowner’s Essential Guide to Lawns, Trees, Shrubs, and Garden Flowers
Taking care of your yard — does this phrase bring to mind the glorious flowerbeds of summer or the tedium of mowing your lawn? Do you anticipate with joy the first leaves of spring or think only of raking those leaves? Have you been taking care of a yard for many years or did you just move into your first home? No matter how you answer these questions, *Taking Care of Your Yard: The Homeowner's Essential Guide to Lawns, Trees, Shrubs, and Garden Flowers* will help you care for your yard and add beauty and value to your home.

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Climate Information

The Indiana State Climate Office at Purdue University offers many resources about Indiana climate and weather, including average temperatures, average freeze dates, and forecasts:

climatic.org

The National Climactic Data Center provides a wealth of valuable climate information, including average frost and freeze dates for locations around the country. Visit the Web site below, click on the “Frost/Freeze Data 1971-2000 (CLIM20-01)” link, and select your state:

cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl

Midwest Hardiness Zones

- Zone 3 (-40ºF to -30ºF)
- Zone 4 (-30ºF to -20ºF)
- Zone 5 (-20ºF to -10ºF)
- Zone 6 (-10ºF to 0ºF)
- Zone 7 (0ºF to 10ºF)

Soil and Your Plants

The Midwest has some of the richest soil in the United States, supporting corn, soybean, tomato, pumpkin, and many other crops. Many landscape plants thrive in this soil as well.

You can learn about your soil by having it tested. The soil test results will provide you with the soil’s pH and nutrient levels, and provide fertilizer recommendations.

Solutions to Common Soil Problems

Just like the weather, Midwest soil can vary widely from site to site. Common soil-related problems you may encounter are:

- Poorly drained (waterlogged) soil
- High-clay (heavy) soil
- Sandy soil
- Soil pH

Recommendations for managing these problems are discussed on the following pages.

Soil and Your Plants

Testing your soil is one of the best things you can do for your plants. Purdue Extension provides a list of commercial soil testing labs at:

www.agry.purdue.edu/ext/soiltest.html

For soil testing labs in your state, contact your cooperative extension service (see the back inside cover).

Purdue Extension publication HO-71-W, Collecting Soil Samples for Testing, gives instructions for collecting and packaging the soil samples.

Find it at the Purdue Extension Education Store:

www.extension.purdue.edu/store

For a detailed national map, see www.usna.usda.gov/Hardzone/index.html.
Care for Established Lawns

Give your established lawn the care it needs and it will reward you by smothering weeds and resisting diseases. Correct mowing is a big part of lawn care, but you need to fertilize and water correctly as well.

Here are the basics of caring for an established lawn:

- **Mow grass to 3 to 3.5 inches high.** You can adjust most lawnmowers to cut at this height. Grass cut to 3 to 3.5 inches tall is less prone to insect, disease, and weed problems.

- **Mow frequently and cut off no more than a third of the height.** Mow when the longest grass leaves are 4 to 4.5 inches tall. Kentucky bluegrass and fescue are common lawn grasses in the Midwest. They grow fastest in the cool weather of spring and fall. You may need to mow twice a week during these seasons, but less frequently during warm weather.

- **Leave the clippings on your lawn.** Don’t bag your clippings during mowing or rake up the clippings. Leave them on the lawn to break down and return valuable nutrients to the soil. However, you should break up clumps of clippings by raking or mowing again so they don’t shade the grass. Mowing frequently in the spring and only when grass is dry will prevent clumping.

- **Fertilize in September and again in late fall.** If you fertilize at no other time, make sure to fertilize your lawn in September and late fall. Use a fertilizer high in nitrogen (the first number listed on fertilizer bag, see The Numbers on the Bag, page 11) such as 22-0-5. Fertilize again in mid- to late May to keep the lawn green and healthy throughout the summer.

- **Water deeply and infrequently as needed rather than on a set schedule.** When summer rainfall is plentiful, you may not need to water the lawn to maintain its color and density.

  If rainfall is lacking, water the lawn after it first shows signs of water stress (it will turn bluish-gray or footprints will remain in the lawn). With each watering, apply enough water to wet the soil to a depth of 4 to 6 inches, usually 0.5 to 1 inch of water (see How Much Water?, page 15).

- **Consider letting the grass go dormant in a dry summer.** If the summer is dry, you may decide to save water and not irrigate your lawn. If you choose this option, the grass will go dormant and turn brown. Don’t worry. The grass is not dead. It will revive when autumn brings cooler weather and rain.

  You will still need to water the lawn just enough to keep the grass alive. Apply a half-inch of water every four weeks after the lawn turns brown in midsummer. Be sure to minimize or eliminate traffic on a dormant lawn to reduce possible damage.
**An Example — Calculating the Amount of Fertilizer You Need**

In this example, it’s September and you want to fertilize your lawn. The Fertilizer Recommendations for Established Lawns table (page 12) advises you to apply a fertilizer that is a mix of quick-release and slow-release nitrogen. You choose one with a 25-0-5 analysis.

Now it’s time to calculate — use the Fertilizer Worksheet (page 14) to calculate the amount of fertilizer your lawn needs.

**Step 1. Determine the area of your lawn (in square feet).**

Your house is on a 50-foot by 70-foot lot (see illustration above). Adding together the different areas, you determine your lawn is 3,125 square feet.

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**Step 2. Find the recommended nitrogen application rate.**

Nitrogen application rates are provided in pounds per 1,000 square feet. Use the Fertilizer Recommendations for Established Lawns table (page 12). In September, you should apply 1 pound of actual nitrogen per 1,000 square feet.

**Step 3. Divide the area of your lawn (Step 1) by 1,000 square feet.**

\[ 3,125 \div 1,000 = 3.125. \]

**Step 4. Determine how many pounds of actual nitrogen your lawn needs.**

Multiply the recommended application rate from Step 2 (1 pound) by the number from Step 3 (3.125).

\[ 1 \times 3.125 = 3.125 \text{ pounds of actual nitrogen needed for your entire lawn.} \]

**Step 5. Determine how much actual nitrogen is in each pound of your fertilizer.**

The first number on the fertilizer bag is the percentage of nitrogen it contains. So, if you have a bag of 25-0-5 fertilizer, it is 25 percent nitrogen. So each pound of fertilizer contains 0.25 pound of actual nitrogen.

**Step 6. Determine the total amount of fertilizer your lawn needs.**

Finally, determine how much fertilizer your entire lawn needs. Take the actual nitrogen your entire lawn needs (3.125 pounds, the number from Step 4) and divide it by the actual nitrogen in each pound of fertilizer (0.25 pound, the number from Step 5).

\[ 3.125 \div 0.25 = 12.5 \text{ pounds of 25-0-5 fertilizer required for your entire lawn.} \]

Once you’ve determined the amount of fertilizer to use, weigh it out and distribute it evenly with a hand-held or wheeled mechanical spreader. Your application will be more even if you apply half the fertilizer while walking in one direction, and then apply the second half while walking in a direction perpendicular to the first.

Make sure to water well after applying the fertilizer.
Weeds struggle to survive in lawns with healthy, dense grass. A vigorous lawn is the best defense against weeds. Weeds fall into two groups:

- **Grassy weeds**, which have long, slender leaves
- **Broadleaf weeds**, which have leaves that are more rounded or broad

Some weeds are annual. They grow from seed each year, produce more seed for the next, and then die. Other weeds are perennials. They produce new growth from their roots every year. Crabgrass is an annual grassy weed; nimblewill is a perennial grassy weed. Henbit and purslane are annual broadleaf weeds; dandelion, thistle, and ground ivy are perennial broadleaf weeds.

Different weed types require different control strategies, so the first step is to identify the weed. Not sure which weed you have? Your extension service may be able to help you identify them.

### Annual Grassly Weeds

One of the most common annual grassy weeds is crabgrass. It grows from seed each spring, produces new seed over the summer, and dies with the first frost. The seeds produced in the summer will grow the following spring.

Proper mowing, fertilizing, and watering practices will produce a vigorous lawn, making it hard for crabgrass to grow.
Where You Plant is Important

Once you’ve selected a tree or shrub that will grow in your yard, there are several things you should consider before digging a hole.

Stay Away from Overhead Utility Lines

Take special care if you are planting near overhead utility lines. Select plants that, when mature, will not touch the wires (see table below).

Remember, some utility lines — like those that connect directly to your home — are only 12 feet high, so plan accordingly. Avoid planting trees directly below utility lines and maintain a distance of at least 10 feet from them.

<table>
<thead>
<tr>
<th>Height of Fully Grown Tree</th>
<th>Distance from Utility Line</th>
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<tr>
<td>Up to 20 feet</td>
<td>OK to plant within 20 feet of line</td>
</tr>
<tr>
<td>Between 20 and 40 feet</td>
<td>Plant at least 20 feet away from line</td>
</tr>
<tr>
<td>More than 40 feet</td>
<td>Plant at least 50 feet away from line</td>
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Purdue Horticulture and Landscape Architecture maintains a list of trees and shrubs generally less than 20 feet tall when mature, visit [www.hort.purdue.edu/ext/trees_utilities.html](http://www.hort.purdue.edu/ext/trees_utilities.html).

Stay Away from Underground Utility Lines

Many utilities run underground. Local utility companies will mark the underground utility locations for free. Dig your planting holes away from the marked lines.

Stay Away from Septic Fields

Do not plant trees and shrubs over septic absorption fields or close enough that their roots can reach the field. This means you should plant trees 20 to 50 feet away from septic fields and plant shrubs at least 10 feet away.

Call Before You Dig

Protect yourself and your property.

Call 811 before you dig.

The call is free and the location of the underground utility lines on your property will be marked in 48 to 72 hours.

Don’t make risky assumptions. Damaging a utility line can knock out service for you or your neighbors. More information available at: [www.call811.com](http://www.call811.com)

Planting Over Septic Systems

Purdue Extension publication HENV-15-W, *Landscaping Over Septic Systems with Native Plants*, provides information about plants that can be grown over septic absorption fields.

Download it from the Education Store: [www.extension.purdue.edu/store](http://www.extension.purdue.edu/store)

For recommendations specific to your state, contact your cooperative extension service (see the back inside cover).
Garden Flowers

A landscape in full bloom is a wondrous sight. Annuals and perennials can be combined to surround your home with color and add year-round interest.

This section includes information on:
- Selecting your flowers
- Preparing and planting your flower garden
- Caring for your flowers
- Growing flowers in containers
- Solutions to common flower problems

An incredible variety of annuals and perennials is available at garden centers and by mail order. When selecting flowering plants for your yard, consider:
- Their preference for sun or shade
- Their preference for soil moisture
- The final size of the plant

If you are buying perennials, also make sure they are suited to your USDA hardiness zone (see Climate and Your Plants, page 4). Don’t assume. Always check the tag or other references to confirm plant hardiness.

Preparing and Planting Your Flower Garden

Before planting your annuals and perennials, loosen the soil by digging or tilling, and then mix in organic matter such as compost, sphagnum peat, or aged manure. Once the soil is loose, it is easy to dig a planting hole for each new plant.

Make the planting hole twice as wide as the plant’s root ball. The depth of the hole should equal the height of the root ball. Remove the plant from its container, set the root ball in the hole, and gently firm the soil around it. Water well immediately after planting. New plants may need extra water for the first few weeks after planting.

Most annuals and perennials do well when planted in spring, but be careful! Many annuals are sensitive to cold and should be planted only after the danger of frost has passed, usually two weeks after the average last frost date (see Climate Information, page 5).

Plant hardy bulbs (for example, daffodils, tulips, crocus, hyacinth) in fall after the weather has cooled (October-November). Plant them deep enough so the bottom of the bulb is at a depth that is three times the height of the bulb. Place the bottom of the bulb (the part with the hairy roots) down, not up.

Selecting Your Flowers

Annuals last for only one summer and must be replanted each year. You can change the look of your garden each year simply by changing the annuals you grow. Most annuals also bloom all summer, an added advantage.

Perennials, including bulbs such as daffodils and crocus, will live and bloom for many years. Perennials often bloom for only a few weeks and always at a specific time of year (for example, tulips usually flower in April). It can be fascinating to grow perennials since the garden is continuously colorful but continually changing through the year.