



HOW-TO BOOKLET #3092

GREENER GRASS



TOOL & MATERIAL CHECKLIST

- Soil Testing Kit
- Spade or Shovel
- Quality Grass Seed/Sprigs
- Quality Fertilizer

Read This Entire How-To Booklet for Specific Tools and Materials Not Included in the Basics Above.



The bottom line of any successful lawn project is how hard you are willing to work at it. The neighbor's lawn, which you may envy for its beauty, looks greener, thicker, and weed-free because the neighbor probably spends a lot of time and effort making it that way. The point is that the neighbor probably has a goal in mind and works toward it. The goal does not require a green thumb or even a lot of knowledge. There is no mystery involved.

Greener grass starts with planting. It then progresses to mowing, watering, fertilizing, weed control, insect control, raking, and thatching. You can follow through on any one or two of these categories of lawn management you want. For example, just keep up with mowing and watering and forget the rest. The end result, of course, probably will not be a picture-perfect lawn. That usually requires you to follow the entire regimen of proper lawn management.

In this How-To Booklet you'll find the basics of a good, green, thick lawn. Just follow the directions and you can be assured of a lawn that the neighbor will envy.

FIRST, WHAT TYPE LAWN?

Climate and soil are the determining factors in deciding what types of grass you should plant and/or maintain. For example, growing Bermuda grass in Minnesota would have its problems; bluegrass, fine fescue, bentgrass, tall fescue, and ryegrass would be the best choices.

Four other factors when choosing turf grass are:

- 🏠 What type of lawn do you want? One for show or one for “go” (that is, for lawn tennis, a golf chipping area, baseball, badminton, or other lawn games)?
- 🏠 How much monthly maintenance is needed? Is water plentiful? Will the turf grass respond well to mowing and fertilizing?
- 🏠 What are the physical limitations of your lawn? Factor in such items as slope, shade, air circulation, high wind, and sunlight.
- 🏠 What is the chemical balance of the soil? Do yourself a big favor and make a simple soil test. The test is easy and inexpensive and it can save you plenty of time and money now and in the years ahead.

Help with the answers to these questions follows.

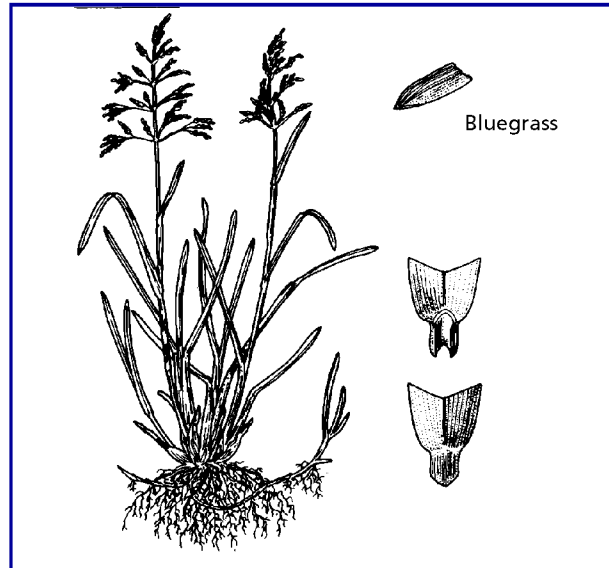
TYPES OF TURF GRASSES

The following descriptions of turf grasses will help you select those that will grow best in your part of the nation.

There are blends of these grasses and other strains of grasses. If you don't like what you see here, consult a quality nursery in your community.

BLUEGRASS. Picture a map of the United States. Draw a line across the states from about Los Angeles through the upper part of New Mexico, Kansas, Missouri, the upper half of Illinois, down through eastern Tennessee and up through the center of the Carolinas to about Virginia Beach, Va. This northern area has the right climate and soil for growing bluegrass as well as fine fescue, bentgrass, tall fescue, and ryegrass.

There are about 200 species of this grass. It is dark green in color and has medium-textured blades (see drawing). The popular strains of bluegrass include Merion, Newport, Vantage, Victa, Windsor, Bristol, Merit, and common Kentucky. Bluegrass requires moderate amounts of water. It



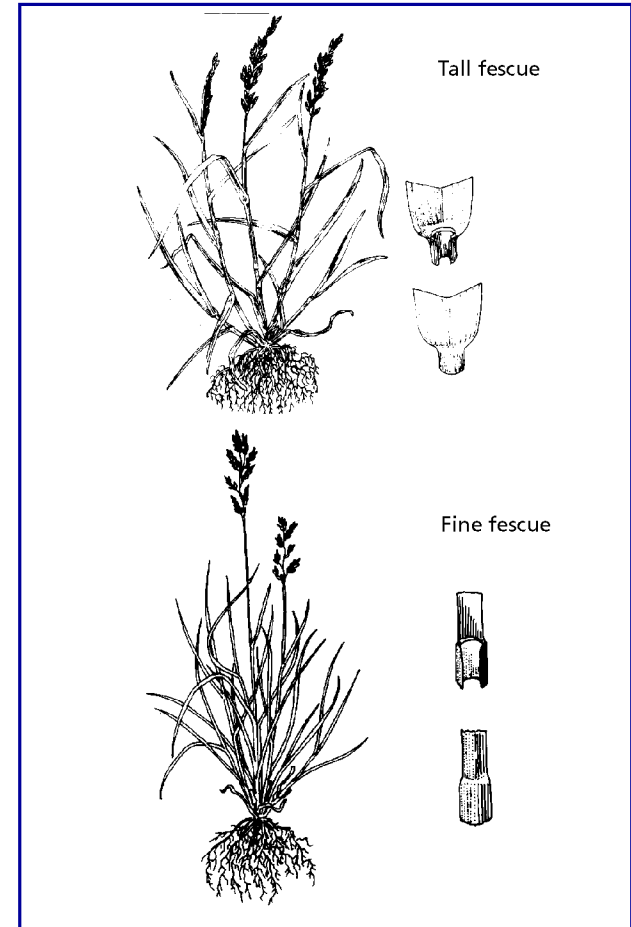
may turn brownish in hot weather, but a little watering will restore its rich color.

Keep bluegrass cut at 1 1/2- to 2 inches high. You may even prefer to leave it at 2 1/2 inches for a carpet effect and that cushiony feeling when you walk over it.

Feed the grass during the growing season or during the fall and winter. Bluegrass loves soil that is slightly acid—6.7pH (see charts). If you run a soil test, you may find that the soil needs a ground limestone treatment every 3 to 5 years. The amount of limestone usually required is 25 pounds for each 1000 sq. ft.

RED FESCUE. This is an eastern grass that like well-drained sandy soil. Other types of red fescue are creeping red and chewing fescue. Ranier, Pennlawn, and Ilahee are varieties.

As a rule, red fescue is blended with Kentucky bluegrass to make a mixture with greater resistance to wear. It should be watered moderately, maintained at a 2-inch height, and fertilized in the early spring and early fall. The soil should have a pH of



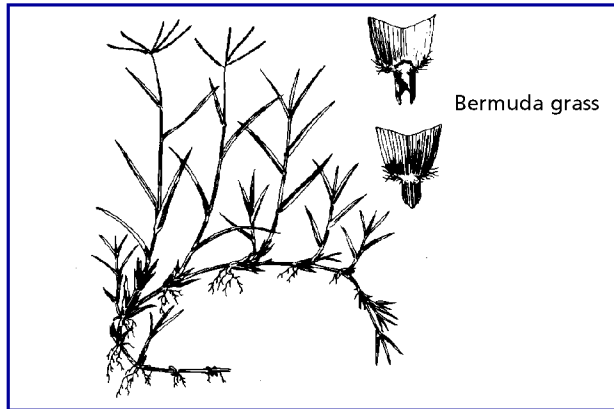
about 6.0. To maintain it, apply about 25 pounds of lime for 1000 sq. ft., annually.

TALL FESCUE. This is similar to red fescue. It like cool weather. It can handle lots of work and play activities without damage.

If the soil is rich, you can keep a 1-inch height. If the soil is average, 2 1/2 to 3-inch cutting height produces more body in the turf. Fertilize twice annually—in the spring and fall. The grass likes 6.0 to 6.5 pH. The best time to seed is late summer; use about 1 pound of seed for each 1000 sq. ft.

FINE FESCUE. This is used in seed blends to make the blends adaptable to both hot sun and cool shade. Keep the height from about 1 1/2 to 2 1/2 inches. Fescue tends to get brown when it's hot and dry. Keep it watered with plenty of water.

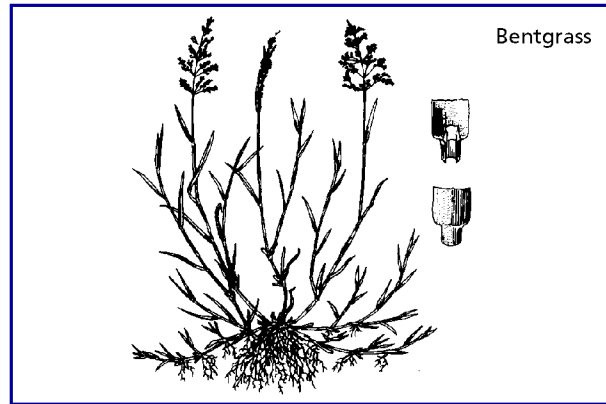
The best planting time is in the fall, and the turf should be fertilized in the spring, summer, and fall. Best seed rates for planting are 3 pounds for 1000 sq. ft.



BERMUDA GRASS. If you live in the South and Southwest, this is the grass that grows best in your warm climate (see drawing). Bermuda grass creates a very tight turf. It is cut at 3/4- to 1-inch to provide a carpet effect.

Planting time is early summer. You can use common seed at a rate of 2 to 3 pounds for 1000 sq. ft. Improved Bermuda grass can be sodded or planted with sprigs using from 5 to 10 bushels of sprigs per 1000 sq. ft. At the time of planting, sow ryegrass until the lawn is established. Keep the ryegrass at 1-inch height so it doesn't overpower its weaker cousin. You can overseed an established Bermuda grass lawn with ryegrass when the Bermuda grass becomes dormant and brown.

The pH for Bermuda is 6.0 to 7.0. The soil must be fertilized three times annually: spring, mid-summer, and early fall. Water the turf moderately and don't become alarmed if the grass remains



dormant in the spring. The temperature has to get to 60 degrees before the grass starts to turn green.

BENTGRASS. If you want a golf putting green type lawn and live in the Pacific Northwest or the northeastern United States, plant your lawn in bentgrass. It takes a lot of work, however.

It needs fertilizer every four weeks during the growing season and it needs frequent applications of fungicides and insecticides to protect the grass from disease/bugs. Height of cut is 1/4- to 1-inch.

Bentgrass needs lots of moisture. Because the turf is so tight, it will have to be sliced open with a verticutting tool that can be rented. All thatch (dead grass) must be removed regularly as it accumulates.

Bentgrass usually is mixed with fine fescue. It takes about 1 pound of seed for every 1000 sq. ft. It can be grown by sprigs or plants.

Colonial Astoria and Highland strains do best in the northeast. Before you invest in this grass, or before you try to doctor the bentgrass you have, we recommend that you contact the Greenskeeper at a local golf course. This person can give you good advice since local knowledge is involved.

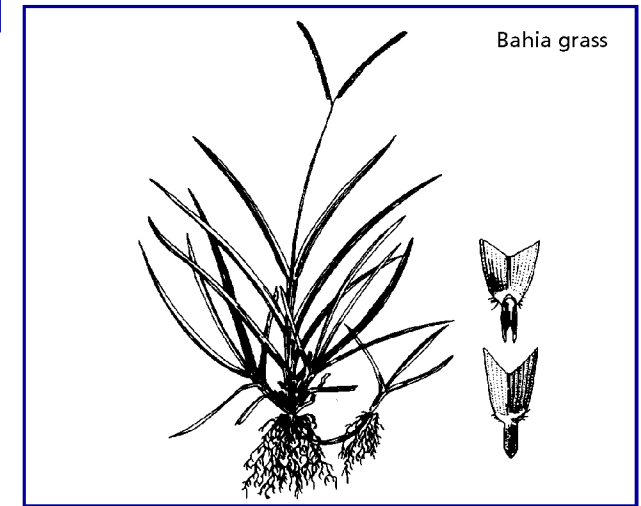
BAHIA GRASS. This tough grass grows well in the Gulf Coast area. It likes warm moist weather, but turns brown in the winter months.

Keep it at 2 to 3 inches high, and cut it at least once a week—more during growing season.

Fertilizer should be applied four times annually: winter, spring, summer, and fall. If the lawn is subjected to salt air from the ocean or gulf, pick another grass. Bahia grass doesn't like salt with its greens.

DICHONDRA. This grass is for Southern California and Arizona. It has dicot or kidney-shaped leaves.

Dichondra can be grown via plugs or from seed. Plant it during the early summer months and use plenty of water to get it started. This cover should be cut from 3/4- to 1 1/4 inches; fertilize it every other month.

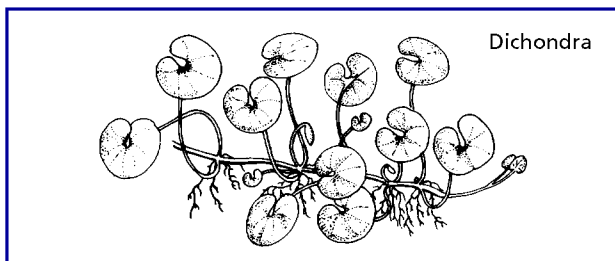
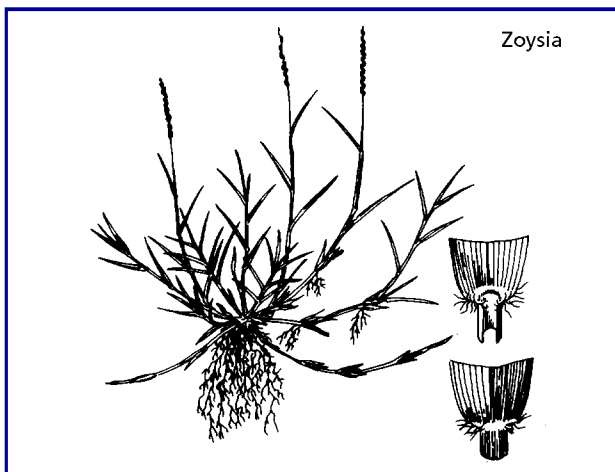


ST. AUGUSTINE GRASS. This is a warm weather grass and it does best in Florida, around the Gulf Coast, and in California. It is easy to grow from stolons (runners) and sod.

Best mowing height is from 1-1/2 to 3 inches. It must not be cut any lower than 1-1/2 inches.

Fertilize St. Augustine grass four times annually; since it grows in ample rainfall areas, you may not have to water it frequently. However, if the weather turns dry, see that the grass gets plenty of water.

ZOYSIA. Zoysia grows best in the upper half of the nation. There are several varieties: Korean, Japanese, Manila, and Meyer are examples. The



grass has a fine to medium texture. It grows and greens from a dormant state when the temperatures rise above 60 degrees.

Keep zoysia cut from 3/4 to 1 1/2 inches high. Fertilize it four times yearly—spring, summer, fall, and winter—and give it plenty of water to drink. This grass likes a 6.0 to 6.5 pH.

The best planting time for improved varieties of zoysia is in the warm spring months. Plant sprigs in rows that are spaced about 4 to 6 inches apart. If you are starting zoysia from seed, mix it with Kentucky bluegrass. The bluegrass helps establish the zoysia which will overpower the bluegrass in a couple of years.

SOIL TESTS AND PH INFORMATION

There are two ways to test soil. Buy a fairly

inexpensive soil-testing kit at a nursery or a lawn and garden outlet. Or, take a soil sample to a county agricultural agent for testing. This agency will charge you less than \$5 for the test and it will be accurate. Do not send soil samples to the U.S. Department of Agriculture; this agency does not test soil—at least for homeowners.

To gather soil for a test, cut the soil to a depth of 6 inches. Go straight down with a spade to expose various soil “levels” within the 6 inches. Then cut a 1/2-inch thick slab of soil from the edge of the hole. If your lawn area is large (more than an acre), take samples from different sections. Mix the samples together in a bucket and use a small sample of this for the test.

What a soil test does is measure how acid or how alkaline the soil is. The results are measured on a pH scale, which is used by chemists to indicate alkalinity or acidity. The number 7 on the pH scale is a neutral rating. Ratings lower than 7 mean that the soil is acid. Numbers higher than 7 mean that the soil is alkaline or sweet.

Here is a pH scale and its meaning:

If pH is:	the soil is:
4.5 or below	very acid
4.6 to 5.0	highly acid
5.1 to 5.5	strongly acid
5.6 to 6.0	fairly acid
6.1 to 6.5	mildly acid
6.6. to 7.5	neutral
7.6 to 7.8	mildly alkaline
7.9 to 8.5	fairly alkaline
8.6 to 9.0	highly alkaline
over 9.1	very alkaline

Turf grass does best, as a general rule of thumb, in soil with a pH of 6.0 to 6.5.

To sweeten acid soil, limestone is commonly used. It's available as finely ground stone, hydrated lime,

and oystershell lime. Hydrated lime is fast acting and should be avoided. The other types act more slowly, but you will need more of these types than hydrated to do the job. Aluminum sulfate or sulfur are the choices if you need to make the soil more acid. The charts below show how the pH changes with the various products:

pH change	limestone lbs. needed for 100 sq. ft.
3.5 to 4.5	3-1/2
4.5 to 5.5	4
5.5 to 7.0	5-1/2

pH change	aluminum sulfate lbs. needed for 100 sq. ft.	sulphur lbs. needed for 100 sq. ft.
8.0 to 7.0	4-1/2	2
7.5 to 6.5	7-1/2	3-1/2
7.0 to 6.0	5-1/2	2
6.0 to 5.5	3-1/2	1-1/2
6.0 to 5.0	7-1/2	3
5.5 to 5.0	4	1-1/2
5.5. to 4.5	8-1/2	2-1/2

If the soil is sandy and loamy, use a little less limestone or chemical. If the soil is heavy—such as clay—use a bit more limestone or chemical. And in any case, go easy. The pH should change only one unit each year. You'll be tempted to change the pH faster, but soil experts claim that it's best to let the soil adjust gradually.

Lime conditions the soil; it is not a fertilizer. It helps loosen hard, clay soil, and it helps humus decay faster. Do not apply lime and manure fertilizer at the same time. The lime works chemically on the manure and the benefits are lost. Ideally, the manure should be plowed or spaded under the soil, and then the lime applied on top.