

W. P. LAW INCORPORATED

BERMUDA GRASS

FERTILIZER & WEED PREVENTION PROGRAM

Bermuda Traits

Fertility: HIGH

Drought Tolerance: HIGH

Shade Tolerance: LOW

Disease Problems: PATCH DISEASES, SPRING DEAD SPOT (on hybrid varieties)

Insect Problems: ARMY WORMS

Recovery Rate: GOOD

Density: HIGH

Texture: FINE

Wear Tolerance: GOOD

Bermuda Grass

Bermuda grass is an aggressive **warm season grass** that originated in Africa. Bermuda makes a **dense home lawn**, but needs many inputs to achieve good performance. It is the primary choice for most **golf courses and athletic fields due to its aggressive nature**. This grass can spread rapidly through above and underground runners. Bermuda grass is drought tolerant but **needs regular irrigation for optimal growth**.

The two types of Bermuda grass used in home lawns are **Common and Hybrid**. Hybrid Bermuda grass is the **most aggressive** and can only be established by **sprigging or sodding**. Common Bermuda grass is less dense and considered a lower quality turf. Unlike Hybrid Bermuda, Common Bermuda can be established from seed. There are improved varieties of Common Bermuda available, but their quality is still lacking compared to Hybrid Bermuda grass.

Bermuda grass has a **higher fertility requirement than most other warm season grasses**. For a complete list of fertilizer applications, consult the **schedule in this brochure**. Underfertilization can lead to thinning and allow weed germination in your lawn.

All grasses have an Achilles heel and Bermuda is no different. This grass has **poor shade tolerance** and should only be planted in full sun. If grown in partial shade, the turf quality will only be marginal.

Our Story

Since 1970, **W. P. Law, Inc.** has been the trusted source for irrigation components throughout South Carolina. We are proud to announce the newest line of products to **help keep your property looking its best**. Our **contractor grade** fertilizers and weed prevention products will ensure you get the professional results you desire.

The horticulture staff at W. P. Law, Inc. has assembled an **easy-to-follow schedule** with application rates to take the guess work out of proper fertilization and weed control.

Allow us to use our numerous years of experience to assist you in **saving time** while producing a **healthier landscape**.

In addition to fertilizers, **W.P. Law Inc.** offers a broad range of control products to keep landscapes looking their best. Our **insect control program** works great on fire ants and other lawn damaging insects. This newer generation broad-spectrum insecticide gives up to three months control and works on insects such as fire ants, spittlebugs, armyworms, cutworms, fleas, ticks, mole crickets, sand gnats, millipedes, and centipedes. Two applications per year will give season long control on most unwanted insects. Consult the W.P. Law Inc. Turfgrass Insect Management Guide for additional information on insects that cause damage to turf. A copy of the guide is available for download at www.wplawinc.com/turfgrass

W.P. Law Inc. also offers a complete line of **granular fungicides** to protect your turf against diseases that can cause severe injury. There are a variety of diseases that can cause injury to Bermuda grass. In recent years, large patch (**brown patch**) has become the number one disease on warm-season turf. On the back is a fungicide program to help prevent large patch infestation. For additional information on other diseases that affect Bermuda grass, **visit www.wplawinc.com/turfgrass to download a copy of the W.P. Law Inc. Turfgrass Disease Management Guide**

Soils

A practical understanding of your soil is essential in managing your lawn. **Soil pH** is perhaps the most **crucial** element. Most turf grasses perform best when the soil pH falls between **6.3 and 7.0**. If your soil pH does not fall within this range, essential nutrients will not be available to the grass. W.P. Law Inc. offers a complete **soil testing service**. Soil samples can be dropped off at any of our locations around the state.

Verdelawn is used to adjust soil pH. When applied at a rate of 12 pounds per 1,000 sq. ft., Verdelawn will raise the pH as much as one point in as little as **4-6 weeks**.

Watering

The watering requirement for your Bermuda lawn will **vary greatly** due to constantly changing weather conditions. During the growing season, it may need anywhere from **0-1.5" of water per week**. The professionals at W. P. Law, Inc. suggest using an **irrigation controller** with a weather station or soil moisture sensors to compensate for these changing conditions.

Studies have shown these types of controllers can save **20-50% on your water bill** over traditional time based controllers. Existing controllers can also be fitted with this water saving technology. In addition to saving water and money, there is no need for continual adjustment. The result is a **better looking lawn with less effort**. Because these "**smart controllers**" only apply water when needed, they will usually pay for themselves in water savings within the first year.

Mowing

Bermuda performs best when mowed **closely**. We suggest that your lawn be mowed as close to **1 to 1 1/2 inches** as possible. The height of cut should be easily obtained as long as the lawn is smooth. If there are severe irregularities in the grade, be careful not to scalp certain areas. **Scalping a lawn could cause damage to the crown of the plant**. In order for Bermuda to look its best, it is recommended that your lawn be **mowed every 7-10 days**. This ensures that you avoid that

"white" color of the lawn just after mowing. A good rule of thumb is to **NEVER remove more than 1/3 of the leaf blade during mowing**

Pre-Emergent Herbicides

Pre-emergent herbicides are used to prevent annual weeds from germinating in your lawn by forming a protective chemical barrier on the soil surface. There are both cool season and warm season annual weeds that germinate at various times throughout the year. By applying a pre-emergent herbicide, an ounce of prevention is worth a pound of cure.

NEVER apply these products on a lawn that is not well established!

Aeration

Aeration has two purposes. The first is to simply **loosen the soil**. The second is to **prune the roots**. Core aeration is the recommended method and should be performed every 2 years on a typical home lawn during the growing season.

If your lawn receives heavy foot traffic, it is advisable to aerate every year. Aeration should be performed during the **growing season** of the turf.

Armyworms

Armyworms are the larval stage of adult moths and can be problematic during late summer/early fall if left untreated. This insect can devour large sections of turf in a short amount of time. Most damage starts along tree lines as the insect starts to spread. Armyworms strip leaves, leaving just the stem of the grass. There are a variety of insecticides that give good control of this pest. Once an infestation is identified, action should be taken immediately.



Need a reminder of when to apply? visit
www.wplawinc.com/grass-fertilizer-programs
and sign up to receive e-mail notifications and important information

Management

Bermuda is an aggressive grass that requires a high amount of inputs to make it perform well. Most management mistakes include low fertility and low mowing frequency. Although the grass has a high drought tolerance, it needs adequate moisture to keep it looking good. During the hottest parts of the growing season, it may need to be mowed every 3-5 days. Bermuda will absolutely not tolerate shade. If grown in such conditions, the results are thin, spindly turf.

Common Management Mistakes:

Under-fertilization
Not mowed enough
Identifying armyworm damage
Shady Conditions

Spring Dead Spot

Spring Dead Spot is a disease that is specific to **Hybrid Bermuda**. This disease attacks the grass in the **fall prior to dormancy**. Symptoms are **not recognizable until spring when the grass begins to green up**.

Brown circular patches from 6" to 1' are typical indicators of this disease. Proper cultural practices with last season potash applications and preventative fungicides in the fall can help prevent this disease.

Brown Patch on Warm Season Turf

Symptoms: Large patch typically attacks grasses when they are in the **transition stage**. This occurs during the spring and fall months when grasses are going in and out of dormancy. **Large patch can be identified by large circular patches ranging from 2-20 feet in diameter.** Patches often have a yellow to light brown band around them. These patches can be perennial and occur in the same spot from year to year.

Large patch produces **soft, dark rot that occurs on the lower portion of leaf sheaths**. Rot at the basal portion of the leaf sheath causes shoots to easily detach from stolons. Distinct leaf lesions are usually not noticeable with large patch. This disease has quickly become the **number one disease on warm season turf in South Carolina**.

Conditions favoring the disease: Large patch occurs when daytime temperatures are in the **50° F to 85°F range**. Warm days with cool nights along with heavy dew favor disease development.

Large patch is more active in the **spring and fall** months and can be brought about by conditions of **high humidity and leaf wetness** of more than 10 hours for several consecutive days. Because this disease attacks grasses during their transition stage, **recovery is often slow**.

Tips to Avoid Brown Patch

- Make initial nitrogen applications in **May** once grasses are fully out of dormancy.
- Do not make any nitrogen applications after **Aug. 15th**
- Avoid early season and late season nitrogen applications when the disease is active
- Avoid **over irrigating** grasses during Spring months
- Increase **height of cut** and increase **air circulation** if possible
- Minimize the amount of **shade** the grass receives
- Irrigate turf in the **early** part of the day
- Irrigate **deeply and infrequently**
- **Improve drainage**. Grasses such as Centipede and St. Augustine are stressed by excessive moisture
- **Reduce thatch**
- Apply **lime** if soil pH is less than **6.5**



BERMUDA FERTILIZER AND WEED PREVENTION PROGRAM

January: Soil test and Verdelawn (if necessary)

Soil testing available through W. P. Law, Inc.

A soil test can determine the current fertility and health of your soil. By measuring both the pH level and pinpointing nutrient deficiencies, a soil test can provide the information to maintain the most optimal fertility each year.

February-March: 0-0-7 Barricade 0.38% or 0-0-7 Dimension 0.13%

(3# per 1000 sq. ft. or 3.3# per 1000 sq. ft.)

Pre-emergent for control of broadleaf and grassy weeds

April: 18-24-12 Starter Fertilizer

(4# per 1000 sq. ft.)

Provides the needed nutrients to bring your grass out of dormancy

May-June: 19-0-6 Barricade 0.38% or 19-0-6 Confront3 + Dimension 0.145%

(3# per 1000 sq. ft. or 4# per 1000 sq. ft.)

19-0-6 Barricade provides extended preventative weed control or use 19-0-6 Confront3+ Dimension to control existing broadleaf weeds with the addition of Dimension for extended preventative control.

July: 25-0-10 Fertilizer

(4# per 1000 sq. ft.)

Maintains steady even growth with balanced slow release nutrients

August: 6-1-11 with 7% Iron

(5# per 1000 sq. ft.)

Produces green color without flushing top growth in late season

September- October: 0-0-7 Barricade 0.38% or Dimension 0.13%

(3# per 1000 sq. ft. or 6.6# per 1000 sq. ft.)

Prevents winter annual weeds such as annual and blue grass (poa annua)

INSECT CONTROL PROGRAM

April: Bifenthrin Granular Insecticide

Broad spectrum insect control that lasts up to 3 months. Works great on fire ants.

(2.3#-4.6# per 1000 sq. ft.)

July: Bifenthrin Granular Insecticide

LARGE PATCH FUNGICIDE PROGRAM

April: Pillar G Fungicide

Broad-spectrum fungicide with two active ingredients
(3# per 1000 sq. ft.)

September: Pillar G Fungicide

October: Pillar G Fungicide

**Sign up for our email reminder program to
never miss a fertilizer application!**
www.wplawinc.com/grass-fertilizer-program

DISCLAIMER:

This fertilizer and weed prevention program is an informal reference for herbicides and fertilizers available for turfgrass management. It is not meant to supplement any product labels. Herbicide and fertilizer **labels should always be consulted** before being applied. Labels are subject to change without notice. Due to differences in grass varieties, environmental conditions, temperature, stress, moisture conditions, plant health, and other factors, herbicide and fertilizer applications may cause undesirable injury to grasses.

W.P. Law Inc. does not guarantee or warranty the use of products listed in this program. Please remember that the label is the law.

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Pumping & Piping Systems