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T U R F D I G E S T



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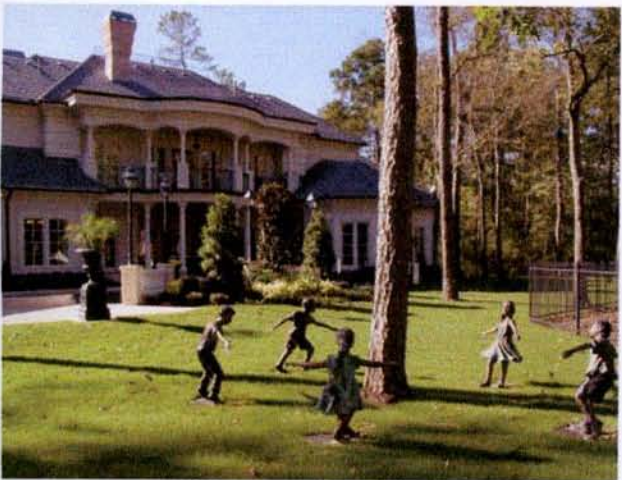
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Lawn Grasses for Florida... **Are You Stuck in Floratamville?**

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Ok,

so what kind of grass do your clients want? Are they happy with Floratam, or do they long for something more carpet-like and fine-textured?

So often, homeowners say, "I want a grass like my Kentucky bluegrass lawn back home — one that you can walk barefoot in." Or "Why can't someone develop a grass that looks good/doesn't need water/doesn't have insects, diseases or weeds? Yadda, yadda, yadda..."

So, again, what kind of grass do your clients really want? And what can you do about it? Is your company ready to manage new grass species and cultivars, or are you stuck in Floratamville?

Many warm-season grasses are available to choose from, so why do we continue to focus on St. Augustinegrass? Although it's been the predominant lawn grass in Florida for a number of reasons, other species may become more important over time. As concerns increase over lawns' water use and as municipalities consider limiting the amount of turf that can be used in the landscape, requirements for a more drought-tolerant grass may be in place before long.

Below is a look at some of the grasses available, both old and new. Table 1 lists many common attributes of the various lawn-grass species.

St. Augustinegrass

St. Augustinegrass sod establishes quickly in most Florida environments. It can tolerate wide pH ranges, from the acidic soils often found inland to the high pH of coastal areas, and it's pretty shade tolerant (even the most shade-tolerant cultivars still require at least four hours of sunlight daily).

Chinch bugs are the main insect problem, although grubs and mole crickets can also cause problems. Disease pressure is common under high water or nitrogen regimens. And, to stay green when rainfall is not adequate, St. Augustinegrass needs supplemental irrigation. Thatch buildup is common in a mature lawn, again especially under high irrigation or nitrogen applications. Loss of herbicide labels in recent years makes weed control challenging. St. Augustinegrass should be fertilized regularly throughout the year to maintain green color and cover.

A number of cultivars are available, including some new varieties recently released.

Released a few years ago, *Amerishade* is a very slow-growing, shade-tolerant St. Augustinegrass. Our research showed that it can easily tolerate 14–18 days without mowing, even in the summer. However, it is susceptible to disease and does not have good cold tolerance, so if the grass gets injured (due to cold, insects, disease, etc.), it grows so slowly that recovery is difficult. *Amerishade* has experienced significant winterkill at research plots in Jay and Gainesville.

A new cultivar from Woerner Turf, *Classic* appears to have better cold tolerance than most of the other cultivars. To date, we have not seen any university data on shade for *Classic*. Some lawncare folks report that establishment is slow and that disease is an issue, while others claim it performs well.

Delmar is a dwarf cultivar with smaller leaf blades and a dense growth habit. It does well in shade (still needs at least four hours of sunlight a day) and has good cold tolerance.

Top (this page) palmetto in the landscape. Photo provided by Laurie E. Trenholm. Second-from-the-top photo provided courtesy of Sod Solutions.



A Floratam St. Augustinegrass lawn under high maintenance. Photo provided by Laurie E. Trenholm.

A new release, *DeltaShade* has better shade tolerance than Floratam and Palmetto, but it is not as good as the dwarf types. It tends to be a light-green color (kind of like Palmetto — we suspect that it may have a tendency to not do well in higher pH soils where iron or manganese become deficient), but it appears to grow rapidly and persist well. I have worked with it only in the greenhouse in shade trials.

FloraShade[™] is the newest St. Augustinegrass currently being grown in Florida. Shade studies are currently underway with this cultivar, but no data are available on this yet. It appears to be a semi-dwarf variety.

Still the most commonly used St. Augustinegrass, *Floratam* has wider leaf blades and fatter stolons than most other cultivars. Because of the wide leaves, it's more difficult for Floratam to grow as densely as some of the other grasses, so there's more space between leaves, with less of a "carpet" effect.

Floratam was released in the early 1970s, and at that time it was widely used for its good resistance to chinch bugs. Over time, however, and with repeated use of the same pesticides, much of this resistance has been lost. Other issues with Floratam include poor shade tolerance relative to other St. Augustinegrasses. In two years of research that I conducted, Floratam showed the least tolerance to shade of any St. Augustinegrass. To maintain good cover, it should have at least six hours of sunlight daily (eight would be better).

Spraying herbicides? Read those labels carefully, since many of them may say "Not for use on Floratam." I'm sure we all know someone who has failed to double-check this and has injured a lawn by using a product that burned the Floratam.

In spite of some of these problems, there's a definite comfort level with Floratam. We know how to manage it and

are pretty familiar with what it takes to keep it green and weed-free.

Palmetto started being used in the late 1990s. It has semi-dwarf characteristics (shorter, thinner leaf blades than Floratam), which make it more appealing to many people. It has better drought and shade tolerance than Floratam but not as good as some of the dwarf cultivars. Like any St. Augustinegrass, Palmetto may have insect or disease issues and appears to require about as much water as the other cultivars.

Raleigh was developed at North Carolina State University, so it has very good cold tolerance. Hence, it is often used in north Florida.

Seville is another dwarf that also performs well in shade. Its cold tolerance is not as good as Delmar's, but it also grows densely due to small leaf blades and has a dark green color.

Zoysiagrasses

Many zoysiagrass cultivars are grown commercially, but use of this species has been limited in Florida. Many of the zoysiagrasses are slow-growing, making establishment difficult, and many of them are susceptible to nematodes, which makes keeping them healthy difficult. Some newer cultivars have been selected for faster growth and more nematode tolerance.

Zoysiagrasses also generally have good shade tolerance, although not quite as good as St. Augustinegrass. They handle traffic well and are adapted to a wide range of soil types. However, they are often susceptible to brown patch disease. Their main insect pest is the hunting billbug. Many of them have excellent cold tolerance and are often used in northern climates. Here is a short list of some cultivars.

Belaire has excellent cold tolerance and medium-green color. It has an open growth habit, coarse leaf texture and a faster establishment rate than many zoysiagrasses.

Crowne is noted for low water-use requirements, cold hardiness and rapid recuperative ability.

El Toro was selected for quick establishment, improved cool-season color, cold tolerance and reduced thatch buildup.

Released in 1955, *Emerald* zoysiagrass has very fine leaf blades and may be used for top-quality lawns where time and money allow for adequate maintenance. Emerald produces excessive thatch and is susceptible to dollar spot, leaf spot and brown patch.

Empire is a low-growing cultivar that is gaining popularity in Florida, and it seems to do well in many areas of the state. It has fairly fine-textured leaves and a very dense growth habit. It maintains a nice green color and establishes more quickly than many other zoysiagrasses. It does not do as well in shade as other cultivars. It does tend to develop brown patch, as

do many zoysias, but it recovers well. It can be fertilized with lower rates of nitrogen than St. Augustinegrasses and look just as good as it does at higher rates.

In use since the 1950s, *Meyer* is often seen in ads as the "miracle grass." Once established, it is low maintenance. Because it is susceptible to nematodes, however, its use in Florida is limited.

Ultimate is a new cultivar being grown for home lawns that should become available in the next year or so. It was selected for quick establishment and shade tolerance.

Centipedegrass

Centipedegrass is sometimes referred to as "the poor man's grass" because it does not like to be highly managed. It does best with low annual rates of nitrogen. Because it does not grow quickly, mowing needs are reduced compared to most other species.

In general, this species is a lighter shade of green. Sometimes people overfertilize it to induce deep-green coloring, but this can actually contribute to "centipedegrass decline," as overfertilization increases the fungal organisms that cause the decline.

Only a few centipedegrass cultivars are available, many of which have been selected for cold tolerance. Centipedegrass is used predominantly in north and central Florida.

Centennial has good cold tolerance and will do well in acidic soils. It must be established vegetatively as sod, sprigs or plugs.

Hammock is a new release from the University of Florida that should be available within the next year. It is reportedly more heat tolerant than other centipedegrasses and requires less frequent mowing due to a slow growth habit.

TennTurf was released in 1999 and was selected for cold tolerance.

Bahiagrass

Hey, quit rolling your eyes! As water restrictions increase, remember which grass can survive without water. That's why we may end up managing more bahiagrass in the future. Like centipedegrass, this is also a low-maintenance grass that does not need nor want high fertility levels, and it has relatively few insect and disease problems. Ground pearls are the major insects of this grass.

Bermudagrass

You know all the work that goes into golf courses? Do you want your clients to try this at home? Bermuda is great for an upper-end lawn, where reel mowers and pesticide budgets are not an issue. It provides about as manicured a lawn as you'll find in a warm-season grass, but at the expense of much more maintenance.

Seashore paspalum

OK, let's talk maintenance! The 'Sea Isle 1' cultivar was released in 1999 by the University of Georgia with a primary

Table 1. Common lawn grass species used in Florida. Some of the species may vary by cultivars for characteristics listed.

Environment	Bahiagrass	Bermudagrass	Centipedegrass	Seashore Paspalum	St. Augustinegrass	Zoysiagrass
Area Adapted To	statewide	statewide	N. Florida & Panhandle	statewide	statewide	statewide
Mowing Ht. (Inches)	3" - 4"	0.5" - 1.5"	1.5" - 2"	1.5" - 3"	1.5" - 4"	1" - 2"
Soil	acid, sandy	wide range	acid, infertile	wide range	wide range	wide range
Leaf Texture	course to medium	fine to medium	medium	fine to medium	course to medium	medium
Drought Tolerance	excellent	good	medium	medium	poor	medium
Salt Tolerance	poor	good	poor	excellent	good	good
Shade Tolerance	poor	poor	fair	poor	good	good
Wear Tolerance	poor	good to excellent	poor	good to excellent	poor	good to excellent
Nematode Tolerance	very good	poor	poor	good	good	poor
Maintenance Level	low	high	low	high	medium	medium to high
Establishment Methods	seed, sod	sod, sprigs, plugs, some sed	seed, sod, sprigs, plugs	sod, plugs, sprigs	sod, plugs, sprigs	sod, plugs, sprigs

audience of athletic fields and golf course fairways. Homeowners who saw it fell in love with its carpet appeal, and a number of people gladly ripped out their St. Augustinegrass to give it a try.

Unfortunately, it is very susceptible to what I term the "stress/disease syndrome," which simply means that when it gets stressed, it gets disease. Scalping is a primary problem, and once-a-week (or less) mowing sets it up for a disease outbreak. This problem led many homeowners to return to St. Augustinegrass. Like bermudagrass, it's a lovely lawn cover for the wealthy, who can pay for maintenance and fungicides.

So, where does this leave us?

So, are you still in Floratamville, where we all feel safe, in spite of the water and herbicide issues? Or do you see a market in learning how to manage some of the other grasses out there, a market where your competition might not dare go? While we might continue to spend the majority of our time in Floratamville for now, don't lose sight of some of the new-and-improved or tried-and-true alternatives. If we're not all careful, we'll find that turf in the landscape is limited to a small percentage of the landscape or (worse yet) we might be managing bahiagrass in the future, if water wars dictate. 🌱



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Amerishade St. Augustinegrass after 20 days without mowing. Above right: An Empire zoysiagrass lawn. Photos provided by Laurie E. Trenholm.