ALTERNATIVES TO GRASS LAWNS: AN ECO-FRIENDLY YARD

A Guide to Environmentally Friendly Alternatives to Grass for the Florida Yard

Sustainable Design
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08/2021, Edition 3

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INTRODUCTION

Maintaining a green lawn in Florida is not an easy feat. It takes a large amount of effort, resources, time and money.

Despite homeowners doing their best to maintain this grass, often times it dies from any number of causes, including pest, drought or stress. Yet, when it does die, many homeowners spend thousands of dollars to resod the lawn. Once the sod is laid, the homeowner continues to use irrigation and chemicals to keep it green. And thus the cycle of sod.

Homeowners Associations and the ever elusive concept of keeping up with the Jones's caused the need to have a lush green lawn even greater. Problems such as pollution, water, energy waste, the time and money needed to maintain the lawn to acceptable standards arose, flourished and continue.

Our love for lawns may have its roots in the English gardens and green pastures. A symbol of prestige and wealth, this ideal of the perfect lawn of green grass made it's way across the ocean to America and rooted deep. In an attempt to emulate those green pastures, Americans were doomed from the start to fail at this as our climate was often times much too different from the grass friendly climate in England, especially here in Florida. Cool, overcast days with large amounts of moisture in the air was not the typical American clime. Across our great country, despite the much different weather, the indomitable persistence of the American spirit was strong, and we attempted to continue the seemingly unattainable goal of a green lawns, despite the many failed attempts.

Though they look beautiful, the constant application of irrigation and chemicals used to keep those lawns lush, vibrant and green would be an indication that things aren't quiet right.

This guide will provide a homeowner alternatives to the grass. Using the plants and practices found in these pages will help the environment, save water, save money.

Problems With Grass Lawns

Monoculture

Because a grass lawn is a single species of the same plant, it creates one swath of only that particular single plant material. The lack of plant diversity creates an environment that doesn't promote other plants that would be beneficial in supporting wildlife like beneficial insects, butterflies and birds.

Water Waste

Altough we can turn on the faucet and expect water to come out, but we need to be mindful, as water is a vital natural resource that is limited, especially, here in Florida. Half of our household water use is estimated to be used on the lawn during the summer months.

Pollution

Air Quality

Though grass contributes to purifying the air, it is easily negated by the air pollution that is produced from the pollution of the lawn mower used to cut that grass. Further poor air quality is contributed through other factors associated with mowing the a lawn, such as pollution from the car produced from the drive to the gas station to get fuel for the lawn mower, spilled gas, oil and filter disposal in the form of regular maintenance performed on the lawn mower.

Pollution

Toxicity

Pesticides, herbicides and fertilizers applied tolawns are toxic to humans and pets.

Water Quality

Pesticides, herbicides and fertilizers used on lawns contribute to chemical pollution. This pollution finds it ways into water bodies, harming wildlife such as fish and birds. This pollution also gets into watersheds, which has the potential to find it's way into the Aquifer from where we obtain our drinking water.

"Of 30 commonly used lawn pesticides 19 have studies pointing toward carcinogens, 13 are linked with birth defects, 21 with reproductive effects, 15 with neurotoxicity, 26 with liver or kidney damage, 27 are sensitizers and/ or irritants, and 11 have the potential to disrupt the endocrine (hormonal) system"
- Beyond Pesticides

Solutions

Organic Lawn Care

One small ecologically minded step a homeowner can take is the implementation and the regular use of organic lawn care. This does not mean that you have to spread feces all over the yard while you sit and smoke another kind of grass.
Organic Lawn Care simply means changing your fertilizer type and a few other easy steps.

Organic Lawn Care
The use of organic fertilizer
The use of slow-release fertilizer
Applying pre-emergent weed killer
Leaving clippings on the lawn
Mowing at a higher setting

While organic fertilizers may cost more, as the market demands rise, the cost will lower.

Low Maintenance Turf Grass

While this is a primer on alternatives to grass, using turf grass sometimes can not be avoided due to reasons that might include aesthetic value, homeowner association covenants or a homeowners reluctance to make a drastic change. A simple solution would be low maintenance turf grass such as **Bahia Grass** and **Centipede grass.**

Low Maintenance Turf Grass

Bahia Grass (Paspalum notatum)

Native to South America, Bahia is extremely well adapted to Florida's sandy, acidic soils. Originally, it was used in pastures for cattle grazing. Because it's high drought tolerance and easy establishment in sandy soils there needs to be little attention paid to this grass once it is established. Bahia is a dense tufted grass that spreads though seed and root stems called rhizomes. A distinctive feature of Bahia is the long erect seed stems that are predominant when the grass has not been maintained.

http://www.hear.org/starr/images/species/?q=paspalum+notatum&o=plants

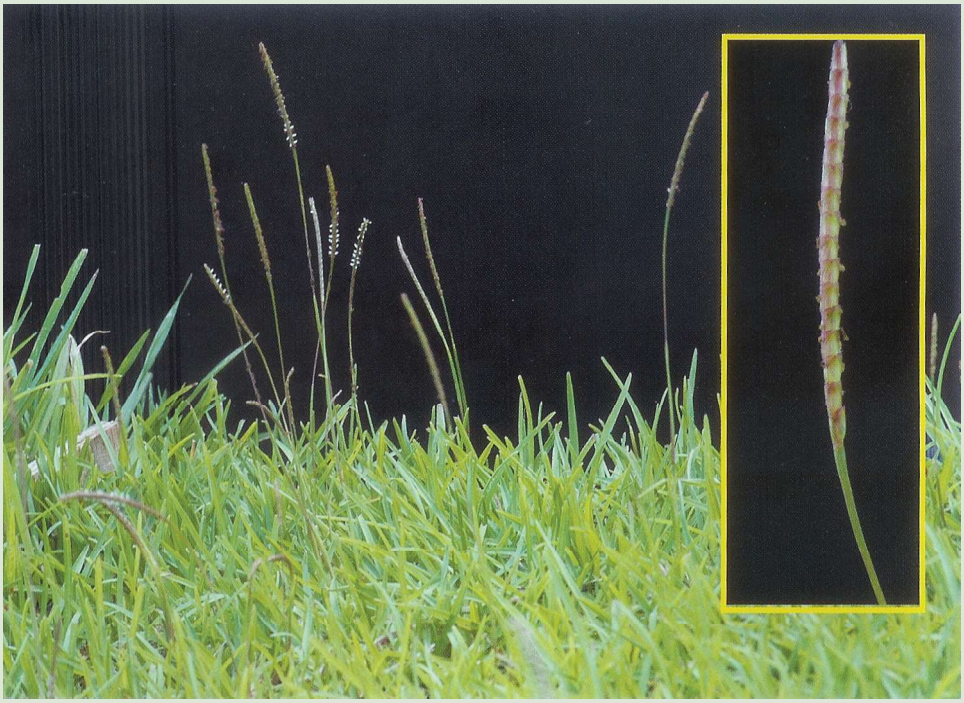
http://www.hear.org/starr/images/image/?q=090828-4770&o=plants

Low Maintenance Turf Grass

Centipede Grass (Eremochloa ophiuroides)

Centipede Grass is originally from southeastern Asia. Like Bahia, it is well adapted to sandy, acidic soils with of low fertilizer use and also requires low maintenance

This creeping grass spreads through stolon's and has a course texture with short upright stems that grow to about 3-5 inches. Because of it's low growth habit, it requires little mowing. It also requires little water and is a great choice for the conservation of water. Freezes will turn it brown, but Centipede Grass reestablishes itself as a green lawn once the temperature rises.



http://www.toyogreen.com/landscape/Turfing.html

Low Maintenance Grass Alternatives

Mimosa *(Mimosa strigillosa)*

Mimosa is a perennial ground cover that grows 3 to 4 inches tall, spreading by rhizomes and tendrils. Mimosa is commonly called Powder puff for the shape of its pink showy flowers resembles small cotton candies which are prevalent from spring through summer.

It is also referred to as “Sunshine Mimosa” and “Sensitive Plant”. Mimosa thrives best in the sun, and has leafs that are remarkably sensitive to touch, floding up with touched.

http://commercialconnection.blogspot.com/2011_04_01_archive.html

Low Maintenance Grass Alternatives

Asiatic jasmine *(Trachelospermum asiaticum)*

This trailing vine, sometimes referred to as Asian Jasmine, from Asia, suprisingly. Presently used abundantly in Florida yards as a ground cover in landscape beds, it can be readily adapted as an alternative to grass. The vines sprawl along the ground forming a dense bed of small leaves. It has small white/yellow fragrant flowers. Though not a ture jasmine, it derives it's name after it's flower which smells similar to that of jasmine. The plant typically will not get taller than six inches, but may grow higher if supported on any type of structure. It will climb bushes and trees, so care must be maintained. This plant prefers shades and thrives best there. Though it will grow in continually hot sunny locations, it is not ideal.

http://farm1.staticflickr.com/155/4157751 43_7dcfbf45de_z.jpg?zz=1com/155/415775143_7dcfbf45de_z.jpg?zz=1

Low Maintenance Grass Alternatives

Perennial Peanut *(Arachis glabrata)*

Like Bahia grass,perennial peanut was originally used in Florida as food for cattle. Because it performed well in the hot, often dry environment, it was readily used in lawns. Spread though rhizomes, the perennial peanut reaches a height of anywhere between two inches to a foot and has a small bright yellow flowers. While not producing a peanut, this plant is in the peanut family. Because of some confusion related to the name and specifying this plant, it is recommended that those seeking this grass alternative should specify the following selections: Ecoturf, Arblick, Brooksville 67, and Brooks-ville 68.

http://www.lwvoc.org/images/Arachis_Glabrata%20-Per%20Peanut4.jpg

Reduce Your Lawn Area and Expand your Beds

An easy inexpensive alternative to large grass areas is the simple solution of expanding the beds you have by decreasing the number of the plants or by creating new beds. If the budget does not allow this alternative solution to grass, one can simply space the plantings out at a greater on center spacing.

Plants and Plant Coding

The following pages contain suggestions for your lawn. Categorized into Eco-Systems that simulate different Florida environments, an array of plants are provided that make up these eco-system for a Florida Friendly Yard.

In no way are these suggestions the full palate of plant material to choose from. There are numerous other plants available.

For ideas for additional Florida Friendly plants download a copy of Environmentally Friendly Landscaping for Florida Yards at https://sustainabledesignandconsulting.com/
Sustainable Design and Consulting llc can be contacted for a greater plant palette and consultation.

The common plant name is listed followed by the scientific name. If the plant is native to Florida, the scientific name will be followed by the letter “N”.

Next, it is listed where the plant can live with the indication of the Zone indicative of the USDA Agriculture growing map and further specified by indicating what part of Florida (North, Central or South) it will grow in.

The plants maximum possible growth size is listed as the Height x the Width 50x60 indicates that the plant might grow 50 feet tall, 60 feet wide), This is the expected size the plant can get at the peak of it’s life.

It is then listed what conditions the plant does best including soil, moisture and lighting conditions.

Common Name *(Scientific Name)* N=Native
USDA Hardiness Zone
Location it grows in Florida
Height X Width of Plant
Soil Type,
Wet/Dry Conditions
Sun/Shade Conditions
Additional Information

Reduce Your Lawn and Install an Ecosystem
Grass Prairie

For Sunny Areas

Prairie's exist all though the United States, all the way from California to North Carolina. Even Florida is home to many native prairie habitats. A homeowner can easily implement the appearance of a prairie with a few select plantings. With a prairie, one can still use grass, but not species of grass lawns, instead using the clumping tall grasses of the plant kingdom. The alternative of using grass clumps in a prairie style planting can easily take the place of one's lawn. As an added benefit, a prairie like yard will attract an abundance of wildlife, like birds and beneficial insects, use less water and is easy to maintain.

http://www.orionmagazine.org/index.php/butterfly/view/4139/

Lopsided Indian Grass *(Sorghastrum secundum)* N
Zone 8-11
North Central South Florida
4 x4
any soil
well drained to medium
sun to partial shade

http://www.gardensoftheblueridge.com/wildflowers_for_sun_to_semin-t.htm

Blue Eyed Grass *(Sisyrinchium angustifolium)* N
Zone 8-11
North Central South Florida
4 x4
any soil
well drained to medium
sun

Fakahatchee Grass *(Tripsacm dactyloides)* N

Zone 8-11
North Central South Florida
4 x4
any soil type
well drained to medium
sun to partial shade

http://farm3.static.flickr.com/2588/3784892175_74a59688a7_z.jpg

Purple Love Grass *(Eragrostis spectabilis)* N

Zone 8-10
North Central South Florida
3x3
any soil type
well drained to medium
sun

http://www.oaklandwildflowerfarm.com/thumbs/Purple%20Love%20Grass%20Thumb.jpg

Muhly Grass *(Muhlenbergia capillaris)* N

Zone 8-11
North Central South Florida
3x3
any soil type
well drained to medium
sun

http://pazgrowers.com/images/Muhl_Muhly__Pink_Muhly_Grass.jpg

Sand Cord Grass *(Spartinia bakerii)* N

Zone 8-9
North Central Florida
3x3
sandy soil
well drained to wet
sun

http://farm3.static.flickr.com/2461/3784927633_8013e201cc_z.jpg

Reduce Your Lawn and Install an Ecosystem
Simulated Wetland

For Low Wet Areas

Wetlands exist all throughout the state of Florida. It is estimated that half have been destroyed through development. If your yard is consistently wet, it would be beneficial to replace the planting in that area with appropriate adapted plants like those found in a Florida wetland.

http://melanys.tripod.com/natives.htm

Canna *(Canna flaccida)* N
Zone 8-11
North Central South Florida
3x1
any soil
well drained to moist
sun
yellow flower

guitarfish.org

Crinum *(Crinum americanum)* N
Zone 9-10
Central South Florida
3x3
any soil type
moist
sun to partial shade
attractive white blooms

http://www.robsplants.com/plants/HibisCocci

Scarlet Hibiscus *(Hibiscus coccineus)* N
Zone 9-10
Central South Florida
any soil type
Moist
sun
attractive red flowers

Sweetbay Magnolia *(Magnolia virginianna)* N
Zone 8-10
North Central -South Florida
15x25
any soil type
sun to partial shade

http://davesgarden.com/guides/pf/showimage/85242/

Cypress, Pond *(Taxodium ascendens)* N
Zone 8-10
North Central South Florida
15x25
any soil type
sun

http://seedclean.com/htdocs/images/IMG_7834.jpg

Maple, Red *(Acer rubrum)* N
Zone 8-10
North Central South Florida
15x35
any soil type
sun to partial shade

http://s.ecrater.com/stores/150661/4c564b64d6d2a_150661n.jpg

River Birch *(Betula nigra)* N
Zone 8-10
North Central South Florida
15x35
any soil type
sun

http://www.colesvillenursery.com/plant/betula-nigra-heritage/attachment/betula-nigra-heritage

Reduce Your Lawn and Install an Ecosystem
Woodland

For Shady/Partly Shady Areas

If one has a shady area in the yard where it is always difficult to maintain grass because of the poor light conditions, then it may be time to submit to nature and plant more suitable plants like shrubs for that shaded area. If one wants to create more shade in the yard, plant the below listed trees.

http://www.cf.edu

Live Oak *(Quercus virginiana)* N
Zone 8-10
North Central South Florida
60x120
any soil type
well drained to wet soil
sun to partial shade
long lived, not for small lots

http://www.duncannurseries.com/images/TREES/Magnolia.jpg

Southern Magnolia *(Magnolia grandiflora)* N
Zone 8-10
North Central South Florida
40x50
any soil type
well drained to medium drained
sun to partial shade
attracts birds, beautiful white fragrant flowers

http://www.oocities.org/zoohort/wax-myrtle.html

Wax Myrtle (N) *Myrica cerifera* N
Zone 8-10
North Central South Florida
varies
any soil type
well drained to medium
sun to partial shade
shrub

Florida Privet (*Forestiera segregate)* N

Zone 8-10
North Central South Florida
varies
any soil type, well drained
sun to shade

http://www.wildflower.org/image_archive/640x480/JAM6151/6151_IMG03255.JPG

Gallberry (*Ilex glabra)* N

Zone 9-10
Central South Florida
varies
any soil type
well drained to medium
sun to partial shade

http://www.plantplaces.com/perl/viewpictureDetails.pl?Plant_ID=307&Region=&Directory=photos&Picture_Name=Ilex.glabra.sg

Holly, Yaupon *(Ilex vomitoria)* N

Zone 9-10
Central South Florida
varies
any soil type
well drained
sun to partial shade

http://www.hiddenacresnurseryfl.com/products/Shrubs/Shrubs.htm

Holly, Dwarf Yaupon *(Ilex vomitoria 'Shillings Dwarf')* N

Zone 8-10
North Central South Florida
varies, any soil type
well drained to medium
sun to partial shade

http://www.hiddenacresnurseryfl.com/products/Shrubs/Ilex%20Vomitoria%20Schilling/Ilex%20Schilling%20Vomitoria.htm

Reduce Your Lawn and Install a Butterfly Garden

An attractive alternative to grass would be a beautiful butterfly garden. Not only are many butterfly plants readily available in nurseries, but the butterflies that are attracted to these plants are abundant in Florida. With a butterfly garden, you not only get the beautiful blooms, but also the beautiful butterflies, doubling the aesthetic pleasure.

http://farm1.staticflickr.com/103/300912824_d0bd3bcf19.jpg

Duranta *(Duranta erecta)*
Zone 8-10
North Central Florida
3x3
sandy soil
well drained to wet
sun
small yellow fruit, purple flowers

http://www.delange.org/CapeHoneysuckle/Dsc00041.jpg

Cape Honeysuckle *(Tecomaria capensis)* N
Zone 8-10
North Central Florida
varies
sandy soil
well drained to wet
sun
Red flowers

http://www.treetopics.com/cephalanthus_occidentalis/buttonbush_3723.png

Buttonbush *(Cephalanthus occidentalis)* N
Zone 8-10
North Central Florida
3x3
sandy soil
well drained to wet
sun
White ball flowers

Candy Corn Cuphea *(Cuphea micropetala)* N

Zone 8-10
North Central South Florida
4 x4
any soil
well drained to medium
sun
Yellow orange flowers

http://toptropicals.com/pics/garden/c20/1127.jpg

Milkweed *(Asclepias curassavica)*

Zone 8-10
North Central South Florida ,
3x3
any soil type
well drained to medium
sun
red and orange flowers

http://reddirtramblings.com/wp-content/uploads/2009/01/tropical-milkweed.jpg

Porterweed *(Stachytarpheta jamaicensis)* N

Zone 8-10
North Central South Florida
3x3
any soil type
well drained to medium
sun
Blue flowers

http://www.almostedenplants.com/shopping/images/full/Stachytarpheta%20jamaicensis.jpg

Salvia *(Salvia coccinea)* N

Zone 8-10
North Central Florida
sandy soil
well drained to wet
sun
Red flowers

http://www.curtismartingroup.com/SalviaRed.jpg

Reduce Your Lawn and Install Food Producing Plants

Vegetable Garden

If you are constantly watering and fertilizing an expanse of land covered with grass in the backyard, why not water and fertilize that large expanse of land covered with vegetables? A variety of vegetables will do well in Florida, including greens, squash, corn, tomatoes, peas, beans, radishes, peppers, strawberries and many others. Because of the great climate, Florida has, it is ideal for gardening year round. With proper planning, a proper water saving irrigation system and proper pest management, you can produce your own vegetables and cut the cost of grocery shopping, while reducing your lawn.

http://www.flowerpicturegallery.com/d/11474-2/planting+a+vegetable+garden+creative+ideas.PNG

Conclusion

We have traditionally attempted to immolate an unattainable standard by installing and maintaining a green lawn. The reality is that green grass lawns take time, energy, and exorbitant amounts of effort to care for. And to care for them is detrimental to the environment, creating pollution in the forms of toxic run off, poisons that affect beneficial insects, animals, as well as humans.

With proper design and plantings, a homeowner can have a beautiful vibrant lawn with reduced grass areas. This alternative lawn can consist of food producing plants, butterfly attracting plants, a simulated ecosystem or simply a yard design that incorporates native and adapted plants.

Many benefits abound with an alternative landscape, including a giant step towards environmental stewardship and less time and money involved in maintenance.

Resources

Below are links to helpful and useful resources.

Nurseries Specializing in Native and Adapted Plants

Biosphere Nursery http://biospherenursery.com/
14908 Tilden Road
Winter Garden, FL 34787
TEL: 407-656-8277

Green Images
1333 Taylor Creek Rd
Christmas, Florida
TEL: 407-568-1333

Websites Specializing in the Florida Yard

Florida Association of Native Nurseries
http://www.afnn.org/

florida friendly landscape
http://fyn.ifas.ufl.edu/

The Florida Yard
http://www.floridayards.org/

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