

# ALTERNATIVES TO GRASS LAWNS: AN ECO-FRIENDLY YARD

A Guide to Environmentally Friendly  
Alternatives to Grass for the Floridian  
and Their Yard

Sustainable Design  
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A Guide to Environmentally Friendly Alternatives to Grass for  
the Floridian and Their Yard

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**Sustainable Design+Consulting**

[sustainabledesignandconsulting.com](http://sustainabledesignandconsulting.com)

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# INTRODUCTION

Maintaining a green lawn in Florida is not an easy feat. It takes an large amount of effort, resources, time and money. And a lot of times it is all for naught, as many of our lawns die from any number of causes, including pest, drought or stress.

Our love for lawns may have its roots in the English landscape garden and Scotland's green pastures. A symbol of prestige and wealth, the perfect ideal of a lawn of green grass made it's way across the ocean to America. In an attempt to emulate green lawns, Americans were doomed from the start as our climate was much different from the grass freindly climate in England and Scotland. Overcast days with large amounts of moisture was not the typical American clime, but rather it was infrequent rain with days full of sunshine which are oppressively hot. We took no for an asnswer, the great indomintable persistence of the American spirit was strong, as we attempted to continue the seemingly unattainable goal of a green lawns, despite the many failed attempts.

Homeowners Associations and the ever elusive concept of keeping up with the Jones's caused the need to have a lush green lawn and this has created a lot of problems. Problems such as pollution, water and energy waste, and the time and money needed to maintain the lawn to acceptable standards. Through the years, '*better looking*' grass was developed, along with pesticides and fertilizers that was necessary to take care of these many '*better looking*' grass's. These pesticides and fetilizers were applied unhesitatingly in abundance without knowing the detriment they were causing to the environment. And despite constant upkeep and continued applications, we were still had grass that died.



# Problems With Grass Lawns

## Monoculture Water Waste Pollution

### Monoculture

Because grass lawns are a single species of the same plant, it creates one swath of only one plant material. The lack of plant diversity creates an environment that doesn't promote or provide for any other life form, including other plants that would be beneficial in supporting wildlife such as beneficial insects, butterflies and birds.

### Water Waste

We can turn on the faucet and expect water to come out and we can brush our teeth, get a glass of water, fill the ice trays up or take a shower. 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 is estimated to be used on the lawn during the summer months.

### Pollution

#### Toxicity

Pesticides, herbicides and fertilizers sprayed on lawns are toxic to humans and pets when they come in direct contact with.



# Pollution

## Water Quality

Pesticides, herbicides and fertilizers used on lawns contribute to vast amounts of pollution. This pollution finds its way into water bodies, harming wildlife such as fish and birds. This pollution also gets into watersheds, and eventually into the Aquifer from whence we obtain our drinking water from.

*“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*

## Air Quality

Though grass contributes to purifying the air, it is easily negated by the air pollution that is produced by the lawnmower used while cutting the grass. Further pollution is contributed through other factors associated with mowing the 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.



# 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, hug a tree 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, its use is ecologically minded and as the market demands rise, the cost will lower.

## Low Maintenance Turf Grass

While this is a primer on alternatives to grass, using turfgrass sometimes can not be avoided due to reasons that might include aesthetic value, homeowner association covenants or a homeowner's reluctance to make a drastic change. Suggested turfgrasses would be **Bahia Grass** and **Centipede grass**.



# Low Maintenance Turf Grass

## Bahia Grass (*Paspalum notatum*)

Native to South America, Bahia is extremely well adapted to Florida and was originally used in pastures for cattle grazing. Because of its high drought tolerance and easy establishment in sandy soils there needs to be little attention paid to this grass once it is established. Because of this, many homeowners are pleased with this grass.

Bahia is a dense tufted grass that spreads through 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, soils with low fertility and also requires low maintenance

This creeping grass spreads through stolon's and has a coarse texture with short upright stems that grow to about 3-5 inches and thus requires little mowing. Because of this low growth, Centipede takes little water and is a better choice for conservation of water than other thirsty species of grass. Freezes will turn it brown, but this 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 thornless, low ground cover, perennial plant that grows 3 to 4 inches tall, spreading by rhizomes and tendrils. Mimosa is commonly called Powderpuff, because the blooms are pink showy flowers that resemble Powder Puff or small cotton candies. Blooms are prevalent from spring through summer. Mimosa thrives best in the sun. It is also referred to as sensitive plant because it has leaves that are remarkably sensitive to touch and will fold up when disturbed.



[http://commercialconnection.blogspot.com/2011\\_04\\_01\\_archive.html](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, is obviously from Asia. Presently used profusely in the Florida yard as a ground cover in planting beds, it can be readily adapted as an alternative to grass. The vines sprawl along the ground forming a dense bed of small leaves and the plant has small white/yellow fragrant flowers. Though Asiatic Jasmine is not a true Jasmine, it derives its name after its 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, including 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/155/415775143\\_7dcfbf45de\\_z.jpg?zz=1](http://farm1.staticflickr.com/155/415775143_7dcfbf45de_z.jpg?zz=1)  
[http://farm1.staticflickr.com/155/415775143\\_7dcfbf45de\\_z.jpg?zz=1](http://farm1.staticflickr.com/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 grazing. Because it performed profusely well in the hot, often times dry, Florida environment, it was readily used in lawns. Spread through rhizomes, the perennial peanut reaches a height of anywhere between five inches to a foot and has small bright yellowish 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](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 or create new ones. If there are any mass plantings presently in you yard, double the mass of the plants by expanding the bed. If the budget does not allow this alternative solution to grass, one can simply space more plantings out and allow the mulch that is laid down to create a large area of the expanded bed.



## Plants and Plant Coding

The following pages are plant suggestions for the Florida Friendly Yard. They are not listed in any order or priority and in no way are these suggestions the full palate of plant material to choose from. There are numerous other plants available. Sustainable Design and Consulting 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 plant's maximum possible growth size is listed as the Height x the Width (50x60 indicates that the plant might grow 50 feet tall, by 60 feet wide). This is the expected size the plant can get at the peak of its life.

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

Any additional information on the plant, including flowers and fruit is then provided.

**Common Name (*Scientific Name*) N=Native**

Location it grows in Florida, Hardiness Zone

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 and even Florida, which 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 use traditional grass lawns. The alternative of using grass clumps in a prairie style planting can easily take the place of large expanses of one's lawn. As an added benefit, a prairie like yard will attract an abundance of wildlife, 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

a clumping grass



[http://www.gardensoftheblueridge.com/wildflowers\\_for\\_sun\\_to\\_semin-t.htm](http://www.gardensoftheblueridge.com/wildflowers_for_sun_to_semin-t.htm)

### **Blue Eyed Grass (*Sisyrinchium angustifolium*) N**

Zone 8-10

North Central South Florida

any soil type

well drained to medium

sun

blue flowers





### **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

a clumping grass



[http://farm3.static.flickr.com/2588/3784892175\\_74a59688a7\\_z.jpg](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

a clumping grass



<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

a clumping grass



[http://pazgrowers.com/images/Muhl\\_Muhly\\_Pink\\_Muhly\\_Grass.jpg](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

a clumping grass



[http://farm3.static.flickr.com/2461/3784927633\\_8013e201cc\\_z.jpg](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 through 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 wetland.



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

### **Canna (*Canna flaccida*) N**

Zone 8-9

North Central South Florida

3x1

any soil type

sun

yellow flower



[guitarfish.org](http://guitarfish.org)

### **Crinum (*Crinum americanum*) N**

Zone 9-10

Central South Florida

3x3

any soil type,

sun to partial shade

attractive white blooms



<http://www.robspplants.com/plants/HibisCocci>

### **Scarlet Hibiscus (*Hibiscus coccineus*) N**

Zone 9-10

Central South Florida

6x3

any soil type

sun



### **Sweetbay Magnolia (*Magnolia virginiana*) N**

Zone 8-10

North Central -South Florida

15x25

any soil type

sun to partial shade

tree



<http://davesgarden.com/guides/pl/showimage/85242/>

### **Cypress, Pond (*Taxodium ascendens*) N**

Zone 8-10

North Central South Florida

15x25

any soil type

sun

tree



[http://seedclean.com/htdocs/images/IMG\\_7834.jpg](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

tree



[http://s.ecriater.com/stores/150661/4c564b64d6d2a\\_150661n.jpg](http://s.ecriater.com/stores/150661/4c564b64d6d2a_150661n.jpg)

### **River Birch (*Betula nigra*) N**

Zone 8-10

North Central South Florida

15x35

any soil type

sun

tree



<http://www.colesvillennursery.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 for that shaded area.



<http://www.cf.edu>

### Live Oak (*Quercus virginiana*) N

Zone 8-9

North Central South Florida

60x120

any soil type

well drained to wet soil

sun to partial shade

tree, not for small lots



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

### Southern Magnolia (*Magnolia grandiflora*) N

Zone 8-9

North Central South Florida

40x50

any soil type

well drained to medium drained

sun to partial shade

tree, attracts birds, long lived, 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





# Shrubs

## 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](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](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, getting double the pleasure.



[http://farm1.staticflickr.com/103/300912824\\_d0bd3bcf19.jpg](http://farm1.staticflickr.com/103/300912824_d0bd3bcf19.jpg)

## **Duranta** (*Duranta erecta*)

Zone 8-9

North Central Florida

4x4

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 8-9

North Central Florida

varies

sandy soil

well drained to wet

sun

red flowers



[http://www.treetopics.com/cephalanthus\\_occidentalis/buttonbush\\_3723.png](http://www.treetopics.com/cephalanthus_occidentalis/buttonbush_3723.png)

## **Buttonbush** (*Cephalanthus occidentalis*) N

Zone 8-9

North Central Florida ,

3x3

sandy soil

well drained to wet

sun

white ball flowers





# 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://reddirramblings.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

Instead of watering and fertilizing a large expanse of land covered with grass in the backyard, why not water and fertilize that large expanse of land covered with vegetables? A plethora of vegetables will do well in Florida, including greens, squash, corn, tomatoes, peas, beans, radishes, peppers, strawberries and many, many others. Because of the great climate, Florida is ideal for gardening year round, making it possible to have vegetables growing in the garden all the time. With proper planning, irrigation and 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>



# Conslusion

With a lawn, we have traditionlly attempted to immolate an unattainable standard and install and maintain a green lawn. The reality is that green grass lawns take time, energy, and exhorbant 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 not only pest, but beneficial insects, animals, as well as humans.

With proper planning 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/>

## Landscape Architect Ecological/Environmental Consultant

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