

# Planting a Native Rain Garden in Alachua County

Fact Sheet # AC FFL 1783

Hudson, A.\* & Clem, T

Published Date: Jan 2020

## RAIN GARDENS

As communities develop, change, or grow, there is an influx in stormwater runoff associated with impervious surfaces. New roadways, sidewalks, or buildings prevent rainwater from filtering through the soil and puts more water into our streams and creeks via stormwater. Increases in stormwater runoff from managed landscapes lead to an increased potential non-point source pollution, soil erosion, and overall decline in water quality.

Many strategies employ ecosystem services to help capture, convey, store, and release clean stormwater back into our environment, including through rain gardens.

Rain gardens are designed to slow, absorb, and filter stormwater runoff associated with a yard or landscape. By utilizing ecosystem services provided by the plants, plants within the rain garden help clean and filter any pollution before entering our waterways.

### Rain Garden



Figure 1: A Floridian rain garden situated within a residential landscape can help protect water quality and enhance a landscape. Image Courtesy of Carrie Stevenson, UF/IFAS Extension.



## **DESIGN CONSIDERATIONS**

When planning a new rain garden for your landscape, consider the following conditions: water location, soil type, and environmental conditions. Does water have a tendency to collect in your landscape or are there any areas in your landscape that can easily collect any rain water? Identifying an ideal location for a rain garden will help improve its effectiveness. Low places or locations along swales around your property could easily be turned into a rain garden.

Secondly, think about your soil conditions. Throughout Alachua County we have sandy soils that have a tendency to drain very quickly. It is important to think about soil because your rain garden could drain very quickly, leaving your plants in a desperate search for water. We typically recommend rain garden plants that can withstand an inundation of water, but can withstand drought conditions too.

Lastly, consider the environmental conditions you intend on planting. Under the Florida-Friendly Landscaping™ Program's first principle, "Right Plant, Right Place", we match plants to our environmental conditions. All plants prefer specific sun or shade conditions, moisture requirements, or climate. Selecting plants that do well in our environmental conditions immediately reduces the need for water and helps improve overall plant health.

## **SELECTING PLANTS FOR YOUR RAIN GARDEN**

The attached list of native plants are well-suited for a rain garden in Alachua County. Each plant is selected because of its adaptability to soil moisture conditions expected in sandy soils. It is very important to spend some time planning your rain garden before planting-it will greatly increase the likelihood of your garden's success.

Plants are also organized by possible locations within the rain garden: bottom of slope, mid-slope, and top of slope. Bottom of slope, or basin plants, are the plants typically located at the bottom of the rain garden, receiving the most water. Mid-slope plants tolerate a some inundation of water and tolerate drought conditions. Top of slope plants are at the highest points of the rain garden and serve as an initial filter for the rain garden. They are the most drought tolerant plants because it is rare that they will be completely inundated with water. These slope locations act as a guide for plant placement in relationship to moisture conditions.



**Table 1: Native Plant Selection for Alachua County Rain Gardens, Grasses & Sedges**

Grasses & Sedges								
Common Name	Scientific Name	Flower Color	Type	Light*	Size (H' x W')	Slope		
						Bottom	Mid	Top
Blue Eye Grass	<i>Sisyrinchium angustifolium</i>	blue	grass	s-ps	2x2	x	x	x
Fakahatchee Grass	<i>Tripsacum dactyloides</i>	yellow-red	grass	s-ps	4x4			x
Fakahatchee Grass Dwarf	<i>Tripsacum floridanum</i>	green	grass	s-ps	3x3			x
Indian Grass, Lopsided	<i>Sorghastrum secundum</i>	green-yellow	grass	s	3x3	x	x	
Love Grass Purple	<i>Eragrostis spectabilis</i>	pink-purple	grass	s	2x2		x	x
Love Grass, Elliot's	<i>Eragrostis elliottii</i>	green	grass	s	2x2		x	x
Muhly Grass	<i>Muhlenbergia capillaris</i>	pink	grass	s-ps	4x4	x	x	x
Sedge White Top	<i>Dichromena colorata</i>	white	sedge	s-ps	2x2	x		
River Oats	<i>Chasmatium latifolium</i>	tan	grass	s-ps	2x2	x	x	x

\*S-Sun; PS-Part Shade; Sh-Shade

**Table 2: Native Plants, Annuals/Perennials/Ferns**

Annuals/Perennials/Ferns								
Common Name	Scientific Name	Flower Color	Type	Light*	Size (H' x W')	Slope		
						Bottom	Mid	Top
Aster Climbing	<i>Aster carolinianus</i>	lavendar	perennial	s-sh	10x2	x	x	x
Browns Savory	<i>Clinopodium brownei</i>	lavendar	perennial	s-ps	.5x2	x	x	
Black-Eye Susan	<i>rudbeckia hirta</i>	yellow	annual	s	2x1			x
Blazing Star	<i>liatris spp</i>	purple	perennial	s	2x2		x	
Blue River Sage	<i>Salvia misella</i>	blue	perennial	ps-sh	1x3		x	x
Butterfly Weed	<i>Asclepias tuberosa</i>	orange	perennial	s	1x1			x
Cardinal Flower	<i>Lobelia cardinalis</i>	red	perennial	s-ps	4x2	x		
Cutleaf Coneflower	<i>Rudbeckia lacinata</i>	yellow	perennial	s	3x4		x	x



*Table 2, Continued*

Fern Cinnamon	<i>Osmunda cinnamomea</i>	none	fern	ps-sh	3x3	x	x	
Fern Royal	<i>Osmunda regalis</i>	none	fern	ps-sh	3x3	x	x	
Fogfruit	<i>Phyla nodiflora</i>	pink	perennial	s-ps	1x8		x	x
Georgia Calamint	<i>Calamintha georgianna</i>	pink	perennial	s	2x2			x
Golden Groundsel	<i>Packera aurea</i>	yellow	perennial	s-sh	1x1		x	x
Iris Blue Flag	<i>Iris virginica</i>	blue	perennial	s	3x3	x	x	
Iris Zigzag	<i>Iris brevicaulis</i>	blue	perennial	s-sh	2x2	x	x	
Iron Weed	<i>Veronia gigantea</i>	purple	perennial	s-ps	4x 3	x	x	x
Meadow Rue Tall	<i>Thalictrum pubescens</i>	white	perennial	ps-sh	5x3	x	x	
Milkweed Aquatica	<i>Asclepias perennis</i>	white	perennial	ps-sh	1x1		x	x
Milkweed, Swamp	<i>Asclepias incarnata</i>	pink	perennial	s-ps	4 x 2	x	x	
Mist Flower	<i>Conoclinium coelestinum</i>	blue/purple	perennial	s-ps	1x1	x	x	
Porter Weed, Blue	<i>Stachytarpheta jamaicensis</i>	blue-purple	perennial	s-ps	1x3		x	x
Rattlesnake Master	<i>Eryngium yuccifolium</i>	green-white	perennial	s-ps	3x4			x
Rattlesnake Master, Marsh	<i>Eryngium aquaticum</i>	blue-white	perennial	s-ps	3x4	x	x	
Rosin Weed	<i>Silphium asteriscus</i>	yellow	perennial	s	3x3		x	x
Sage, Tropical	<i>Salvia coccinea</i>	red, pink, white	annual	s-sh	1x3		x	x
Scorpion Tail	<i>Heliotropium angiospermum</i>	white	perennial	s-ps	2x2		x	
Scrub Mint	<i>Conradina canescens</i>	pink	perennial	s	3x3			x
Stokes Aster	<i>Stokesia laevis</i>	lavendar	perennial	s-ps	2x2		x	x
Swamp Mallow	<i>Hibiscus moscheutos</i>	pink/white	perennial	s-ps	4x4		x	x
White Crownbeard	<i>Verbesenia virginica</i>	white	perennial	s-ps	4x2		x	x
Woodland Phlox	<i>Phlox divaricata</i>	blue	perennial	ps			x	x

\*S-Sun; PS-Part Shade; Sh-Shade



**Table 3: Native Plants, Bulbs/Rhizomes**

Annuals/Perennials/Ferns								
Common Name	Scientific Name	Flower Color	Type	Light*	Size (H' x W')	Slope		
						Bottom	Mid	Top
Canna Yellow	<i>Canna flaccida</i>	yellow	rhizome	s-ps	5x3	x		
Rain Lily	<i>Zepранthes atamasco</i>	white	bulb	s-ps	1x.5	x	x	x
Swamp Lily	<i>Crinum americanum</i>	white	bulb	s-sh	2x1	x	x	

\*S-Sun; PS-Part Shade; Sh-Shade

**Table 4: Native Plants, Trees**

Trees								
Common Name	Scientific Name	Flower Color	Type*	Light	Size (H' x W')	Slope		
						Bottom	Mid	Top
Buckeye Red	<i>Aesculus pavia</i>	red	tree	ps-sh	15x10		x	
Cypress Bald Or Pond	<i>Taxodium spp</i>	none	tree	s-ps	50x30	x	x	x
Fringe Tree	<i>Chionanthus virginicus</i>	white	tree	s-sh	15x15		x	
Holly American	<i>Ilex opaca</i>	white	tree	s-sh	35x25		x	x
Loblolly Bay	<i>Gordonia lasianthus</i>	white	tree	s-ps	50x30	x	x	
Red Maple	<i>Acer rubra</i>	red	tree	s-ps	50x35	x	x	x
River Birch	<i>Betula nigra</i>	brown	tree	s-ps	40x25	x	x	
Sweetbay	<i>Magnolia viirgiana</i>	white	tree	ps-sh	40x25	x	x	
Winged Elm	<i>Ulmus alata</i>	green	tree	s-ps	50x30		x	x

\*S-Sun; PS-Part Shade; Sh-Shade



**Table 5: Native Plants, Shrubs**

Shrubs								
Common Name	Scientific Name	Flower Color	Type	Light*	Size (H' x W')	Slope		
						Bottom	Mid	Top
Arrowwood	<i>Viburnum dentatum</i>	white	shrub	s-sh	10x10	x	x	x
Azalea Fl Flame	<i>Rhododendron austrinum</i>	yellow	shrub	ps	8x8		x	
Azalea Pinxter	<i>Rhododendron canescens</i>	pink	shrub	s-ps	10x10		x	
Beauty Berry	<i>Callicarpa americana</i>	white	shrub	ps	8x6		x	x
Blueberry Darrow's	<i>Vaccinium darrowii</i>	white	shrub	s-ps	2x3		x	x
Buttonbush	<i>cephalanthus occidentalis</i>	white	shrub	ps-sh	10x8	x		
Elderberry	<i>Sambucus canadensis</i>	white	shrub	s-ps	10x10		x	
False Indigo Bush	<i>amorpa fruticosa</i>	purple	shrub	ps	8x8		x	x
Simpson Stopper	<i>Myrcianthes fragrans</i>	white	shrub	s-sh	20x20		x	x
Sweet Pepper Bush	<i>Clethra ainifolia</i>	white	shrub	s-sh	4x6		x	
Sweet Shrub	<i>Calycanthus floridus</i>	red	shrub	ps-sh	9x9	x	x	
Sweet Spire	<i>Itea virginica</i>	white	shrub	ps-sh	8x6		x	x
Wax Myrtle	<i>Myrica cerifera</i>	white	shrub	s-ps	20x20	x	x	x

\*S-Sun; PS-Part Shade; Sh-Shade