



Native Firebush (*Hamelia patens*)

Silver Palmetto (*Serenoa repens* var. *sericea*)

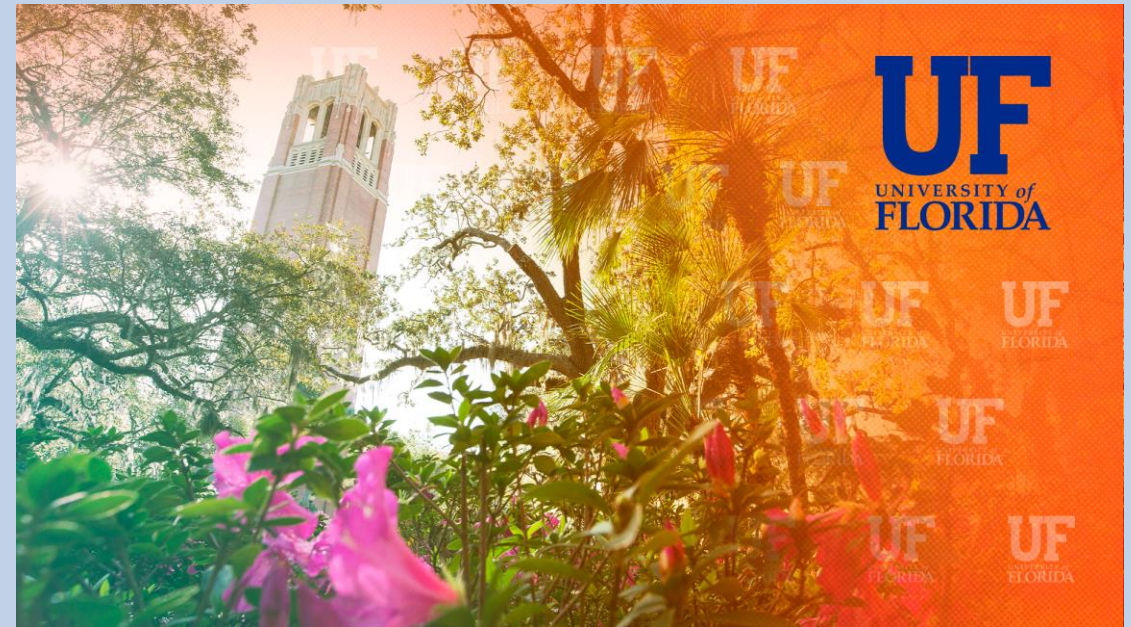
Create a Vegetative Road Buffer Vanderbilt Beach Road Extension

Thomas Becker, Residential Horticulture Extension Agent, UF/IFAS/Collier County Extension Service



Objective of a Roadway Buffer

Offer design solutions to increase privacy and reduce noise
Recommend specific trees and shrubs based on UF/IFAS experts





POTABLE
WATER
AVAILABLE
FOR RECREATION
USES ONLY

Noise Impact Stories
Six Mile Cypress Slough Preserve
Lee County Parks

Assist individuals and HOAs w/privacy and noise

- Find adoptable Florida-Friendly Landscaping (tree & shrub) solutions
 - Right Plant, Right Place
- Choosing plants for hedges added along property borders
 - stormwater retention (wet or dry) basin
 - highway right-of-way
- Interpret plant specifications on blueprints
 - ‘How to’ methods to reduce noise
 - vegetative ribbons, yard berms, absorptive ground, raised beds, Community berms, diverse tropical shrub and tree layering to reduce noise and attract wildlife and choosing Florida native trees & shrubs used in borders and hedges



yard berms



Raised beds



HOA community berm



Diverse tropical plants along driveway

Reduced maintenance, more mulched landscape beds

'Right' Florida yard plantings created by a Master Gardener. A vegetative berm with flat top reducing street noise on busy roadway on golf course and use dense home foundation border using ornamental grasses (Fakahatchee grass) and cocoplum shrub.

Right Plant, Right Place

Florida Native Plants



Burnt Store Marina

Why I do it? Less pruning = improved water quality downstream



Canals, lakes, wet retention ponds

Challenges planting on existing woodland sites in backyards



Select locations based on sight-lines from house, existing tree canopies, tree roots

- Getting roots of new plants anchored
- Require temporary drip irrigation
- Keep out invasives year after year
- Trim off climbing and clinging vines
- Plant trees as soon as possible and smaller shrubs around the trees later
- Burrow pits need managed
- Wet and dry retention ponds
- Wildlife pattern disruption

What are your Existing Woodlot Native Trees? Add more...

- **Red Maple** – *Acer rubrum* (use only local sources)
- **Bald Cypress** – *Taxodium sp.*
- **Southern Slash Pine** – *Pinus elliotii var. densa*
- **Cinnamon-bark** – *Canella alba*
- **Dahoon Holly** – *Ilex cassine*
- **Live Oak** – *Quercus virginiana*
- **Cabbage Palm** – *Sabal Palmetto*

Constructed border/buffer designs (no pruning or hedging)

Single row of evenly spaced, large trees used to break up sight-line to highway

Mixed thickets (noise reducing) using 3 or more types of small trees/large shrubs adjoining Live Oak Canopy

Bok Tower Gardens, Lake Wales, FL



*(Pinus
elliottii)*

*Quercus
virginiana*

Creating privacy from new roadway/ new home site

Shrubs

- Hedges require investment in plants
- Select largest container plants budgeted
- Use hedges wisely, mix single and staggered double rows
- Group shrubs in mass in the corners
- Shrubs kept 5' or more from property line

Trees

- Plant canopy tree **now** in back corner or anywhere to break sightline to roadway

Tree shade reduces size of shrubs below



Florida-Friendly Landscaping

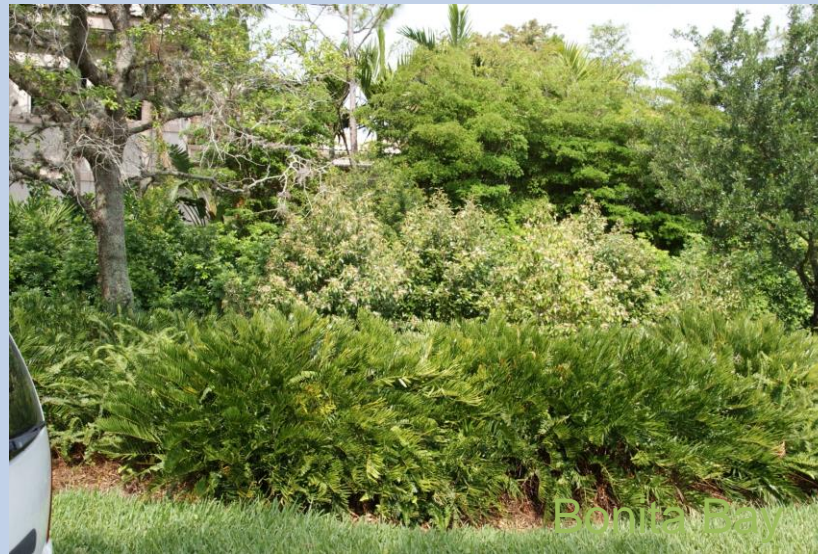
“...quality landscapes that conserve water, protect the environment, are adaptable to local conditions, and are drought tolerant.” F. S., Ch. 373.185

Evaluate plants as screening

good limited pruning on firebush, fiddlewood



Better (unpruned)



Shady lady black olive, Jamaican Caper and Coontie (above)

Best seagrape, royal palms, diverse shrubs (unpruned)



*Full sun and fertilizer increase
foliage color and bloom on
Florida-Friendly plant
Plumbago auriculata cvs. used
as low hedge*

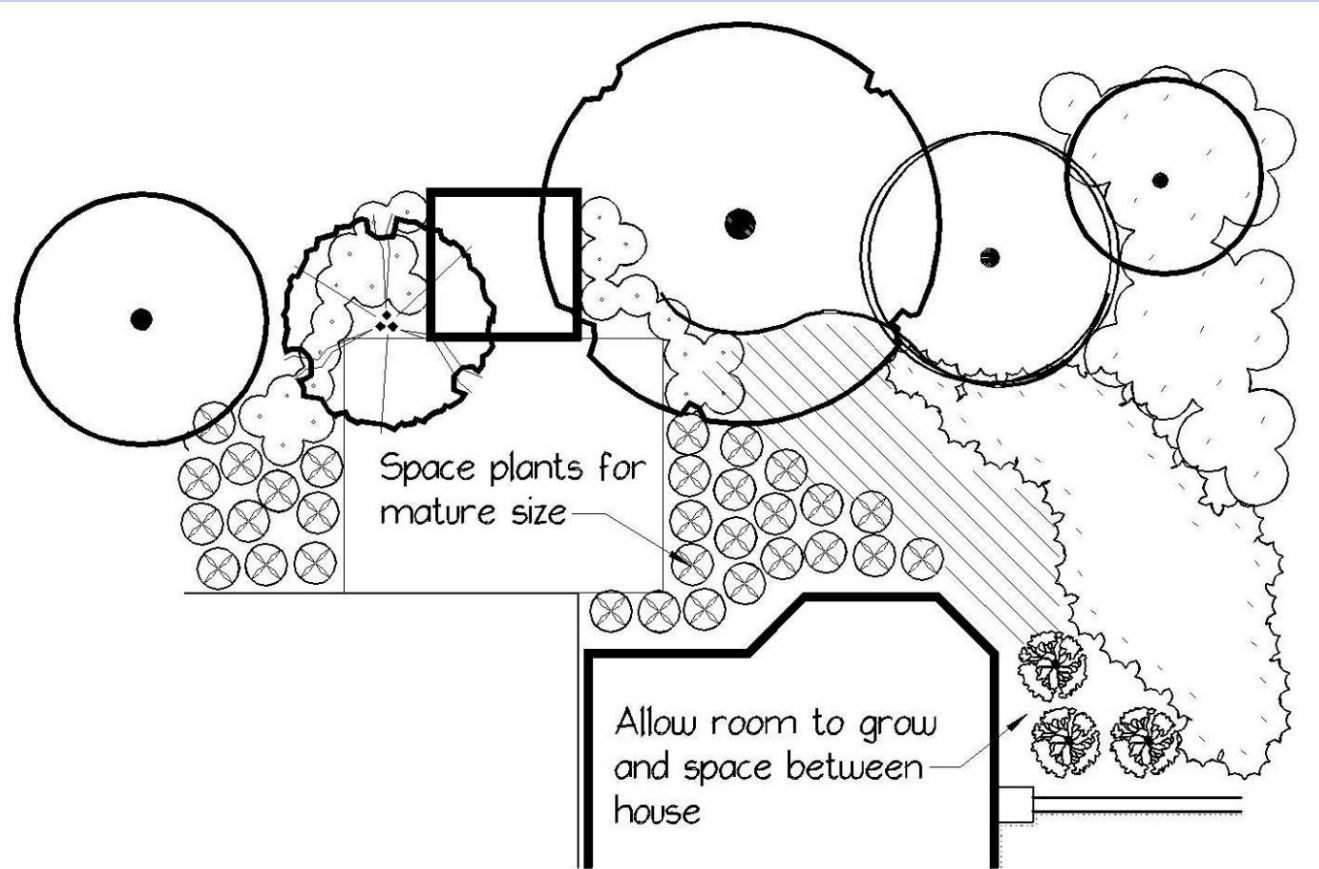


Landscape Design: Space plants proportional to their size

Seagrape FS, 3-35' high, 10-50' wide

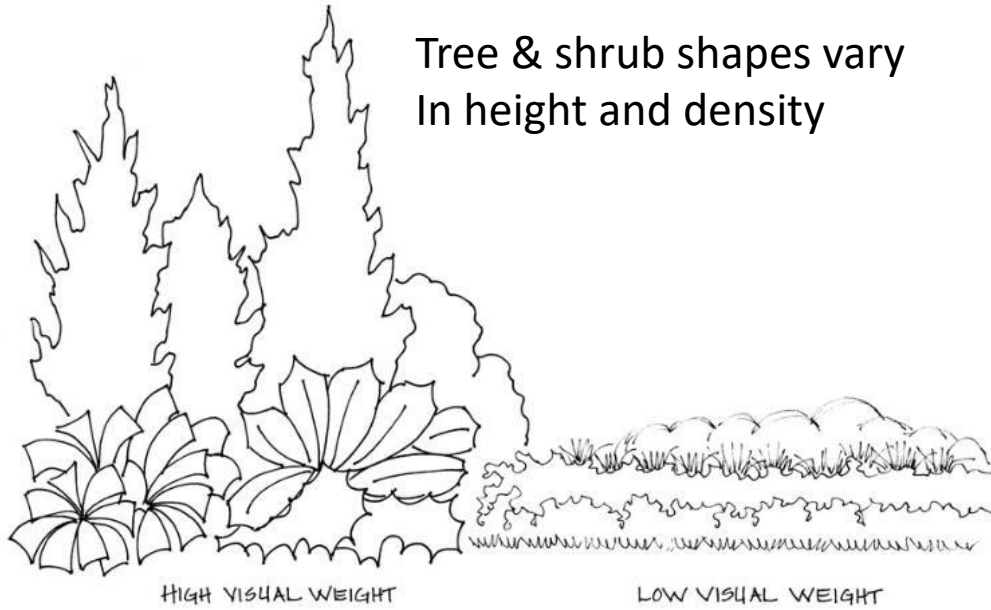


Viburnum suspensum 6-12' high and wide, plant every 4-5', stays low, PS, shade tolerant



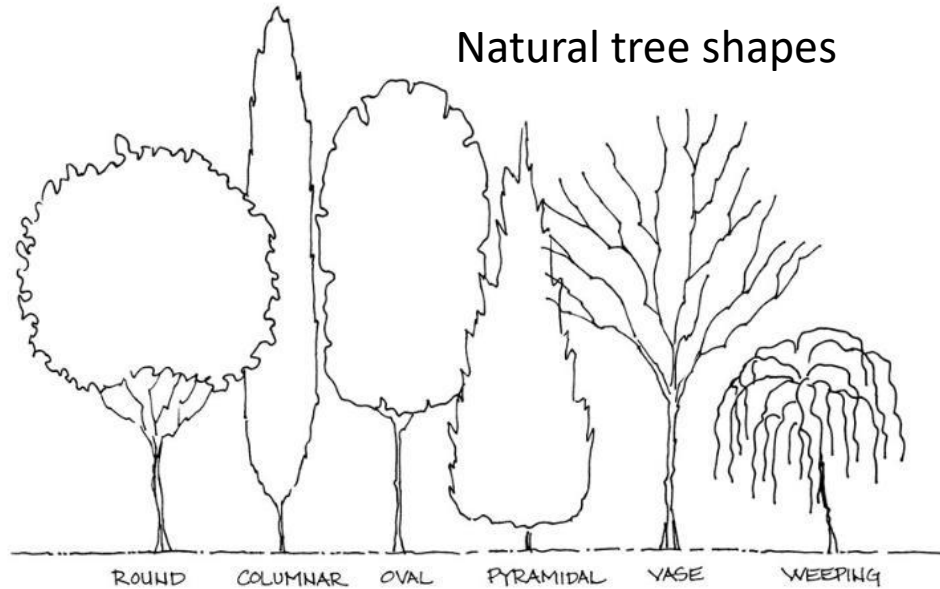
Plant Spacing

Tree & shrub shapes vary
In height and density



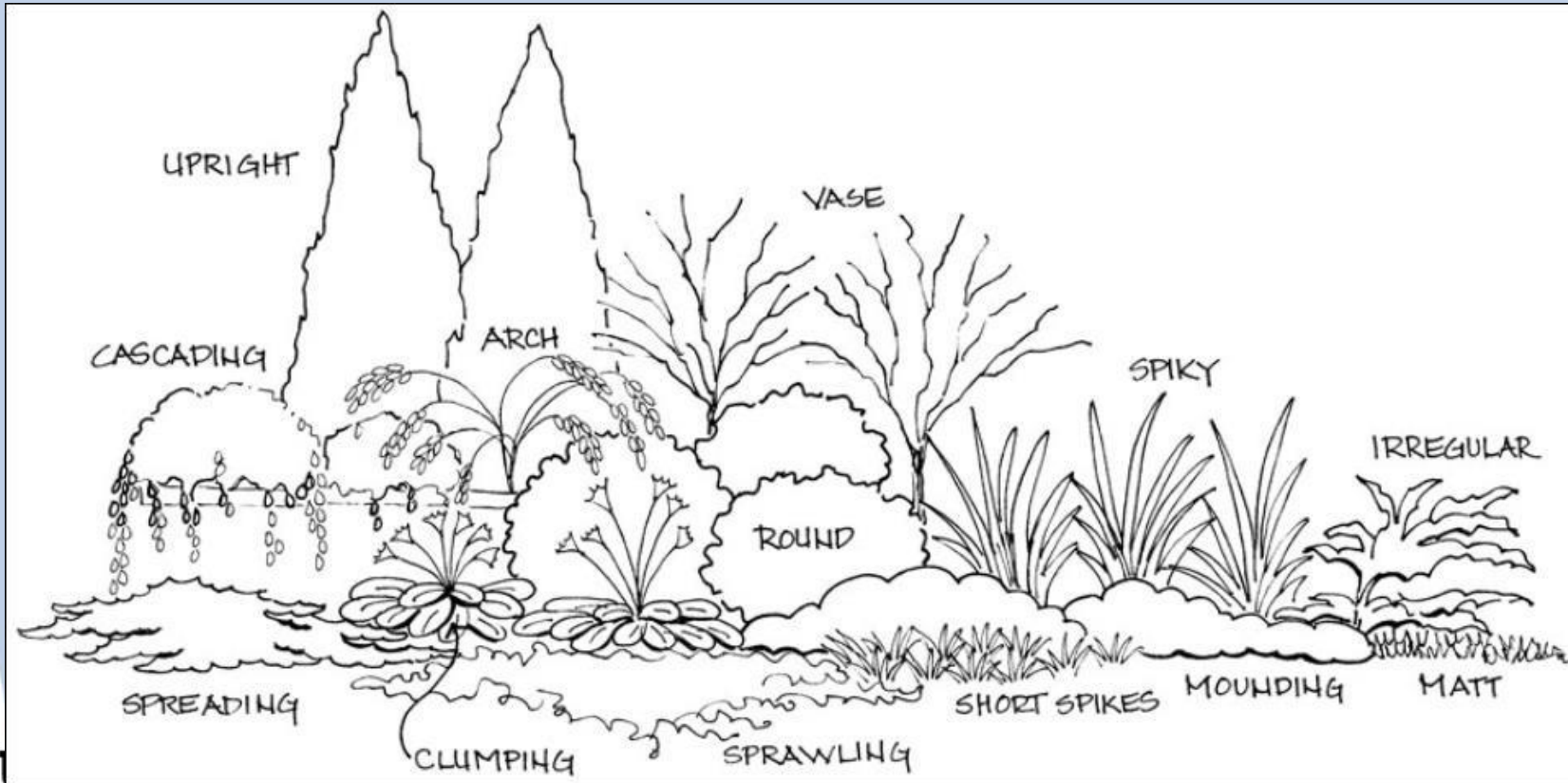
Low single
border &
sheared
shrubs in
front of buffer

Natural tree shapes



Single border
hedge, no
shearing
with tall trees in
background

More natural shrub shapes. Plant in sun/part shade among existing tree canopy. Intersperse short hedges along pathways and sight lines



Constructed border/buffer design

Cabbage palms installed in a **double row and grouped along a fence** with pergola and coontie groundcover. This design uses fast growing palm, reduced amount of pruning and shearing associated with the vine used as hedge - confederate jasmine



- *Sabal palmetto*
- *Zamia floridana*
- *Trachelospermum jasminoides*

Confederate Star Jasmine (*Jasmine minima*)

Search out improved flowering or foliage



tri-color



Right Plant, Right Place

Some plants do better on disturb in-fill soil sites (tolerant to high pH soils)

Chinese Fan Palm (*Livistona* sp.) 6-15' wide
Wax Myrtle (*Morella cerifera*) leave un-pruned



Simpson's Stopper (*Myrcianthes fragrans*)
Jatropha integerrima (8-15' high, 5-10' wide)



Hedges thin out with tree shade, age and over shearing

Use accent plants in front of tree or shrub border

Little pruning or maintenance

- **European fan palm** (*Chamaerops humilis*)
- **Chestnut Dioon Cycad** (*Dioon edule*)
- **Copperleaf**



Myrciathes fragrans
Simpson's Stopper



- Horizontal growth habit, slow growing, exceptional tree or shrub, very few pests
- Fragrant foliage, peeling bark



Spanish Stopper *Eugenia foetida*



- Native, myrtle family
- Accent shrub
- Columnar (taller than wide)
- sun or part shade
- Height 8-15 feet
- dense rounded crown
- Semi-showy flowers
- Performs best with OM and regular mulching
- Fruit for wildlife

Native Bunch Grasses are low maintenance Informal border planting

Sand Cordgrass, (*Spartina bakeri*)
Florida Gamagrass (*Tripsacum floridana*)



Cocoplum Chrysobalanus icaco

Red-tipped cocoplum is ideal as hedge: 15' high, 8' wide fast growing excellent hedge for privacy and noise if not over-sheared. Round leathery leaves, edible fruit & native



Cocoplum



Photo Credits

Optimal Light:



Light Range:



Soil Moisture:



Wildlife:



Native:

Yes

Drought Tolerance: Medium

Perennial: N/A

Invasive Status: N/A

Comments:

white flowers all year; good screen, used as a hedge; no pest problems; edible fruit; attracts wildlife (purple "plums" used by large birds and mammals); high wind resistance

Growth Rate: Medium

Mature Height: 3 - 30 ft.

Mature Spread: 10 - 20 ft.

Soil Texture: Any

Soil pH: Slightly acidic, Slightly alkaline

Salt Tolerance: High

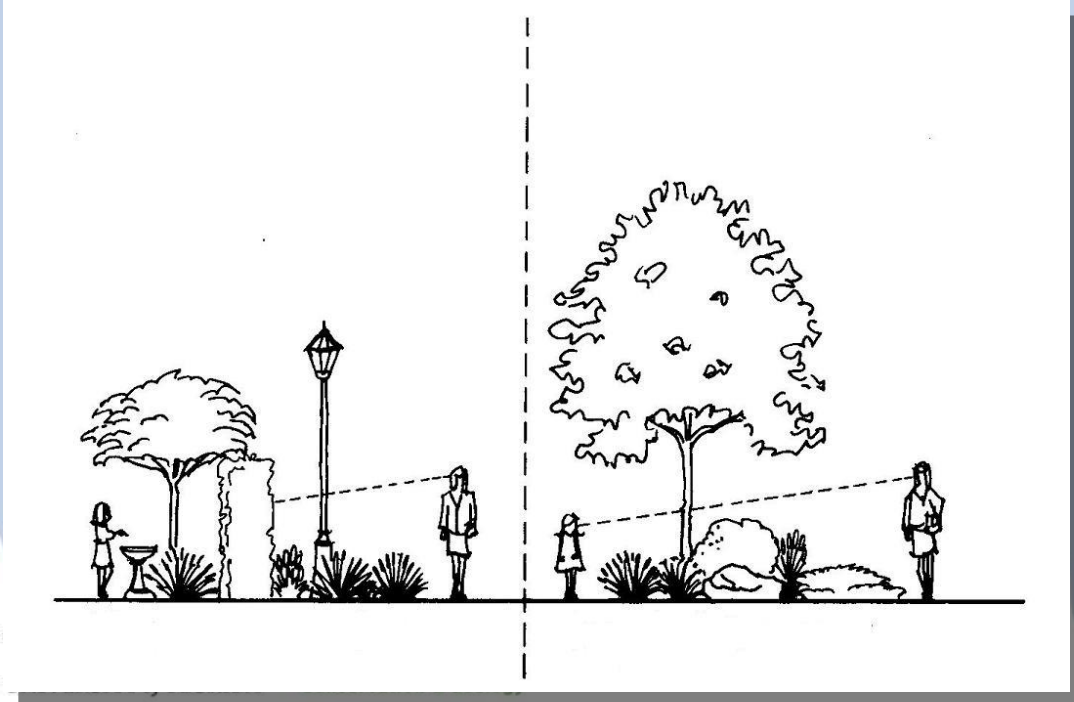
Hardiness Zone: 10-11



Sidewalk – fencing or walls w/vines to breaks view

Retention areas- use native trees spaced widely

Noise reduction increases with height of tree to 30'. Let trees develop their natural habit



Clusia – Use to replace ficus hedges

- Autograph tree, rose-apple
- Dioecious, (separate m/f trees)
- Native, round flowers, 2 inch
- Fruit is round, apple-like
- Dense thick, tough leaves
- Grow as small tree or tall, sheared hedge. Cold sensitive
- Slow growing, salt-tolerant
- Dwarf selections: 'Nana' and 'Compacta'



Cuban ficus with thrip damage

<http://calusacreek.com/tree-farm>



Native Short-leaf Ficus

(Ficus citrifolia)

- Excellent Shade Tree
- Native Southern Florida Tree
- No irrigation needed (once established)
- Semi-deciduous, a few aerial roots

Specs:

40-50' Height x 30+ feet Wide

<https://hort.ifas.ufl.edu/woody/Pages/ficcit/ficcit.shtml>

American Beautyberry

Callicarpa americana



Callicarpa americana

- ⦿ Deciduous, rounded large shrub w/ spreading branches
- ⦿ 6-8' high & wide
- ⦿ Inconspicuous lavender/pink flowers



- ⦿ **Leaves:** ovate, simple & opposite, 3-7" lg, 2-3" wd, covered w/short hairs both sides, serrated edges
- ⦿ **Fruit:** fleshy, 1/8th " wide, round drupe, purple, lavender or white, dense clusters around the stem

Other beautiful trees for wildlife buffer fiddlewood and sea grape

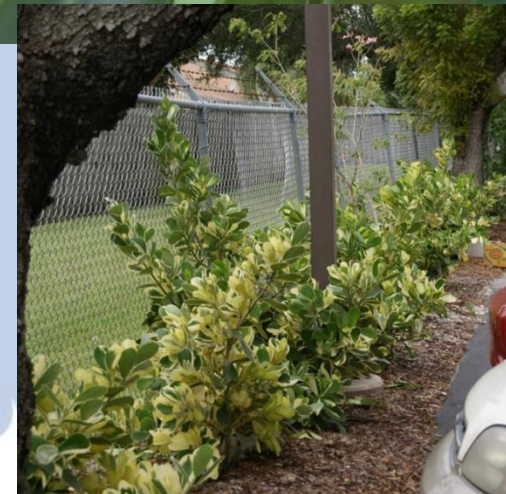
No pruning required. Foliage colors improves on fiddlewood and sea grape based on the season



Green Buttonwood overplanted with Clusia
Avoid mixing hedge materials planted in same row



- Dk. green leaf color - evergreen
- Sticky sap used to caulk boats
- Excellent hedge and screen
- Can be epiphytes & stranglers
- Adventitious, dangling roots



Border plants with challenging characteristics



TAXODIUM DISTICHUM

Baldcypress – deciduous
loosing its leaves, tree shape,
cypress knees, extremely slow
growing

Clumping bamboo- a fast
growing grass, tight growing
habit, widening clumps cross
the property line. Requires
water and fertilize on a regular
schedule



[Bambusa multiplex 'Alphonse Karr'](#)

Challenging single row hedge along fence



- Competing tree roots and shrubs
- Both plants and fencing require regular maintenance
- Planting in dry season is risky without installing irrigation
- Use mulch on disturbed ground

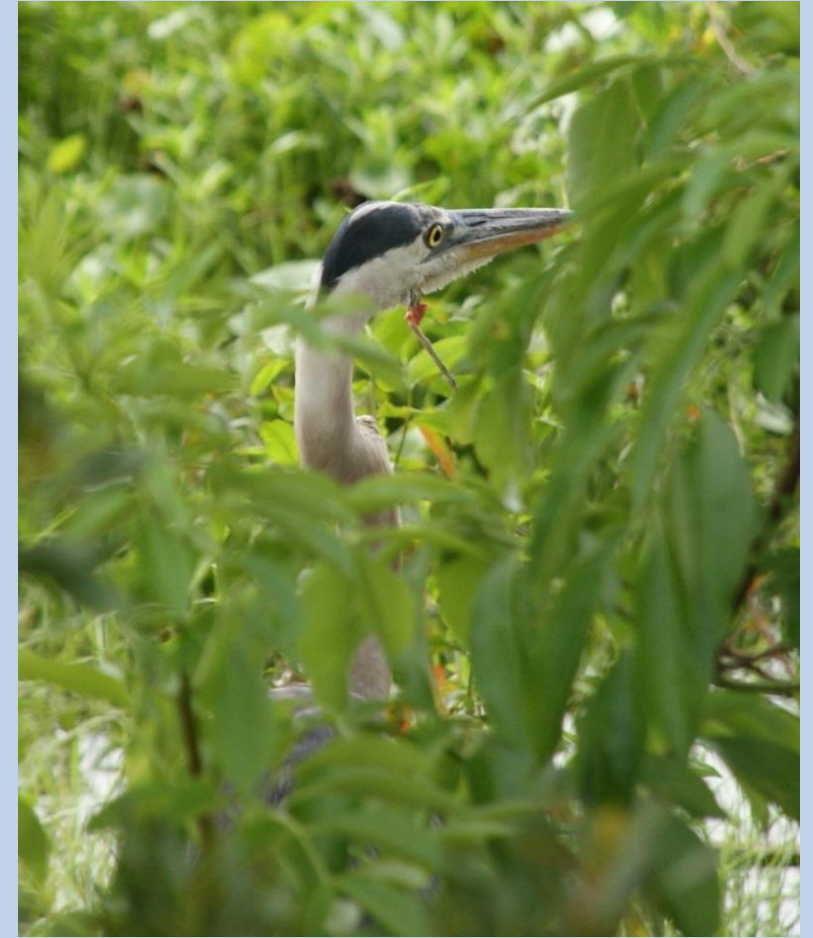


- Difficulty pruning and keeping backside of hedge green
- Consider removing trees too close to fence

Easy to Grow Med.-Small Natives - on disturbed soil, (8-15') (all attract wildlife)

- **Clusia** – *Clusia rosea*
- **Florida Privet** – *Forestiera segregata*
- **Sweet Acacia** – *Acacia farnesiana*
- **Wax myrtle** – *Myrica cerifera*
- **Wild Lime** - *Zanthoxylum fagara*
- **Fiddlewood** - *Citharexylum fruticosum*
- **White Indigoberry** (*Randia aculeata*)
- **Green Buttonwood** (*Conocarpus erectus*)
- **Muhlberry** – *Morus rubrum*
- **Red Cedar** – *Juniperus virginiana*
- **Marlberry** – *Ardisia sp.*

Enjoy seeing more wildlife



Wet tolerant trees



Red maple, Pond apple,
Paurotis palm, Dahoon holly,
Buttonwoods, Red Mangrove,
Sweetgum, Popash, Florida
Elm, Sweetbay, Baldcypress,
Blackgum,, Royal palm ...and
many more!

Visit the website Florida Trees:

<http://orb.at.ufl.edu/FloridaTrees/index.html> Use the Tree Selector tool to find other wet tolerant trees.

Resources

The Florida-Friendly Landscaping™ Guide to Plant Selection & Landscape Design

A FLORIDA-FRIENDLY LANDSCAPING™ PUBLICATION

Adopting a Florida-Friendly Landscape:

Steps for Converting a Traditional Development Landscape to a Florida-Friendly Landscape¹

Gail Hansen, Jennifer Ramos, E.A. Feller, Celeste White²

FLORIDA HOMEOWNERS HAVE many reasons to consider converting their existing residential landscape to a Florida-Friendly Landscape. Most importantly, a Florida-Friendly yard is an environmentally sound yard that conserves and protects Florida's waterways, soil, wildlife, and energy. Using the right plants in the right place can filter harmful stormwater runoff, improve the landscape's soil, provide wildlife habitat, and create shade for energy efficiency in the home. Landscaping also adds beauty and creates pleasant outdoor living spaces to increase the value of residential property. (Figures 1A and 1B demonstrate a Florida-Friendly landscape renovation in a residential development in Osprey, Fla.)

Increased use of strict irrigation ordinances in Florida is another reason many homeowners in the Sunshine State are choosing to use plants that are more appropriate for a Florida landscape. Florida-Friendly plants – which include both native plants and adapted, non-native plants – survive with little maintenance and thrive in the climate and soils of the state's varied regions. Use of these low-maintenance plants in residential landscapes reduces the need for water, fertilizer, and pesticides and also reduces the energy required for landscape maintenance. (See figures 2A, 2B.)

Creating a Florida-Friendly yard is not difficult, and such yards do not conform to any particular style. Instead, a Florida-Friendly yard is a type of landscape that is adaptable to many styles and yards and includes plant choices and design that follow the "right-plant/right-place" principle, which entails locating plants in those areas of the landscape that best meet the plants' requirements for growth. (For more on this topic, see *A Guide to Florida-Friendly Landscaping: Florida Yards and Neighborhoods Handbook*, <http://edis.ifas.ufl.edu/EP0705>, and see the Florida-Friendly Landscaping™ Web site at <http://floridayards.org/index.php>.)




FIGURE 1A. Before – January 2009. A traditional development landscape in Osprey, Fla., with a large lawn and scattered plants.



FIGURE 1B. After Florida-Friendly landscape renovation – June 2009. The new landscape includes a large oak tree with a variety of plants, including Needle Palm, Scorpion Tail, Flax Lily, Adonis, and Firewood Heliotrope. The large, healthy oak tree and shrubs were retained to provide shade and privacy.

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HIKERS and BIKERS
Move to the side of
the road when a
vehicle approaches