Indigenous, Invasive, and Deer Resistant Plant Species

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SEABROOK ISLAND
Property Owners Association

Non-Invasive versus Invasive Species

Common Duckweed - *Lemna minor*

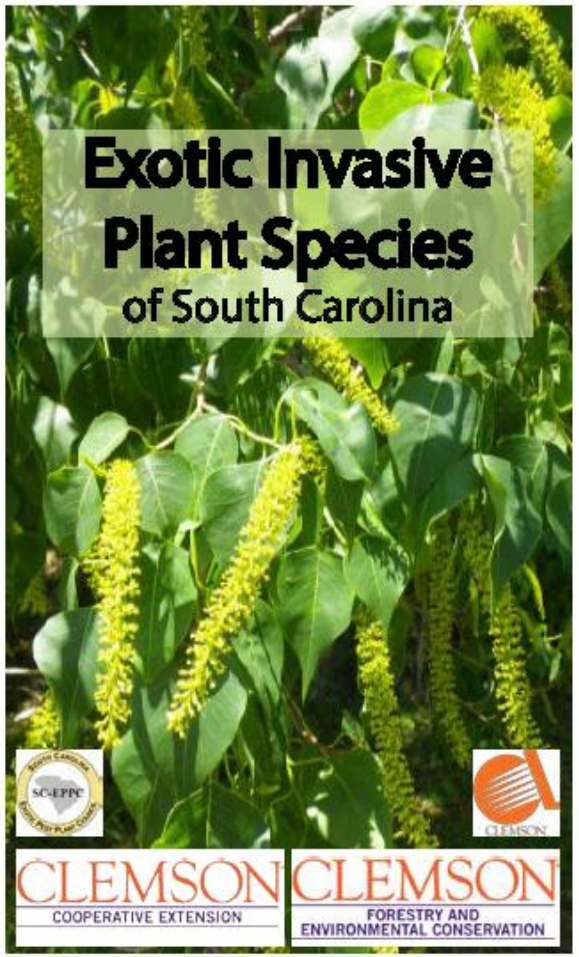
Doug Kreutz / Arizona Daily Star

Shaw, J., D. Estes, B. Ruhfel, A.B. Morris, and T.R. Littlefield. 2021 **Tennessee-Kentucky Plant Atlas**. [S.M. Landry and K.N. Campbell (original application development), **USF Water Institute**. **University of South Florida**]. University of Tennessee at Chattanooga, Austin Peay State University, University of Michigan,

Furman University, and Kentucky State Nature Preserves Commission.

Texas Blueweed – *Helianthus ciliaris*

Nugent, Louis R,
(https://www.wildflower.org/gallery/result.php?id_image=42255)



Yards
tions
in Healthy Soil
e Yard Waste
Matters
Plant, Right Place
Like a Local
e Invasives
› Be Wise When You Fertilize
› Managing Yard Pests
› WaterWisely
› Rain as a Resource
› Reduce Stormwater Runoff

Remove Invasives

Invasive, or exotic pest plant species are a serious problem in South Carolina.

Nonnative plant invasions can be seen in natural areas, croplands, rangelands, pastures, forests, wetlands and waterways, wilderness areas, parks and refuges, and highway rights-of-way. Not all non-native plants are invasive. In fact, a large number of our agricultural crops and ornamental plants are non-native (exotic) in origin.

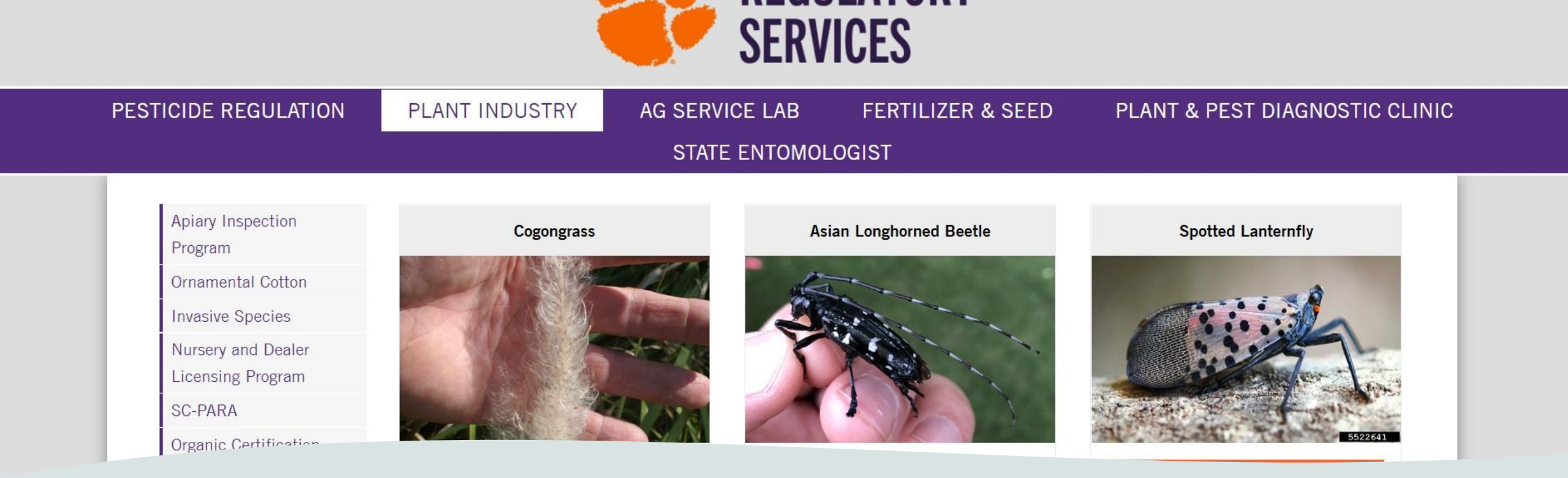
Invasive plant populations can grow, adapt, multiply, and spread to unmanageable levels, often overwhelming entire landscapes. Invasive plants significantly reduce plant diversity (and ecosystem biodiversity) and can be a severe threat to stability and sustainability of our natural systems. Management of invasive, nonnative plant species is difficult and complex. It is estimated that 100 million acres in the United States are already impacted by invasive plant species, requiring costly management. Preventing further spread of invasive plants and recapturing impacted sites is a monumental task that depends on public awareness, support, and participation.

Carolina Yards Spotlight: Chinese Privet

Did you know?

Recent estimates found that **42%** of the nation's endangered and threatened species have declined as a result of encroaching invasives. The direct cost of invasive species to the American economy is estimated at **$138 billion** per year (Clemson University, Department of Plant Industry, Invasive Species Program).

Tip:



Who/What determines if a plant is an invasive species?

South Carolina Code of Regulations Chapter 27 Article 10

27-135. Designation of Plant Pests.

An advisory committee meets annually to review and make recommendations on the official listing of plant pests in SC:

1. State Plant Regulatory Official for South Carolina
2. USDA State Plant Health Director for South Carolina
3. A Clemson University Cooperative Extension Service Representative

4. & 5. At least 2 at large representatives from other stakeholder agencies: such as the SC Department of Natural Resources or the SC Forestry Commission, or the SC Department of Agriculture.

The official listing of plant pests in SC shall be maintained and made publicly available on Clemson's website located at: www.clemson.edu/invasives

Native versus Indigenous

Sweet Gum – *Liquidambar styraciflua*

https://www.gardenersworld.com/plants/liquidambar-styraciflua/

Loblolly Pine – *Pinus taeda*

https://canr.udel.edu/udbg/?plant=pinus-taeda

Black Gum – *Nyssa sylvatica*

https://www.arborday.org/trees/treeguide/TreeDetail.cfm?ItemID=793

Mountain Laurel – *Kalmia latifolia*

Shirley Denton; fnps.org

Cabbage Palmetto – *Sabal palmetto*

T.K. Broschat, UF/IFAS

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Tough Buckthorn – *Sideroxylon tenax* syn. *Bumelia tenax*

https://davesgarden.com/guides/pf/go/67572/

Seabrook Island Invasive Species

- Chinese Tallow – *Triadica sebifera*
- Thorny olive - *Elaeagnus pungens*
- Bradford Pear, Callery Pear - *Pyrus calleryana* 'Bradford'
- Privet Hedge – *Ligustrum sp.*
- Chinaberry – *Melia azedarach*
- Common Reed – *Phragmites australis*
- Bahia Grass – *Paspalum dilatatum*
- Pampas Grass – *Cortadeia selloana*
- Nandina – *Nandina domestica*
- Jointed prickly pear – *Opuntia aurantiaca*
- Beach Vitex – *Vitex rotundifolia*
- Kudzu – *Pueraria montana*
- Japanese Honeysuckle – *Lonicera japonica*
- Chinese Wisteria – *Wisteria sinensis*
- Chinese Silvergrass – *Miscanthus sinensis*
- Golden Bamboo – *Phyllostachys aurea*

Likely to see on Undeveloped Lots

Chinese Tallow – *Triadica sebifera*



Chinaberry – *Melia azedarach*


www.screneoutside.co.nz


Photo: Nancy Hamlett


Photo: Jim Robbins

Thorny olive - *Elaeagnus pungens*



https://www.lsu.edu/


https://www.talbottnurseryanddpoultry.com

Jointed prickly pear – *Opuntia aurantiaca*

Photo: Sheldon Navie

Privet Hedge – *Ligustrum sinensis, L. japonica, L. luncidum, L. vulgare*


Photo: Megan Hansen


www.forestryimages.org


L. sinensis 'Sunshine'

https://buyevergreenshrubs.com/product/sunshine-ligustrum/

Likely to see in Existing Landscapes

Bradford Pear - *Pyrus calleryana* 'Bradford'

Photo: Dr. Kelly Oten

https://scnps.org/bradford-pear-to-be-banned-in-south-carolina

P. Calleryana = rootstock

https://www.walterreeves.com

Nandina – *Nandina domestica*

https://scnps.org/nandina-a-not-so-heavenly-bamboo

Pampas Grass – *Cortadeia selloana*

Photo: Andrea Laine

Golden Bamboo – *Phyllostachys aurea*

Both photos:
https://www.bamboogarden.com

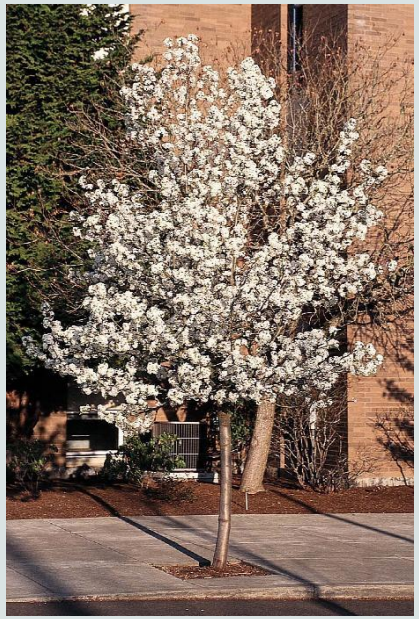
Beach Vitex – *Vitex rotundifolia*

http://plantworld2.blogspot.com/2016/03/vitex-rotundifolia.html

Forest and Kim Starr, Starr Environmental, Bugwood.org

Likely to see at A Plant Nursery For Sale

www.Monrovia.com



Pyrus Calleryana
'Cleveland Select'

Nandina domestica
'Tuscan Flame'

Phyllostachys aurea

Ligustrum jamponicum
'Rotundifolium'

Ligustrum x vicaryi

Likely to see at a Plant Nursery For Sale

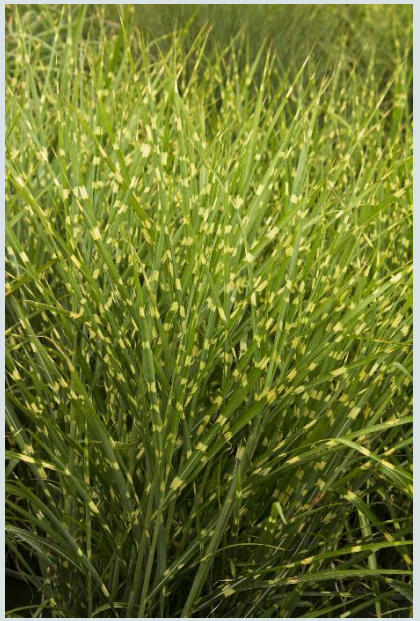
www.Monrovia.com

Elaeagnus X ebbingei
'Gilt Edge'

Wisteria sinensis

Miscanthus sinensis
'Adagio'

Miscanthus sinensis
'Fire Dragon'



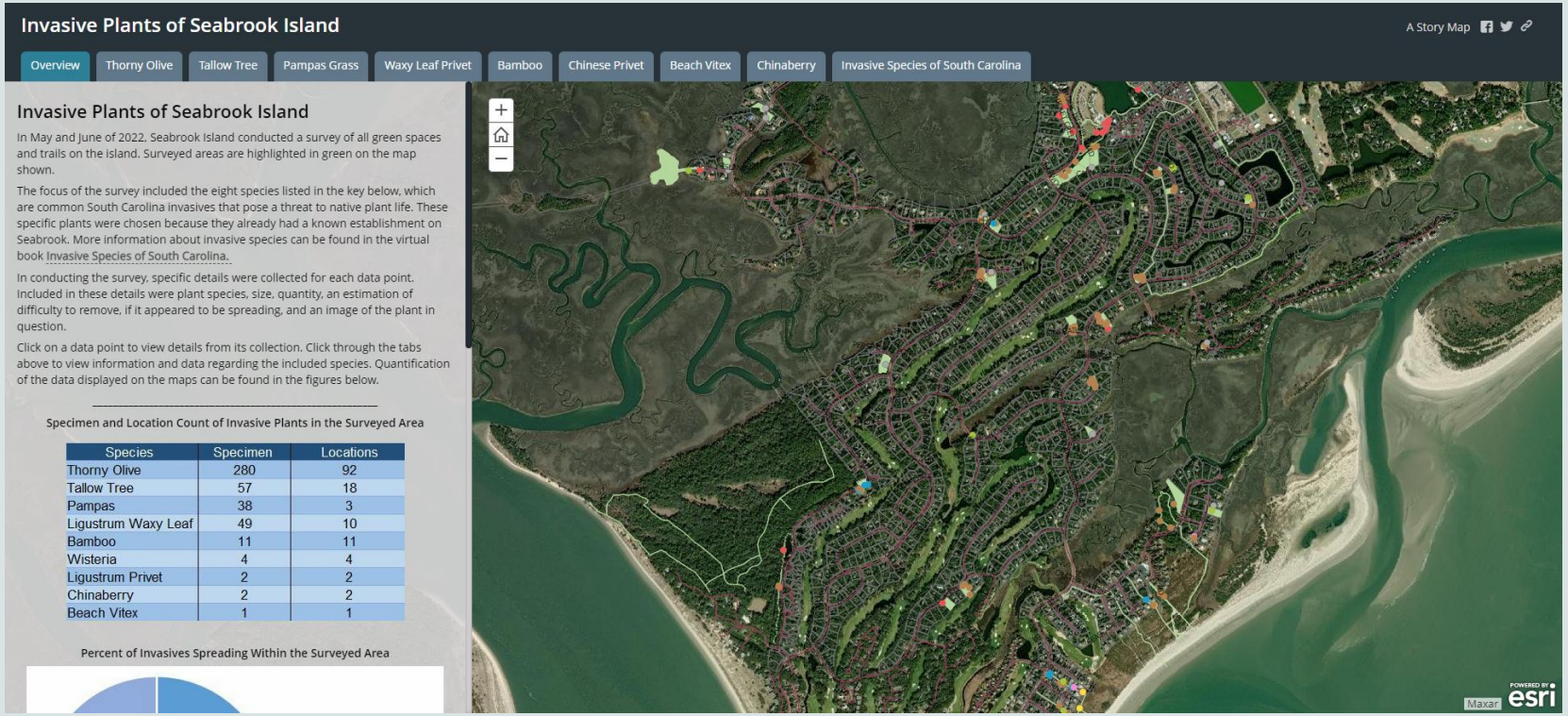
Miscanthus sinensis '
Strictus'

Why use Native Ornamentals?

- Formed a symbiotic relationship with the native wildlife of an ecosystem over thousands of years
  - *Wildlife species has adapted to local food sources*
  - *Provide vital habitat for wildlife*
- Adapted to local environmental conditions
  - *Changes of temperature*
  - *Humidity*
  - *Local pests*
  - *Fire, flooding, salt tolerance*
- Require less water, fertilizer, pesticides

Invasive Plant Species Survey

- https://sipoa1.maps.arcgis.com/apps/MapSeries/index.html?appid=41841c4480ae4641b3a257b71f8f1d03
- Survey and interactive map completed during the summer of 2022
- Inventory of invasive species on Greenspace Conservancy properties and some select SIPOA properties



Deer Resistant Plants

Tyler Collins

Horticulturist

The Greenery of Charleston

Why do deer eat my plants?

- Deer are herbivores (eat crops, grasses, vegetation, fruits, acorns, and nuts)
- Prefer tender grasses and herbaceous plants (buds and new growth)
- Mature deer eat an average of 7 lbs. per day
- Can smell and be attracted to fertilizer. Recognize the nutritional value of fertilized vegetation
- "Deer will attempt to eat almost anything if their population is high and they are running out of food. That happens most often in times of drought or near the end of a colder-than-normal winter" Scott Aker, US National Arboretum, Horticulturist

Deer Repellents

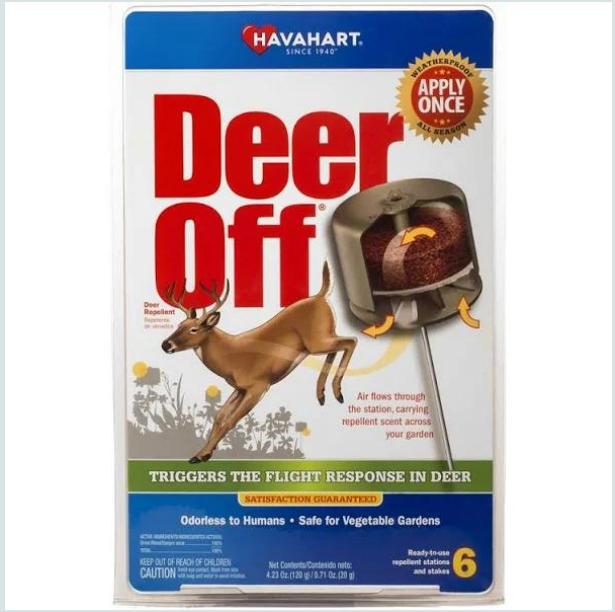
- Sprays that contain ingredients that offend a deer's sense of taste or smell work best. Some products have a very pungent smell (rotten eggs, fish byproduct, garlic) Limited products for edible plants
- Granular products tend to have a longer residual and can be highly effective
- Flight Triggering options: Coyote urine and dried blood repellents. Most are odorless to humans but easily detected by deer. The smell warns deer of a decaying animal or predator and causes them to avoid the area

Spray Repellents

- Deer Stopper
- Liquid Fence
- Bobbex

Granular and Repellents

- Deer Scram
- Shake-Away (urine)
- Deer Off



Noteworthy Facts

- Deer do not read the list of deer resistant plants
- Many conventional tricks, soap shavings, perfumes, bags of human hair clippings, are not effective on the island because the scent of humans is not alarming to the deer

Plants That Work (Less than 5')

Plants That Work (Less than 5')


Foxtail Fern


Farfugium


Variegated Shell Ginger


Wintergreen Boxwood


African Iris


Inland Sea Oats

Grasses

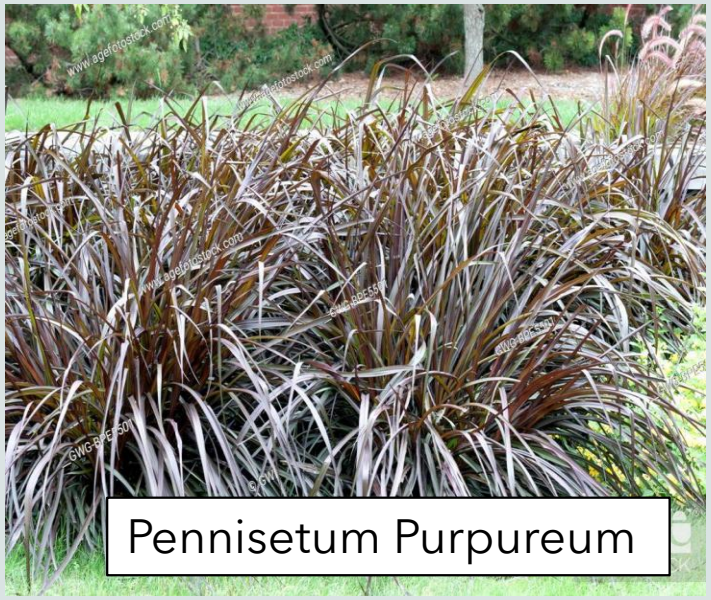

Fakahatchee Grass


Pink Muhly Grass


Breeze Grass


Carex Everillo


Spartina


Pennisetum Purpureum

Plants That Work (over 5’)


Pineapple Guava


Saw Palm


Viburnum Suspensum


Bottlebrush


Chinese Fan Palm


Alphonse Karr Bamboo

Color That Works!


Evolvulus Blue Daze


Foxglove


Coreopsis

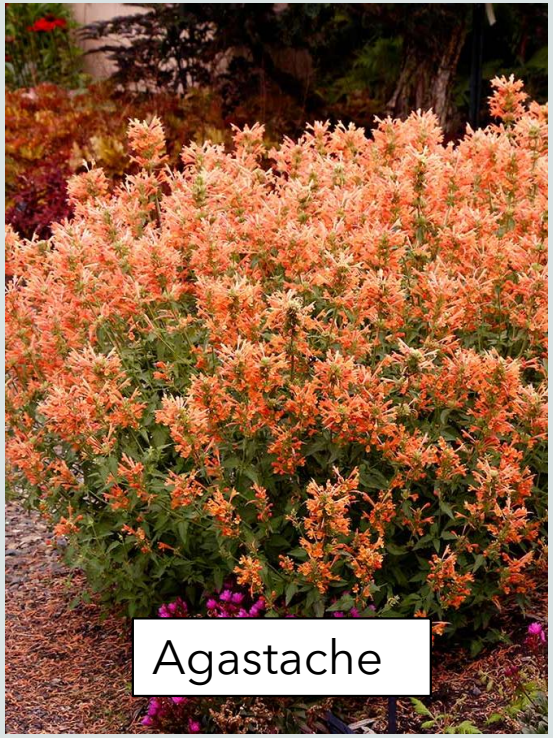

Canna Lily

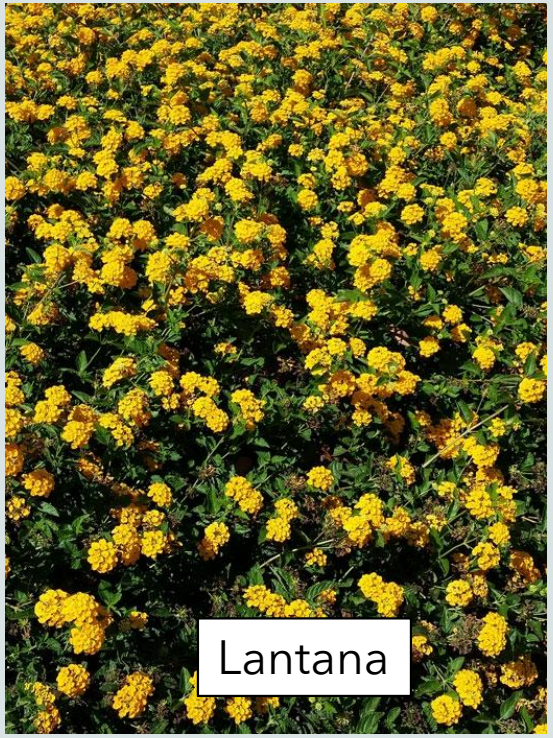

Colocasia/Alocasia

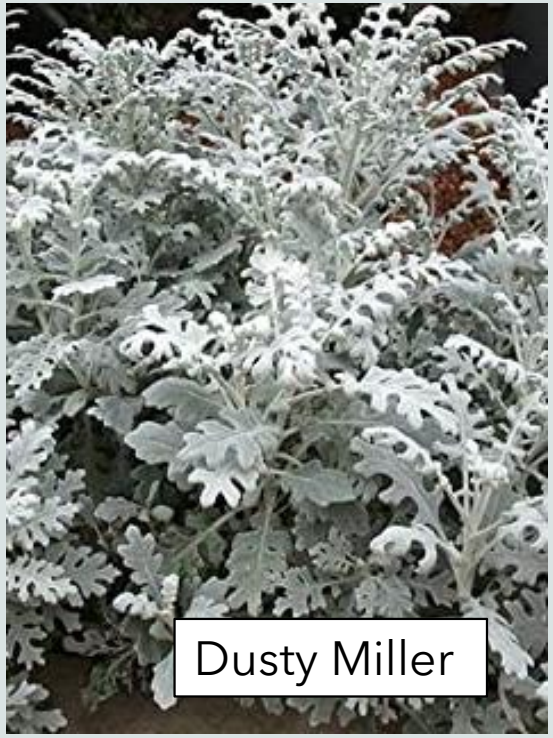

Vinca

Color That Works!


Salvia Leucantha


Agastache


Lantana


Dusty Miller

Deer Damage

Local Culprits!