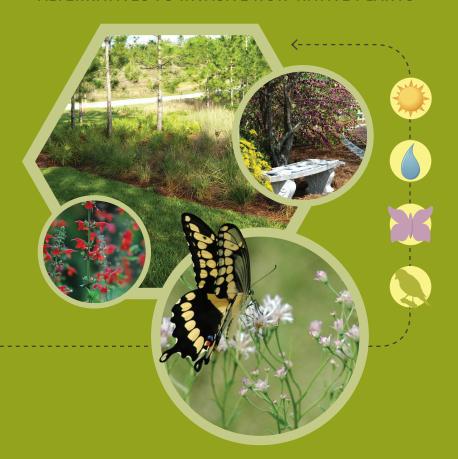
Greener

ALTERNATIVES TO INVASIVE NON-NATIVE PLANTS



An educational pamphlet of the Lake County Office of Parks & Trails and the Big Scrub Cooperative Invasive Species Management Area (CISMA) of Lake and Marion counties.



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City

Lake County is under attack and needs your help in preserving its unique environment.

Invasive non-native plants threaten to crowd out native species and disrupt Lake County's distinctive ecosystem processes.

According to the Florida Fish and Wildlife Conservation Commission (FWC), while some non-natives, such as tomato plants, behave nicely and put food on our tables, others, without conditions that control them on their home turf, become invasive — growing and spreading rapidly and aggressively. Invasive plants, such as the Old World climbing fern and

Brazilian pepper, cost Floridians

More than 1.7 million acres of Florida's remaining natural areas have become infested and overwhelmed with non-native plant species.

millions of dollars annually. In Florida, approximately \$45 million taxpayer dollars are spent annually on invasive plant management on natural areas and waterways.

The economic costs pale in comparison to the ecological ones. Invasive non-native species are often cited as the number two threat to global biodiversity, second only to habitat loss due to land conversion.

WHAT OU CAN DO TO

The first step to control the spread of non-native plants — marked with a "\(\begin{align*} '' - \text{ is to avoid using them.} \end{align*}

If you have invasive plants in your landscape, consider removing them by hand pulling or carefully applying herbicide. UF/IFAS Extension Lake County, 352–343–4101, located at 1951 Woodlea Road in Tavares, can assist in providing detailed removal techniques for various invasive plants.

This brochure was designed to suggest alternatives to invasive non-native plants.

Replacing invasive non-native plants with Florida natives creates a more sustainable landscape in your yard that will have lasting benefits.

According to The Florida
Native Plant Society, fnps.org,
one advantage of using native
plants is that they add beauty
and interest to your landscape. In
addition, native plants, which are
better adapted to Florida's soil
types and climate, will conserve
water by requiring less irrigation
once established; provide food
and shelter for butterflies, birds,
and other wildlife; and save
money by reducing maintenance
and pest control costs.





PLANT CARE GUIDE

- Full Sun
- Part Shade
- Shade
- Moist Soil
- Moderate Water
- Drought Tolerant (Applies to established plants)
- Mature Height (In Feet)

WILDLIFE BENEFITS

- Butterfly Friendly
- Bird Friendly

Invasive NON-NATIVE Trees

(Blooming)



Invasive non-native trees are typically introduced as ornamental plants because of their attractive blooms. When many of these trees bloom, seeds fall or are dispersed into the air and carried by birds, animals or the wind into other landscapes.

> <--- • CHINABERRY TREE (Melia azedarach)

> > **HEIGHT:** Up to 50 feet



<--- ORCHID TREE

(Bauhinia spp.)

HEIGHT: Up to 50 feet



<--- • FLAMEGOLD TREE.

also known as GOLDENRAIN TREE (Koelreuteria ssp.)

HEIGHT: Up to 50 feet

FLOWERING DOGWOOD

(Cornus florida)









EASTERN REDBUD

(Cercis canadensis)









OTHER ALTERNATIVES

- Carolina Silverbell (Halesia carolina)
- Loblolly Bay (Gordonia lasianthus)
- Sweetbay (Magnolia virginiana)
- Southern Magnolia (Magnolia grandiflora)
- Sugarberry (Celtis laevigata)
- Sparkleberry (Vaccinium arboreum)

CAROLINA SILVERBELL

(Halesia carolina)





















(Gordonia lasianthus)







Invasive NON-NATIVE Trees (Shade)



Some non-native shade trees are able to invade due to fast growth and the ability to produce large amounts of fruit. Birds and other wildlife that eat the prolific fruit become vessels for seed dispersal, thus making it hard to contain and control the spread of these invasive trees.



<--- AUSTRALIAN PINE.

also known as SHEOAK (Casuarina spp.)

HEIGHT: Up to 100 feet

LONGLEAF PINE

(Pinus palustris)





CAMPHOR TREE

(Cinnamomum camphora)

HEIGHT: Up to 70 feet

AlterNATIVE Trees

OTHER ALTERNATIVES

- Bluejack Oak (Quercus incana)
- Pond Pine (Pinus serotina)
- Red Bay (Persea borbonia)
- Red Cedar (Juniperus virginiana)
- Sand Live Oak (Quercus geminata)





Invasive NON-NATIVE Trees

(Fall Color)



Many invasive trees and shrubs form dense monotypic (consisting of only one type) thickets that crowd out native vegetation and prevent any other plant species from sprouting.



BRAZILIAN PEPPER.

also known as a FLORIDA HOLLY (Schinus terebinthifolia)

HEIGHT: Up to 30 feet



• CHINESE TALLOWTREE,

also known as a POPCORNTREE (Triadica sebifera)

HEIGHT: Up to 50 feet

SWEETGUM

(Liquidambar styraciflua)









AlterNATIVE Trees

OTHER ALTERNATIVES

- American Elm (Ulmus americana)
- American Holly (Ilex opaca)
- Dahoon Holly (Ilex cassine)
- Persimmon (Diospyros virginiana)
- Pignut Hickory (Carya glabra)
- Red Maple (Acer rubrum)
- River Birch (Betula nigra)
- Turkey Oak (Quercus laevis)

YAUPON HOLLY (Ilex vomitoria)













Invasive NON-NATIVE Shrubs



A mechanism used by certain plants to successfully invade is their release of allelochemicals—chemical compounds that can have harmful effects on the surrounding plant community. Allelochemicals can negatively influence growth, survival and reproduction of other plant species.



<---• LANTANA, also known as **a SHRUB VERBENA**

(Lantana strigocamara)

HEIGHT: Up to 6 feet



-- • CORAL ARDISIA

(Ardisia crenata)

HEIGHT: Up to 6 feet

OAKLEAF HYDRANGEA

(Hydrangea quercifolia)

FIREBUSH

(Hamelia patens)











--• NANDINA, also known as **a HEAVENLY BAMBOO**

(Nandina domestica)

HEIGHT: Up to 8 feet

SHINY BLUEBERRY



AlterNATIVE Shrubs

OTHER ALTERNATIVES

- Autumn Sage (Salvia coccinea)
- Deerberry (Vaccinium stamineum)
- Florida Pennyroyal, Wild Pennyroyal • (Piloblephis rigida)
- Garberia (Garberia heterophylla)
- Highbush Blueberry (Vaccinium corymbosum)
- Scrub Mints (Conradina spp.)
- St. John's Wort (Hypericum tenuifolium)
- Mock Vervain (Glandularia spp.)



ST. JOHN'S WORT









FLORIDA PENNYROYAL, WILD PENNYROYAL



















Invasive NON-NATIVE Vines



Invasive vines shade out native flora and kill trees by weighing down the canopy until it topples, or by destroying the protective bark, also known as girdling. Invasive vines can climb and completely cover trees, shrubs, and structures; form extensive ground covers; or exhibit both habits.



(Lonicera sempervirens)





(Lonicera japonica)

HEIGHT: Up to 15 feet

(Antigonon leptopus)

HEIGHT: Up to 25 feet

<--- CORAL VINE



-- • FLAME VINE

(Pyrostegia venusta)

HEIGHT: depends upon supporting structure

YELLOW JESSAMINE, CAROLINA JESSAMINE, CAROLINA JASMINE

(Gelsemium sempervirens)



AMERICAN WISTERIA (Wisteria frutescens)

<--- CHINESE WISTERIA

(Wisteria sinensis)

HEIGHT: Up to 65 feet



AlterNATIVE Vines

OTHER ALTERNATIVES

- Crossvine (Bignonia capreolata)
- Netleaf Leather-Flower (Clematis reticulata)
- Passionflower, Maypop (Passiflora incarnata)
- Climbing Aster (Symphyotrichum carolinianum)
- Man-of-the-Earth (Ipomoea pandurata)







TRUMPET VINE, TRUMPET CREEPER

(Campsis radicans)







Invasive NON-NATIVE Groundcovers



Most invasive plants used in landscapes as groundcover are capable of aggressively reproducing by either an underground mass of roots (rhizomes), aboveground runners, or both. New plants can sprout from broken-off fragments of roots or runners, which makes total removal of these non-native plants difficult.



 WEDELIA, also known as a CREEPING OXEYE

(Sphagneticola trilobata)

HEIGHT: Up to 1 foot



--• BOWSTRING HEMP
SNAKEPLANT, also known as
a MOTHER-IN-LAW'S TONGUE

(Dracaena hyacinthoides & Dracaena trifasciata)

HEIGHT: Up to 3 feet

AlterNATIVE Groundcovers

OTHER ALTERNATIVES

- Gopher Apple (Geobalanus oblongifolius)
- Frogfruit, Turkey Tangle Fogfruit, Capeweed (Phyla nodiflora)
- Powderpuff (Mimosa strigillosa)
- Narrowleaf Blue-Eyed Grass (Sisyrinchium angustifolium)
- Partridge Berry (Mitchella repens) 1

DUNE SUNFLOWER

(Helianthus debilis)





ADAMS NEEDLE

(Yucca filamentosa)

Invasive NON-NATIVE Grasses



These grasses take up more water and nutrients, and produce more seeds than native plants. They can eventually take over gardens, yards, and natural areas and displace native plants, animals and pollinators such as bees and butterflies.



--• ARUNDO, also known as a GIANT REED

(Arundo donax)

HEIGHT: Up to 20 feet



- • FOUNTAIN GRASS

(Cenchrus setaceus)

HEIGHT: Up to 3 feet

MUHLY GRASS

(Muhlenbergia capillaris)







AlterNATIVE Grasses

OTHER ALTERNATIVES

- Pineland Dropseed (Sporobolus junceus)
- Purple Lovegrass (Eragrostis spectabilis)
- Splitbeard Bluestem (Andropogon ternarius)
- Wiregrass (Aristida stricta)

FAKAHATCHEEGRASS, EASTERN GAMAGRASS (Tripsacum dactyloides)





Invasive NON-NATIVE **Tropical Plants**



Tropical-looking invasive plants will readily form dense growth along river and lake shores, displacing native shoreline vegetation. Many of these plants have been purposely introduced into a landscape, but may also have spread via fruit or vegetative fragments floating though waterways.



-- • QUEEN PALM

(Syagrus romanzoffiana)

HEIGHT: Up to 50 feet

-- • GOLDEN BAMBOO (Phyllostachys aurea)

HEIGHT: Up to 40 feet

EVERGLADES PALM, PAUROTIS PALM

(Acoelorraphe wrightii)







AlterNATIVE Tropical Plants

OTHER ALTERNATIVES

- Bluestem Palmetto. **Dwarf Palmetto** (Sabal minor)
- Coontie (Zamia floridiana)
- Necklace Pod (Sophora tomentosa)
- Pipestem (Agarista populifolia)
- Scrub Palmetto (Sabal etonia)
- Sea Grape (Coccoloba uvifera)
- Swamp Fern (Blechnum serrulatum)
- Switch Cane, Giant Cane (Arundinaria gigantea)



SABAL PALM, CABBAGE PALM

(Sabal palmetto)













(Ruellia simplex)

HEIGHT: Up to 3 feet

CORALBEAN

(Erythrina herbacea)











(Albizia julibrissin)

HEIGHT: Up to 25 feet















Invasive NON-NATIVE **Tropical Plants** (Wetland)



Some invasive tropical plants have seeds that cling to animal fur, human clothing, vehicles and equipment and are then transported to new locations, where they eventually fall off, and may then start a new infestation.



SANDWEED (Hypericum fasciculatum)





 WILD TARO (Colocasia esculenta)

HEIGHT: Up to 4 feet



<--- UMBRELLA PLANT

(Cyperus involucratus)

HEIGHT: Dwarf plant can grow up to 2 feet. Regular plant can grow up to 6 feet.



-- • CAESARWEED

(Urena lobata)

HEIGHT: Up to 10 feet



SALT MARSH MALLOW

(Kosteletzkya pentacarpos)

STRING-LILY

(Crinum americanum)









OTHER ALTERNATIVES

- Alligatorflag (Thalia geniculata)
- Crimsoneyed Rosemallow (Hibiscus moscheutos)
- Blue Flag Iris, Prairie Iris (Iris spp.)
- Lizard's Tail (Saururus cernuus)
- Scarlet Rosemallow (Hibiscus coccineus)
- String-lily (Crinum americanum)
- Swamp Rosemallow (Hibiscus grandiflorus)

CARDINALFLOWER

(Lobelia cardinalis)











BLUE FLAG IRIS PRAIRIE IRIS (Iris spp.











For more information about INVASIVE NON-NATIVE PLANTS:

Florida Invasive Species Partnership floridainvasives.org

The Nature Conservancy nature.org/florida

UF Center for Aquatic & Invasive Plantsplants.ifas.ufl.edu

Florida Fish & Wildlife Conservation Commission myfwc.com/wildlifehabitats/habitat/invasive-plants

Lake Soil & Water Conservation District district.afcd.us/lakesoilandwater

UF IFAS Extension Office *sfyl.ifas.ufl.edu/lake*

UF IFAS Center for Aquatic and Invasive Plants plants.ifas.ufl.edu

For more information about NATIVE PLANTS:

Florida Native Plant Society fnps.org

Atlas of Florida Plants florida.plantatlas.usf.edu/results.aspx



Parks & Water Resources

27351 State Road 19, Tavares, FL 32778 352-253-4950 | lakecountyfl.gov/parks