

Lake County, Florida

GREENER CHOICES

Alternatives to invasive-exotic plants



An educational pamphlet of the Lake County Department
of Public Resources and the Cooperative Invasive Species
Management Area (CISMA) of Lake County

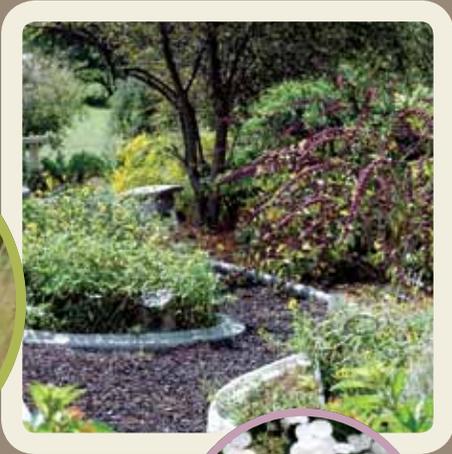


Table of Contents

- Call to action 1
- What you can do to help 2
- Plant Care and Wildlife Benefits. 3
- Plants. 4
 - Trees 4
 - Blooming 4
 - Shade 6
 - Fall Color 7
 - Shrubs 8
 - Vines 10
 - Groundcovers 12
 - Grasses. 13
 - Tropical Plants 14
 - Wetlands 16

CALL to ACTION

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

Invasive exotic 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. **More than 1.5 million acres of Florida’s remaining natural areas have become infested and overwhelmed with non-native plant species.**

Invasive plants, such as the Old World climbing fern and Brazilian pepper, cost Floridians millions of dollars annually. Farmers, ranchers, and golf course owners spend more than \$30 million each year to eradicate exotic weeds.

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

What YOU CAN do to HELP

The first step to control the spread of exotic plants (marked with "X") is to **avoid using them.**

If you have invasive plants in your landscape, consider removing them by hand pulling or carefully applying herbicide. The Lake County UF/IFAS Extension Office, (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 exotic plants. **Replacing invasive exotic plants with Florida natives creates a more sustainable landscape in your yard that will have lasting benefits.**

According to The Florida Native Plant Society, www.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)

-  0 Mature Height

Wildlife Benefits

-  Butterfly Friendly
-  Bird Friendly

Invasive EXOTIC Trees (Blooming)



Invasive exotic 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.



ORCHID TREE
(*Bauhinia variegata*)
HEIGHT: Up to 50 feet



CHINABERRY TREE
(*Melia azedarach*)
HEIGHT: Up to 50 feet



FLAMEGOLD TREE,
also known as **GOLDEN RAIN TREE**
(*Koelreuteria elegans* ssp. *formosana*)
HEIGHT: Up to 50 feet

DOGWOOD
(*Cornus florida*)
☀️ 💧 25



REDBUD
(*Cercis canadensis*)
☀️ 💧 25



WHITE FRINGE TREE
(*Chionanthus virginicus*)
☀️ 💧 25

AlterNATIVE Trees

OTHER ALTERNATIVES

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



LOBLOLLY BAY
(*Gordonia lasianthus*)
☀️ 💧 75



CAROLINA SILVERBELL
(*Halesia carolina*)
☀️ 💧 25



Invasive EXOTIC Trees (Shade)



Some exotic 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 a **BEACH SHEOAK**
(*Casuarina equisetifolia*)

HEIGHT: Up to 100 feet

LONGLEAF PINE
(*Pinus palustris*)



CAMPHOR TREE
(*Cinnamomum camphora*)

HEIGHT: Up to 50 feet

AlterNATIVE Trees (Shade)

OTHER ALTERNATIVES

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



LIVE OAK
(*Quercus virginiana*)



Invasive EXOTIC 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 terebinthifolius*)

HEIGHT: Up to 30 feet



CHINESE TALLOW TREE,
also known as a **POPCORN TREE**
(*Sapium sebiferum*)

HEIGHT: Up to 50 feet

SWEETGUM

(*Liquidambar styraciflua*)



AlterNATIVE Trees (Fall Color)

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*)



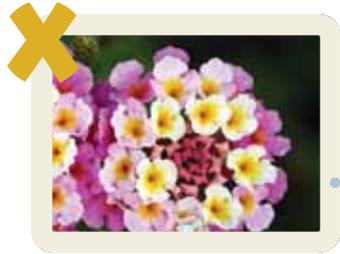
YAUPON HOLLY
(*Ilex vomitoria*)



Invasive EXOTIC Shrubs

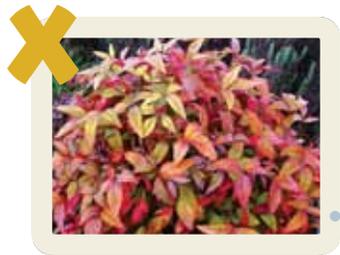


A mechanism used by certain plants to successfully invade is their release of allelochemicals—chemical compounds that can have harmful effects on the surrounding plant community. Allelochemicals can negatively influence growth, survival and reproduction of other plant species.



LANTANA, also known as a **SHRUB VERBENA**
(*Lantana camara*)

HEIGHT: Up to 6 feet



NANDINA, also known as a **HEAVENLY BAMBOO**
(*Nandina domestica*)

HEIGHT: Up to 8 feet

SHINY BLUEBERRY
(*Vaccinium myrsinites*)



CORAL ARDISIA
(*Ardisia crenata*)

HEIGHT: Up to 6 feet

OAKLEAF HYDRANGEA
(*Hydrangea quercifolia*)



FIREBUSH
(*Hamelia patens*)



AlterNATIVE Shrubs

OTHER ALTERNATIVES

- **Autumn Sage/Deerberry** (*Vaccinium stamineum*)
- **Florida Pennyroyal, Wild Pennyroyal** (*Piloblephis rigida*)
- **Garberia** (*Garberia heterophylla*)
- **Highbush Blueberry** (*Vaccinium corymbosum*)
- **Scrub Mints** (*Conradina*)
- **St. John's Wort** (*Hypericum reductum*)
- **Tampa Verbena** (*Glandularia tampensis*)



FLORIDA PENNYROYAL, WILD PENNYROYAL
(*Piloblephis rigida*)



ST. JOHN'S WORT
(*Hypericum reductum*)



Invasive EXOTIC 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.

CORAL HONEYSUCKLE,
(*Lonicera sempervirens*)



JAPANESE HONEYSUCKLE
(*Lonicera japonica*)

HEIGHT: Up to 15 feet



CORAL VINE
(*Antigonon leptopus*)

HEIGHT: Up to 25 feet



FLAME VINE
(*Pyrostegia venusta*)

HEIGHT: depends upon supporting structure

YELLOW JESSAMINE, CAROLINA JESSAMINE, CAROLINA JASMINE

(*Gelsemium sempervirens*)



CHINESE WISTERIA
(*Wisteria sinensis*)

HEIGHT: Up to 65 feet



AlterNATIVE Vines

OTHER ALTERNATIVES

- **Crossvine** (*Bignonia capreolata*)
- **Native grapes** (*Vitis* spp.)
- **Passion Flower, Maypop** (*Passiflora incarnata*)
- **Virginia Creeper** (*Parthenocissus quinquefolia*)

PASSION FLOWER
(*Passiflora incarnata*)



AMERICAN WISTERIA
(*Wisteria frutescens*)



TRUMPET VINE, TRUMPET CREEPER
(*Campsis radicans*)



Invasive EXOTIC 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 exotic 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**
(*Sansevieria hyacinthoides* & *Sansevieria trifasciata*)

HEIGHT: Up to 3 feet

AlterNATIVE Groundcovers

OTHER ALTERNATIVES

- **Gopher Apple** (*Licania michauxii*)
- **Frogfruit, Turkey Tangle Frogfruit, Capeweed** (*Phyla nodiflora*)
- **Powderpuff** (*Mimosa strigillosa*)
- **Narrowleaf Blue-Eyed Grass** (*Sisyrinchium angustifolium*)
- **Partridge Berry** (*Mitchella repens*)



ADAMS NEEDLE
(*Yucca filamentosa*)



PARTRIDGE BERRY
(*Mitchella repens*)



DUNE SUNFLOWER
(*Helianthus debilis*)



Invasive EXOTIC 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
(*Pennisetum setaceum*)

HEIGHT: Up to 3 feet

MUHLY GRASS
(*Muhlenbergia capillaris*)



AlterNATIVE Grasses

OTHER ALTERNATIVES

- **Pineland Dropseed** (*Sporobolus junceus*)
- **Purple Love Grass** (*Eragrostis spectabilis*)
- **Splitbeard Bluestem** (*Andropogon ternarius*)
- **Wiregrass** (*Aristida stricta* var. *beyrichiana*)



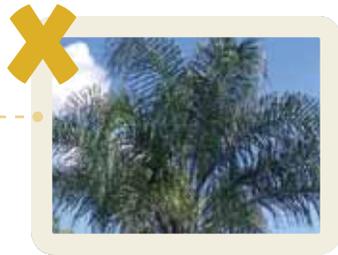
FAKAHATCHEEGRASS, EASTERN GAMA GRASS
(*Tripsacum dactyloides*)



Invasive EXOTIC 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 through waterways.



QUEEN PALM
(*Syagrus romanzoffiana*)
HEIGHT: Up to 40 feet



GOLDEN BAMBOO
(*Phyllostachys aurea*)
HEIGHT: Up to 40 feet



MEXICAN PETUNIA
(*Ruellia brittoniana*)
HEIGHT: Up to 3 feet



MIMOSA
(*Albizia julibrissin*)
HEIGHT: Up to 25 feet

CORAL BEAN
(*Erythrina herbacea*)
☀️ 💧 🌸 🍃 15

TULIP POPLAR
(*Liriodendron tulipifera*)
☀️ 💧 🍃 90



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*)

COONTIE
(*Zamia floridiana*)
☀️ 💧 2



EVERGLADES PALM, PAUROTIS PALM
(*Acoelorrhaphe wrightii*)
☀️ 💧 20



SABAL PALM, CABBAGE PALM
(*Sabal palmetto*)
☀️ 💧 🌸 🍃 60



Invasive EXOTIC 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.



PERUVIAN PRIMROSE WILLOW
(*Ludwigia peruviana*)

HEIGHT: Up to 12 feet



WILD TARO
(*Colocasia esculenta*)

HEIGHT: Up to 4 feet



UMBRELLA FLAT SEDGE
(*Cyperus involucratus*)

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



**CAESAR'S WEED,
also known as CAESARWEED**
(*Urena lobata*)

HEIGHT: Up to 10 feet

SANDWEED
(*Hypericum fasciculatum*)



STRING-LILY
(*Crinum americanum*)



AlterNATIVE Tropical Plants

OTHER ALTERNATIVES

- Alligator Flag (*Thalia geniculata*)
- Crimoneyed Rosemallow (*Hibiscus moscheutos*)
- Dixie Iris, Prairie Iris (*Iris hexagona*)
- Lizard's Tail (*Saururus cernuus*)
- Scarlet Rosemallow (*Hibiscus coccineus*)
- String-lily (*Crinum americanum*)
- Swamp Rosemallow (*Hibiscus grandiflorus*)

CARDINAL FLOWER

(*Lobelia cardinalis*)



**DIXIE IRIS,
PRAIRIE IRIS**
(*Iris hexagona*)



SALT MARSH MALLOW
(*Kosteletzkya virginica*)



• For **MORE INFORMATION** about invasive-exotic plants:

- **Florida Invasive Species Partnership**
www.floridainvasives.org
- **The Nature Conservancy**
www.nature.org/floridainvasive
- **The Florida Exotic Pest Plant Council**
www.fleppc.org
- **UF Center for Aquatic & Invasive Plants**
<http://plants.ifas.ufl.edu>
- **Lake County Water Authority**
www.lcwa.org
- **Lake County Horticultural Learning Center**
<http://lake.ifas.ufl.edu/discovery-gardens/index.shtml>
- **Florida Fish & Wildlife Conservation Commission**
<http://myfwc.com/wildlifehabitats/habitat/invasive-plants/>

For **MORE INFORMATION** about native plants:

- **Florida Native Plant Society**
www.fnps.org



For more information, call (352) 253-4950,
or log on to www.lakecountyfl.gov/parks.

*Photography used in this guide was provided
by Peg Urban, employees of the Lake County
Board of County Commissioners and Wikimedia
Commons (<http://commons.wikimedia.org>).*