

EXOTIC PREVENTION AND CONTROL

When landscaping, do not use plants that have the potential to be invasive. Although Collier County only has 12 prohibited species identified in this brochure, the Florida Exotic Pest Plant Council (<http://www.fleppc.org>) lists 159 non-native plants that are currently disrupting native plant communities or have the potential to disrupt native plant communities.

Exotic plant control techniques include manual removal, mechanical removal and herbicide treatments. Herbicide treatment is the most effective and economical way to kill exotic plants with minimal risk to the neighboring native species when applied properly. Examples of herbicide treatments involve cut stump, foliar and basal bark applications. Contact a state certified pesticide applicator for proper removal of exotic vegetation. Contact Collier County Contractor Licensing to find a licensed exotic removal contractor.

The Collier County Land Development Code (LDC) Section 3.05.08 requires the removal and control of prohibited exotic species on most residential and commercial developments. Collier LDC 4.06.05F prohibits planting of any FLEPPC Category I Invasive Exotics along with *Melia azedarach* (Chinaberry tree) and *Dalbergia sissoo* (Indiana rosewood). **State and/or Local permits may be required when removing vegetation, check with Collier County Environmental Services prior to starting work on any site.**

Utilize native trees, shrubs and ground covers whenever practical. They are generally disease resistant and often require less maintenance. Contact the University of Florida Collier County Extension office for assistance with plant choices and landscape planning.

To Learn More, Contact:

Collier County Environmental Services

2800 N. Horseshoe Dr., Naples, Florida 34104
(239)252-2505: <http://www.colliergov.net/environmental/>

Collier County Contractor Licensing

(239)252-2400: <http://cvportal.colliergov.net/CityViewWeb/License/Locator>

Collier County Extension Service/ University of Florida

14700 Immokalee Road, Naples, Florida 34120
(239)252-4800: <http://collier.ifas.ufl.edu/>

FWC Invasive Plant Management/Everglades Field Office

298 Sabal Palm Rd., Naples FL 34114
(239)229-5403: <http://myfwc.com/wildlifehabitats/invasive-plants/>

Florida Exotic Pest Plant Council

7922 NW 71st Street, Gainesville, FL 32653
(407)349-0551: <http://fleppc.org>

Florida Native Plant Society/Naples Chapter

PO Box 278, Melbourne, FL 32902
(321)271-6702: <http://www.fnps.org/>

University of Florida Center for Aquatic and Invasive Plants

7922 NW 71st Street, Gainesville, Florida 32653
(352)392-9613: <http://aquat1.ifas.ufl.edu/allplants.html>

Florida Department of Agriculture and Consumer Services

3125 Conner Blvd, Bldg 8(L-29), Tallahassee, FL 32399-1650
(850)617-7870: <http://www.freshfromflorida.com/Divisions-Offices/Agricultural-Environmental-Services/Business-Services/Pesticide/Pesticide-Applicator-Certification>

Some pictures provided by Rookery Bay National Estuarine Research Reserve, others provided by the Collier County Engineering & Natural Resources Division. The photo of the Catclaw Mimosa was provided by the University of Florida IFAS Extension.

INVASIVE EXOTIC PLANTS OF COLLIER COUNTY

What is an invasive exotic plant?

Invasive exotic plants are those that are not native to Florida and adversely impact Florida's biodiversity and native plant communities. They are often brought here from tropical regions for ornamental display in landscaping. It is common for invasive exotics to grow more rapidly and aggressively than native species.

Why are invasive exotics a problem?



BEFORE EXOTIC REMOVAL

Invasive exotics threaten local wildlife habitats and displace native plants that are important to Florida's ecology. They often out-compete native plants, because they grow quickly and are not easily affected by native pests and diseases. Some exotic plants growing near residential areas cause allergic reactions in people that are sensitive. In the state of Florida, millions of dollars are spent every year to manage or eradicate invasive exotics.

An estimated 1,327 of Florida's 3,936 named plants are considered an exotic species, but only four percent of are designated as an invasive exotic that can threaten native Collier County's plant communities. These spreading exotics are difficult and expensive to remove and diminish the diversity of wildlife.

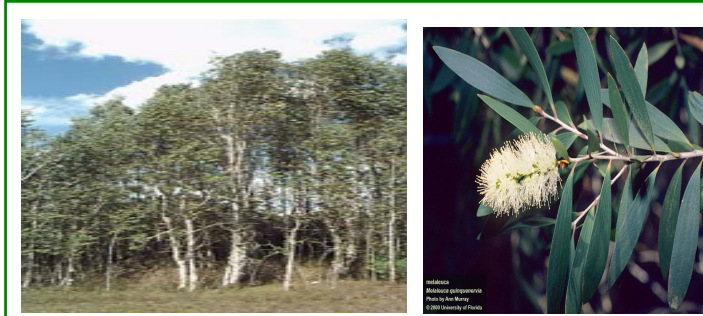
Why are natives better?



AFTER EXOTIC REMOVAL

- * Native plants are adapted to our soils, temperatures, and rainfall patterns so they require less irrigation and fertilization than most non-native plants.
- * Native plants preserve Florida's natural resources and unique heritage by promoting water conservation and erosion control.
- * Native plants support diverse and abundant wildlife where exotics usually form monocultures.

* Wildlife utilization of exotic plants is limited.



MELALEUCA
(*Melaleuca quinquenervia*)

Description:

- * Tall tree growing 65 feet tall
- * Spongy, whitish, paper-like bark
- * Gray-green elliptic alternate leaves
- * White flowers in brush-like spikes in the spring
- * Drooping branches

Habitat:

- * Central and South Florida
- * Residential yards, lakes, wet pine flatwoods, and wetlands

Reasons it should be removed:

- * Trees are highly flammable
- * Highly invasive in wetland environments
- * When it is stressed by fire, frost, or herbicide treatment, it releases large quantities of seeds, creating impenetrable areas
- * Flowers produce noxious chemicals that cause respiratory problems in many people



AUSTRALIAN PINE
(*Casuarina spp.*)

Description:

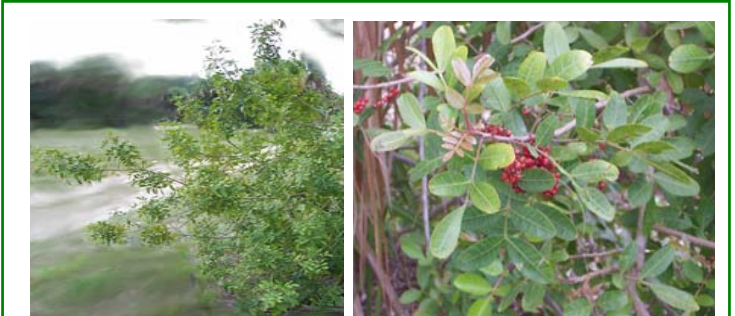
- * Tall, shallow rooted evergreen tree growing 150 feet tall
- * Long, thin branches with leaves resembling pine needles
- * Rough, reddish-brown to gray bark
- * Small round cone-like fruit with winged seeds

Habitat:

- * Throughout coastal Florida
- * Beaches, sandbars, islands, sandy areas, river banks

Reasons it should be removed:

- * Thick shallow roots increase beach erosion, lowering beach profile and width. The dense canopy shades out the preferred dune stabilizing plants.
- * Easily blown over during hurricanes posing a threat to utilities
- * Provides poor habitat with little food for native wildlife
- * Quickly re-sprouts when cut; grows 5 – 10 feet per year
- * Leaf litter chemically prevents native plant growth



BRAZILIAN PEPPER
(*Schinus terebinthifolius*)

Description:

- * Large, evergreen shrub tree with average height of 25 feet tall
- * Smooth branches with aromatic leaves
- * Bright red, small fruits draped in clusters in late fall and winter, resembling Holly
- * Small, yellowish-white flowers in clusters in the fall

Habitat:

- * Central and South Florida
- * Residential yards, lake shores, road sides, most native habitats
- * Moist to moderately well drained soil

Reasons it should be removed:

- * Grows so dense it physically and chemically prevents the growth of other vegetation
- * Re-sprouts after pruning, fire, and freeze damage
- * Provides poor wildlife habitat
- * Causes respiratory problems and skin rashes in some people



DOWNY ROSE-MYRTLE
(*Rhodomyrtus tomentosa*)

Description:

- * Evergreen, flowering shrub growing to average of 6 feet tall
- * Small, pinkish to rose colored flower
- * Small, grape-size, blue-black fruit
- * Glossy green elliptic-oval leaves

Habitat:

- * Pasco County south
- * Dry, upland areas

Reasons it should be removed:

- * Quickly invades native pinelands
- * Forms dense understory thickets that crowd out native plants
- * Seeds sprout easily



EARLEAF ACACIA
(*Acacia auriculiformis*)

Description:

- * Weak-wooded, spindly evergreen tree reaching 50 feet in height
- * Leaves are crescent-shaped and stiff
- * Spiral seedpods develop after yellow flowers

Habitat:

- * South Florida
- * Ranges from dry subtropical forests to moist, wet forests

Reasons it should be removed:

- * Grows into a very large tree and can invade established, closed-canopy forests
- * Invades numerous forest types; from dry upland scrub to rich hammock
- * Potential wind hazard to residences and utilities



WOMAN'S TONGUE
(*Albizia lebeck*)

Description:

- * Deciduous pale bark tree reaching 65 feet in height
- * Small dull green leaflets
- * Greenish-yellow flowers
- * Fruit is foot-long flat brown pods

Habitat:

- * Marion County south to the Florida Keys
- * Residential yards, vacant lots

Reasons it should be removed:

- * Branches break in strong winds



JAVA PLUM
(*Syzygium cumini*)

Description:

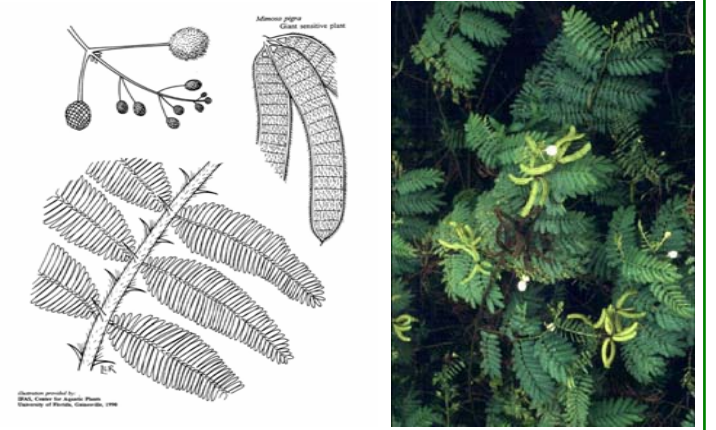
- * Evergreen tree reaching height of 80 feet
- * Course bark with smooth grayish white stems
- * Glossy oblong leaves with purplish red berries

Habitat:

- * South Florida
- * Wet hammocks to dry uplands
- * Java Plum is considered exempt if it has attained a single trunk diameter at breast height (4.5') of 18" or greater, per LDC 3.05.08D.2.d

Reasons it should be removed:

- * Rapidly spreading
- * Invades and disrupts native plant communities



CATCLAW MIMOSA
(*Mimosa pigra*)

Description:

- * Thicket forming shrub reaching 6-20 feet in height
- * Dangerously sharp recurved thorns on stems and leaves
- * Pink flowers arranged in a head
- * Clusters of flat, brown pods 3-4 inches in length

Habitat:

- * Can survive in variety of habitats growing dense in wet areas
- * Highlands County in central Florida southward

Reasons it should be removed:

- * Causes extensive damage to natural and cultivated ecosystems
- * Can withstand flooding, allowing it to invade wetland areas
- * Produces seeds year round that are viable for many years



AIR POTATO
(*Dioscorea bulbifera*)

Description:

- * Tall-climbing, twining vine with heart-shaped leaves
- * Forms potato-like tubers of variable size
- * Stems to 66 feet or more in length

Habitat:

- * Panhandle to South Florida
- * Most habitats
- * Deciduous, spouting from tubers in spring

Reasons it should be removed:

- * Can quickly engulf native vegetation, climbing high into mature tree canopies damaging supporting plants
- * Produces large numbers of aerial tubers accelerating its spread



CLIMBING FERN
(*Lygodium microphyllum*)

Description:

- * Fern with climbing, twining fronds growing to 90 feet long
- * Spores on undersides of fronds

Habitat:

- * South Florida
- * Most habitats

Reasons it should be removed:

- * Forms mats that can reach a thickness of 4 feet, stopping all other plant growth
- * Overtakes trees and structures
- * In fires, burning clumps of fern float away, spreading fire far and wide



LATHER LEAF
(*Colubrina asiatica*)

Description:

- * Low, rambling, twining shrub with climbing or drooping branches
- * Pale, somewhat rough bark
- * Greenish-white flowers in July, brown fruit
- * Shiny, green, oval leaves with toothed edges

Habitat:

- * East and west coast of central and south Florida
- * Coastal beach and dune vegetation, coastal hammocks
- * Tropical hardwood forests

Reasons it should be removed:

- * It can form a thick mat of tangling stems which are virtually impenetrable
- * Its climbing growth allows it to grow over the native vegetation canopy and can shade out native flora
- * Replaces buttonwood, mangrove and mangrove fringe communities



CARROTWOOD
(*Cupaniopsis anacardioides*)

Description:

- * Fast-growing evergreen tree that grows to a height of about 33 feet
- * The leaves are large and compound, made up of 4-12 oblong leathery yellowish green leaflets
- * Clusters of small, greenish-white flowers
- * The fruit is a yellow-orange woody capsule

Habitat:

- * Pinellas and Volusia counties south but not including the Florida Keys
- * Variety of natural communities, coastal hammocks, dunes, coastal strand, sand pine scrub, slash pine flatwoods, mangrove swamps, cypress swamps, freshwater marshes and river banks
- * Tolerant of salt, poor soils, poor drainage, sunlight and shade

Reasons it should be removed:

- * Forms dense monocultures, crowding out and out-competing native plants for available light and nutrients
- * Increases stress on remaining hammocks