

A Floristic Survey and Rare Species Assessment of
Wild Turkey Strand Preserve, Lee County, Florida
Final Report

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September 23, 2005



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Cover photo: Fringed meadowbeauty (*Rhexia petiolata*), a species newly recorded for Lee County, and ranked as Critically Imperiled in South Florida by The Institute for Regional Conservation taken by the primary author.

Introduction:

Lee County Parks and Recreation manages the 2600 acre Wild Turkey Strand Preserve. Lee County possessed very little floristic data on Wild Turkey Strand Preserve including floristic inventories, lists of rare plant species, lists of exotic species, or status of rare plant species. The Institute for Regional Conservation (“IRC”) was contracted to provide these data to Lee County on this property.

Methods:

Survey Wild Turkey Strand Preserve, owned by Lee County, producing a species list and collect occurrence data for agency listed rare species. Two biologists visit each habitat during each inventory period. Inventory periods take place over four weeks dispersed throughout the year covering each flowering season, winter, spring, summer, and fall.

- a) Make list of all plant species on property.
- b) Estimate population sizes on a \log_{10} scale of all mature individuals of each plant species.
- c) Collect GPS coordinates for occurrences of rare plant species when they occupy small, discrete areas on each site.

Results:

Wild Turkey Strand Preserve was visited by two IRC biologists October 5-7 and December 7-9, 2004 & and April 5-7, 2005 and July 20-22, 2005. Within the Wild Turkey Strand Preserve, a total of 501 native, naturalized, and cultivated exotic plant species were recorded in our surveys. Of these 405 (81%) are considered native to Lee County, 1 is considered doubtfully native, and 94 (19%) are considered exotic and naturalized. One additional non-native species *Opuntia ficus-indica* was recorded as cultivated only, from dumped material, on the site. Of the exotic species found on the preserve, 57 were considered ruderal or potentially invasive. Potentially invasive species include *Acacia auriculiformis*, *Alternanthera philoxeroides*, *Caperonia palustris*, *Ceratopteris thalictroides*, *Cyperus esculentus*, *Hemarthria altissima*, *Imperata cylindrica*, *Lantana camara*, *Murdannia nudiflora*, *Nephrolepis multiflora*, *Oeceoclades maculata*, *Psidium guajava*, *Pteris vittata*, *Rhynchosytrum repens*, *Senna pendula* var. *glabra*, *Syzygium cumini*, *Urochloa mutica*, and *Urochloa subquadriflora*. In addition a species apparently new to the Flora of North America (*Eleocharis acutangula*) was discovered. This species was invading basin marsh, and it should be closely monitored if not eradicated from the preserve before it becomes problematic elsewhere. Of the native species recorded, 36 species were determined to be ruderal (not occurring in any undisturbed habitat) only 9 % of the native flora. Twenty-three vascular plants listed as invasive or potentially invasive by the Florida Exotic Pest Plant Council (FLEPPC) were recorded at the site (table 6). All were found naturalized on the site. Taxonomy follows Wunderlin (1998) or Gann et al. (2004).

No plant species listed by the U.S. Fish and Wildlife Service were recorded. Thirteen plant species listed by the State of Florida as commercially exploited, threatened, or endangered were recorded. One plant species listed by the Florida Natural Areas Inventory (FNAI) as critically imperiled (S1) in Florida was recorded. Seventeen plant species considered critically imperiled (SF1) in South Florida by The Institute for Regional Conservation (Gann et al 2005) were recorded. One native plant species was newly recorded for Lee County and is ranked SF1 (*Rhexia petiolata*). In addition, as a result of this inventory, *Wolffiella gladiata* has now been downranked to imperiled in South Florida (SF2). Twenty-nine rare plant species were recorded (Table 4), 7% of the native plant species recorded.

If determinations could not be made in the field, plants were new to Lee County, or documentation of unusual species was deemed important plants were vouchered. Primary collections are deposited in part at Fairchild Tropical Botanic Garden Herbarium (FTG) in Coral Gables, FL. Duplicate specimens are deposited at The University of South Florida Herbarium (USF) and other registered herbaria. A total of 65 collections were made at the preserve and include 60 vascular plant species and one non vascular plant species (*Ricciocarpus natans*), a floating liverwort, not included elsewhere in this report.

A total of nine habitats were surveyed during this study (Table 1). Habitats follow guidelines provided by the Florida Natural Areas Inventory and Florida Department of Natural Resources (FNAI, 2004) or The Institute for Regional Conservation (Gann et al., 2004). Habitats surveyed include: basin marsh, bayhead, depression marsh, disturbed upland (including roadside), disturbed wetland, dome swamp, mesic flatwoods, prairie hammock and strand swamp. Bayhead is a habitat newly reported for Wild Turkey Strand Preserve.

The compiled plant list is provided in two formats. Table 2 provides a list of vascular plants recorded at the site arranged by group, family, and then genus/species. Common names and native status are also provided here. Table 3 provides a list of vascular plants recorded at the site arranged by genus/species with common names. In Table 3, native status, state status, FNAI status, IRC status, FLEPPC status, habitat location, and collector/collector # are provided. Also in Table 3, population size estimates on a \log_{10} scale of each of these species are noted. Table 4 provides a list of rare plants recorded at the site. Table 5 provides a list of rare species with GPS coordinates in decimal degrees for discrete locations, and a description of where the plants were observed. Table 6 provides a list of FLEPPC species recorded at the site.

An electronic copy of this report and a plant list with the above information in excel format is also provided and also includes herbarium label data for all plants collected.

Table 1:

The Habitats of Wild Turkey Strand Preserve

The following are habitat descriptions for the 9 habitats encountered in the 2004-2005 survey of Wild Turkey Strand Preserve.

Basin Marsh: Large basin with peat substrate; seasonally inundated; temperate or subtropical; frequent fire; sawgrass and/or cattail and/or buttonbush and/or mixed emergents (FNAI 2005).

Bayhead: Wetland with peat substrate; usually saturated and occasionally inundated; subtropical; rare or no fire; bays and/or dahoon holly, cocoplum, wax myrtle, and other hardwoods. This category is not used by the Florida Natural Areas Inventory and has been added (Gann et al., 2001).

Depression Marsh: Small rounded depression in sand substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; frequent or occasional fire; maidencane, fire flag, pickerelweed, and mixed emergents, may be in concentric bands (FNAI 2005).

Disturbed Upland (including Roadside): Includes areas such as roadsides, agricultural fields, or thickets. This category is not used by the Florida Natural Areas Inventory and has been added (Gann et al., 2001).

Disturbed Wetland: Includes disturbed wet areas such as ditches, canals, and borrow pits. This category is not used by the Florida Natural Areas Inventory and has been added (Gann et al., 2001).

Dome Swamp: Rounded depression in sand/limestone substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; occasional or rare fire; cypress, blackgum, or bays, often tallest in center. (FNAI 2005)

Mesic Flatwoods: Flatland with sand substrate; mesic; subtropical or temperate; frequent fire; slash pine and/or longleaf pine with saw palmetto, gallberry and/or wiregrass or cutthroat grass understory (FNAI 2005).

Prairie Hammock: Flatland with sand/organic soil over marl or limestone substrate; mesic; subtropical; occasional or rare fire; live oak and/or cabbage palm. (FNAI 2005).

Strand Swamp: Broad, shallow channel with peat over mineral substrate; seasonally inundated, flowing water; subtropical; occasional or rare fire; cypress and/or willow. (FNAI 2005)

Table 2:
The Vascular Plants of
Wild Turkey Strand Preserve, Lee County



The Institute for Regional Conservation
 Miami, Florida

Compiled from field observations made by Steven W. Woodmansee and/or Keith A. Bradley
 between October 4th, 2004 and July 22nd, 2005.

Dicots

Acanthaceae

<i>Dyschoriste oblongifolia</i>	Common twinflower, Oblongleaf twinflower
<i>Justicia angusta</i>	Narrow-leaved waterwillow
<i>Stenandrium dulce</i>	Pinklet

Aceraceae

<i>Acer rubrum</i>	Red maple
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Amaranthaceae

E	<i>Alternanthera philoxeroides</i>	Alligatorweed
E	<i>Alternanthera sessilis</i>	Sessile joyweed
E	<i>Amaranthus viridis</i>	Slender amaranth
E	<i>Gomphrena serrata</i>	Globe-amaranth
	<i>Iresine diffusa</i>	Bloodleaf, Juba's bush

Anacardiaceae

<i>Rhus copallinum</i>	Winged sumac
E <i>Schinus terebinthifolius</i>	Brazilian-pepper

Annonaceae

<i>Annona glabra</i>	Pond-apple
<i>Asimina reticulata</i>	Common pawpaw, Netted pawpaw

Apiaceae

<i>Centella asiatica</i>	Coinwort, Spadeleaf
<i>Eryngium baldwinii</i>	Baldwin's eryngo
<i>Eryngium yuccifolium</i>	Button snakeroot, Button rattlenakemaster
<i>Hydrocotyle umbellata</i>	Manyflower marshpennywort
<i>Oxypolis filiformis</i>	Water dropwort, Water cowbane
<i>Ptilimnium capillaceum</i>	Mock bishopsweed, Herbwilliam

Aquifoliaceae

<i>Ilex cassine</i>	Dahoon holly, Dahoon
<i>Ilex glabra</i>	Gallberry, Inkberry

Asclepiadaceae

Asclepias longifolia
Asclepias pedicellata
Sarcostemma clausum

Longleaf milkweed
Savannah milkweed
Whitevine, White twinevine

Asteraceae

<i>Ambrosia artemisiifolia</i>	Common ragweed
<i>Aster adnatus</i>	Clasping aster, Scaleleaf aster
<i>Aster carolinianus</i>	Climbing aster
<i>Aster dumosus</i>	Rice button aster
<i>Aster elliottii</i>	Elliott's aster
<i>Aster subulatus</i>	Annual saltmarsh aster
<i>Baccharis glomeruliflora</i>	Silverling
<i>Baccharis halimifolia</i>	Saltbush, Groundsel tree, Sea-myrtle
<i>Bidens alba</i> var. <i>radiata</i>	Spanish-needles
<i>Bigelovia nudata</i> subsp. <i>australis</i>	Southern pineland rayless goldenrod
<i>Boltonia diffusa</i>	Smallhead Doll's-daisy
<i>Carphephorus corymbosus</i>	Florida paintbrush, Coastalplain chaffhead
<i>Carphephorus odoratissimus</i> var. <i>suptropicanus</i>	Pineland purple, False vanillaleaf
<i>Chaptalia tomentosa</i>	Woolly sunbonnets, Pineland daisy
<i>Cirsium horridulum</i>	Purple thistle
<i>Cirsium nuttallii</i>	Nuttall's thistle
<i>Conoclinium coelestinum</i>	Blue mistflower
<i>Conyza canadensis</i> var. <i>pusilla</i>	Dwarf Canadian horseweed
<i>Coreopsis floridana</i>	Florida tickseed
<i>Coreopsis leavenworthii</i>	Leavenworth's tickseed
<i>Eclipta prostrata</i>	False-daisy
<i>Elephantopus elatus</i>	Florida elephant's-foot, Tall elephant's-foot
E <i>Emilia fosbergii</i>	Florida tasselflower
<i>Erechtites hieracifolia</i>	Fireweed, American burnweed
<i>Erigeron quercifolius</i>	Southern-fleabane, Oakleaf fleabane
<i>Erigeron vernus</i>	Early whitetop fleabane
<i>Eupatorium capillifolium</i>	Dog-fennel
<i>Eupatorium leptophyllum</i>	Falsefennel
<i>Eupatorium mohrii</i>	Mohr's thoroughwort
<i>Euthamia caroliniana</i>	Slender goldenrod
<i>Gnaphalium falcatum</i>	Cudweed, Narrowleaf purple everlasting
<i>Gnaphalium obtusifolium</i>	Rabbit's tobacco, Sweet everlasting
<i>Helenium pinnatifidum</i>	Southeastern sneezeweed
<i>Heterotheca subaxillaris</i>	Camphorweed
<i>Hieracium megacephalon</i>	Coastal plain hawkweed
<i>Iva microcephala</i>	Piedmont marshelder
<i>Liatris garberi</i>	Garber's gayfeather
<i>Mikania scandens</i>	Climbing hempweed, Climbing hempvine
<i>Pectis prostrata</i>	Spreading cinchweed
<i>Pityopsis graminifolia</i>	Narrowleaf silkgrass
<i>Pluchea odorata</i>	Sweetscent
<i>Pluchea rosea</i>	Rosy camphorweed
<i>Pterocaulon pycnostachyum</i>	Blackroot
<i>Rudbeckia hirta</i>	Blackeyed susan
<i>Solidago fistulosa</i>	Pinebarren goldenrod

<i>Solidago gigantea</i>	Giant goldenrod
<i>Solidago sempervirens</i>	Seaside goldenrod
<i>Solidago stricta</i>	Narrow-leaved goldenrod, Wand goldenrod
<i>Solidago tortifolia</i>	Twistedleaf goldenrod
E <i>Tridax procumbens</i>	Brittleweed, Coatbuttons
E <i>Vernonia cinerea</i>	Little ironweed
<u>Boraginaceae</u>	
<i>Heliotropium polyphyllum</i>	Pineland heliotrope
<u>Brassicaceae</u>	
<i>Rorippa teres</i>	Southern marsh yellowcress
<u>Buddlejaceae</u>	
<i>Polyprenum procumbens</i>	Rustweed, Juniperleaf
<u>Cactaceae</u>	
CE <i>Opuntia ficus-indica</i>	Spineless cactus
<u>Campanulaceae</u>	
<i>Lobelia glandulosa</i>	Glade lobelia
<u>Caprifoliaceae</u>	
<i>Sambucus canadensis</i>	Elderberry, American elder
<u>Caryophyllaceae</u>	
<i>Drymaria cordata</i>	West Indian chickweed, Drymary
<u>Chenopodiaceae</u>	
E <i>Chenopodium album</i>	Lamb's-quarters
E <i>Chenopodium ambrosioides</i>	Mexican tea
<u>Chrysobalanaceae</u>	
<i>Chrysobalanus icaco</i>	Coco-plum
<i>Licania michauxii</i>	Gopher-apple
<u>Cistaceae</u>	
<i>Lechea torreyi</i>	Piedmont pinweed
<u>Clusiaceae</u>	
<i>Hypericum brachyphyllum</i>	Coastalplain St. John's-wort
<i>Hypericum cistifolium</i>	Roundpod St. John's-wort
<i>Hypericum fasciculatum</i>	Sandweed, Peelbark St. John's-wort
<i>Hypericum gentianoides</i>	Pineweeds, Orangegrass
<i>Hypericum hypericoides</i>	St. Andrew's-cross
<i>Hypericum mutilum</i>	Dwarf St. John's-wort
<i>Hypericum reductum</i>	Atlantic St. John's-wort
<i>Hypericum tetrapetalum</i>	Fourpetal St. John's-wort
<u>Convolvulaceae</u>	
<i>Evolvulus sericeus</i>	Silver dwarf morningglory
<i>Ipomoea indica</i> var. <i>acuminata</i>	Ocean-blue morningglory
<i>Ipomoea sagittata</i>	Everglades morningglory
<u>Cornaceae</u>	
<i>Cornus foemina</i>	Stiff cornel, Swamp dogwood, Stiff dogwood

Cucurbitaceae

Cucumis sativa Cucumber
Melothria pendula Creeping-cucumber

Droseraceae

Drosera capillaris Pink sundew

Ericaceae

Bejaria racemosa Tarflower
Gaylussacia dumosa Dwarf black-huckleberry, Dwarf huckleberry
Lyonia fruticosa Coastalplain staggerbush
Vaccinium myrsinites Shiny blueberry

Euphorbiaceae

Caperonia castaneifolia Chestnutleaf Falsecroton
E *Caperonia palustris* Sacatrapo
Chamaesyce hirta Hairy spurge, Pillpod sandmat
Chamaesyce hypericifolia Eyebane, Graceful sandmat
Chamaesyce hyssopifolia Eyebane, Hyssopleaf sandmat
Cnidocolus stimulosus Tread-softly, Finger-rot
Euphorbia inundata Florida pineland spurge
Euphorbia polyphylla Pineland euphorbia, Lesser Florida spurge
Phyllanthus caroliniensis subsp. saxicola Rock Carolina leafflower
E *Phyllanthus urinaria* Chamber bitter
Stillingia aquatica Corkwood, Water toothleaf
Stillingia sylvatica Queensdelight

Fabaceae

E *Abrus precatorius* Rosary-pea, Crab-eyes
E *Acacia auriculiformis* Earleaf acacia
Acacia farnesiana Sweet acacia
Aeschynomene americana Shyleaf
E *Aeschynomene indica* Indian joint-vetch
E *Alysicarpus ovalifolius* False moneywort, Alyce-clover
Centrosema virginianum Spurred butterfly-pea
Chamaecrista nictitans Sensitive-pea
Chamaecrista nictitans var. aspera Hairy partridge-pea, Hairy sensitive-pea
E *Crotalaria lanceolata* Lanceleaf rattlebox
E *Crotalaria pallida var. obovata* Smooth rattlebox
Crotalaria rotundifolia Rabbitbells
E *Crotalaria spectabilis* Showy rattlebox
Desmodium incanum Beggar's-ticks
E *Desmodium triflorum* Threeflower ticktrefoil
Galactia elliotii Elliott's milkpea
Galactia regularis Eastern milkpea
E *Indigofera hirsuta* Hairy indigo
E *Macroptilium lathyroides* Wild-bean, Wild bushbean
E *Medicago lupulina* Black medic
E *Melilotus albus* White sweetclover
E *Senna pendula var. glabrata* Valamuerto
Sesbania herbacea Danglepod
Tephrosia rugelii Rugel's hoarypea
Vicia acutifolia Sand vetch, Fourleaf vetch

<i>Vigna luteola</i>	Cow-pea, Hairypod cowpea
<u>Fagaceae</u>	
<i>Quercus laurifolia</i>	Laurel oak, Diamond oak
<i>Quercus minima</i>	Dwarf live oak
<i>Quercus virginiana</i>	Virginia live oak
<u>Gentianaceae</u>	
<i>Bartonia verna</i>	White screwstem
<i>Sabatia bartramii</i>	Bartram's rosegentian
<i>Sabatia brevifolia</i>	Shortleaf rosegentian
<i>Sabatia grandiflora</i>	Largeflower rosegentian
<i>Sabatia stellaris</i>	Rose-of-Plymouth
<u>Haloraginaceae</u>	
<i>Proserpinaca palustris</i>	Mermaid weed, Marsh mermaidweed
<i>Proserpinaca pectinata</i>	Mermaid weed, Combleaf mermaidweed
<u>Hydrophyllaceae</u>	
<i>Hydrolea corymbosa</i>	Skyflower
<u>Lamiaceae</u>	
<i>Hyptis alata</i>	Musky mint, Clustered bushmint
E <i>Hyptis pectinata</i>	Comb bushmint
E <i>Hyptis spicigera</i>	Marubio
E <i>Hyptis verticillata</i>	John Charles
<i>Lycopus rubellus</i>	Taperleaf waterhoarhound
<i>Physostegia purpurea</i>	False dragonhead, Eastern false dragonhead
<i>Piloblephis rigida</i>	Wild pennyroyal
<u>Lauraceae</u>	
<i>Cassytha filiformis</i>	Lovevine, Devil's gut
<i>Persea palustris</i>	Swamp bay
<u>Lentibulariaceae</u>	
<i>Pinguicula lutea</i>	Yellow butterwort
<i>Pinguicula pumila</i>	Small butterwort
<i>Utricularia cornuta</i>	Horned bladderwort
<i>Utricularia foliosa</i>	Leafy bladderwort
<i>Utricularia gibba</i>	Cone-spur bladderwort, Humped bladderwort
<i>Utricularia inflata</i>	Floating bladderwort
<i>Utricularia purpurea</i>	Eastern purple bladderwort
<i>Utricularia resupinata</i>	Small purple bladderwort
<i>Utricularia simulans</i>	Fringed bladderwort
<i>Utricularia subulata</i>	Zigzag bladderwort
<u>Linaceae</u>	
<i>Linum floridanum</i>	Florida yellow flax
<i>Linum medium var. texanum</i>	Stiff yellow flax
<u>Loganiaceae</u>	
<i>Mitreola petiolata</i>	Miterwort, Lax hornpod
<i>Mitreola sessilifolia</i>	Mitrewort, Swamp hornpod

Lythraceae

	<i>Ammannia latifolia</i>	Pink redstem, Toothcup
E	<i>Cuphea carthagenensis</i>	Colombian waxweed
	<i>Rotala ramosior</i>	Toothcup, Lowland rotala

Malvaceae

	<i>Sida acuta</i>	Common wireweed, Common fanpetals
	<i>Sida rhombifolia</i>	Cuban jute, Indian hemp
E	<i>Urena lobata</i>	Caesarweed

Melastomataceae

	<i>Rhexia cubensis</i>	West Indian meadowbeauty
	<i>Rhexia mariana</i>	Pale meadowbeauty, Maryland meadowbeauty
	<i>Rhexia nuttallii</i>	Nuttall's meadowbeauty
	<i>Rhexia petiolata</i>	Fringed meadowbeauty

Menyanthaceae

	<i>Nymphoides aquatica</i>	Big floatingheart
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Moraceae

	<i>Ficus aurea</i>	Strangler fig, Golden fig
E	<i>Ficus microcarpa</i>	Laurel fig, Indian laurel

Myricaceae

	<i>Myrica cerifera</i>	Wax myrtle, Southern Bayberry
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Myrsinaceae

	<i>Rapanea punctata</i>	Myrsine, Colicwood
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Myrtaceae

E	<i>Melaleuca quinquenervia</i>	Punktree
E	<i>Psidium guajava</i>	Guava
E	<i>Rhodomyrtus tomentosa</i>	Downy myrtle, Rose myrtle
E	<i>Syzygium cumini</i>	Jambolan-plum, Java-plum

Nymphaeaceae

	<i>Nymphaea elegans</i>	Blue waterlily, Tropical royalblue waterlily
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Oleaceae

	<i>Fraxinus caroliniana</i>	Water ash, Carolina ash, Pop ash
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Onagraceae

	<i>Gaura angustifolia</i>	Southern gaura, Southern beeblossum
	<i>Ludwigia curtissii</i>	Curtiss's primrosewillow
	<i>Ludwigia linifolia</i>	Southeastern primrosewillow
	<i>Ludwigia maritima</i>	Seaside primrosewillow
	<i>Ludwigia microcarpa</i>	Smallfruit primrosewillow
	<i>Ludwigia octovalvis</i>	Mexican primrosewillow
E	<i>Ludwigia peruviana</i>	Peruvian primrosewillow
	<i>Ludwigia repens</i>	Creeping primrosewillow
	<i>Oenothera laciniata</i>	Cut-leaf evening-primrose

Oxalidaceae

	<i>Oxalis corniculata</i>	Lady's-sorrel, Common yellow woodsorrel
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Passifloraceae

Passiflora suberosa

Corkstem passionflower

Phytolaccaceae

Phytolacca americana

American pokeweed

Polygalaceae

Polygala baldwinii

Baldwin's milkwort

Polygala cruciata

Drumheads

Polygala cymosa

Tall pinebarren milkwort

Polygala grandiflora

Candyweed, Showy milkwort

Polygala incarnata

Procession flower

Polygala lutea

Orange milkwort

Polygala nana

Candyroot

Polygala rugelii

Big yellow milkwort

Polygala setacea

Coastalplain milkwort

Polygonaceae

Polygonum densiflorum

Denseflower knotweed

Polygonum hydropiperoides

Mild water-pepper, Swamp smartweed

E *Polygonum pensylvanicum*

Pennsylvannia smartweed

Polygonum punctatum

Dotted smartweed

Portulacaceae

Portulaca oleracea

Purslane, Little hogweed

Primulaceae

Anagallis minima

Chaffweed

Anagallis pumila

Florida pimpernel

Samolus valerandi subsp. parviflorus

Pineland pimpernel, Seaside brookweed

Ranunculaceae

Clematis baldwinii

Pine-hyacinth

Rhamnaceae

Berchemia scandens

rattan vine, Alabama supplejack

Rosaceae

Rubus cuneifolius

Sand blackberry

Rubus trivialis

Southern dewberry

Rubiaceae

Cephalanthus occidentalis

Common buttonbush

Diodia teres

Poor joe, Rough buttonweed

Diodia virginiana

Buttonweed, Virginia buttonweed

Galium hispidulum

Coastal bedstraw

E *Hedyotis corymbosa*

Flattop mille grains

Hedyotis procumbens

Innocence, Roundleaf bluet

Hedyotis uniflora

Clustered mille graine

E *Richardia scabra*

Rough Mexican clover

Spermacoce assurgens

Woodland false buttonweed

Spermacoce prostrata

Prostrate false buttonweed

E *Spermacoce verticillata*

Shrubby false buttonweed

Salicaceae

Salix caroliniana Coastal Plain willow

Sapotaceae

Sideroxylon reclinatum Recline Florida bully

Scrophulariaceae

Agalinis fasciculata Beach false foxglove
Agalinis obtusifolia Tenlobe false foxglove
Bacopa caroliniana Lemon hyssop, Lemon bacopa, Blue
Bacopa monnieri Water hyssop, Herb-of-grace
Buchnera americana American bluehearts
Gratiola hispida Rough hedgehyssop
Gratiola ramosa Branched hedgehyssop
Linaria canadensis Canada toadflax
E *Lindernia crustacea* Malaysian false-pimpernel
Lindernia dubia var. *anagallidea* Yellowseed false-pimpernel
Lindernia grandiflora Savannah false-pimpernel
Mecardonia acuminata subsp. *peninsularis* Axilflower
Micranthemum glomeratum Manatee mudflower
Micranthemum umbrosum Shade mudflower
Scoparia dulcis Sweetbroom, Licoriceweed

Solanaceae

E *Lycopersicon esculentum* Tomato, Garden Tomato
Physalis pubescens Husk tomato
Physalis walteri Walter's groundcherry
Solanum americanum Common nightshade, American black nightshade
E *Solanum tampicense* Aquatic soda-apple

Sterculiaceae

E *Melochia corchorifolia* Chocolateweed
Melochia spicata Bretonica peluda
Waltheria indica Sleepy morning

Turneraceae

Piriqueta caroliniana Pitted stripeseed

Urticaceae

Boehmeria cylindrica Button-hemp, False nettle, Bog hemp

Verbenaceae

Callicarpa americana American beautyberry
E *Lantana camara* Shrubverbena
Phyla nodiflora Frog fruit, Turkey tangle fogfruit, Capeweed

Violaceae

Viola lanceolata Bog white violet
Viola palmata Early blue violet

Vitaceae

Parthenocissus quinquefolia Virginia-creeper, Woodbine
Vitis rotundifolia Muscadine, Muscadine grape

Gymnosperms

Cupressaceae

Taxodium ascendens

Pond cypress

Pinaceae

Pinus elliotii var. *densa*

South Florida slash pine

Monocots

Alismataceae

Sagittaria graminea

Grassy arrowhead

Sagittaria graminea var. *chapmanii*

Chapman's arrowhead

Sagittaria lancifolia

Bulltongue arrowhead

Amaryllidaceae

Crinum americanum

Swamp-lily, Seven-sisters, String-lily

Nothoscordum bivalve

False-garlic, Crowpoison

Araceae

E *Pistia stratiotes*

Water-lettuce

Areaceae

Sabal palmetto

Cabbage palm

Serenoa repens

Saw palmetto

Bromeliaceae

Tillandsia balbisiana

Reflexed wild-pine, Northern needleleaf

Tillandsia fasciculata var. *densispica*

Stiff-leaved wild-pine, Cardinal airplant

Tillandsia paucifolia

Twisted wild-pine, Potbelly airplant

Tillandsia recurvata

Ball-moss

Tillandsia setacea

Thin-leaved wild-pine, Southern needleleaf

Tillandsia usneoides

Spanish-moss

Tillandsia utriculata

Giant wild-pine, Giant airplant

Burmanniaceae

Burmannia capitata

Southern bluethead

Commelinaceae

E *Commelina diffusa*

Common dayflower

E *Commelina gambiae*

Gambian dayflower

E *Murdannia nudiflora*

Nakedstem dewflower

E *Murdannia spirata*

Asiatic dewflower

Cyperaceae

Carex longii

Long's sedge

Carex verrucosa

Warty sedge

Cladium jamaicense

Saw-grass, Jamaica swamp sawgrass

Cyperus compressus

Poorland flatsedge

Cyperus croceus

Baldwin's flatsedge

Cyperus distinctus

Distinct flatsedge, Swamp flatsedge

E *Cyperus esculentus*

Yellow nut-grass, Chufa flatsedge

Cyperus flavescens

Yellow flatsedge

Cyperus haspan

Haspan flatsedge

E	<i>Cyperus iria</i>	Ricefield flatsedge
	<i>Cyperus ligularis</i>	Swamp flatsedge
	<i>Cyperus odoratus</i>	Fragrant flatsedge
	<i>Cyperus polystachyos</i>	Manyspike flatsedge
E	<i>Cyperus pumilus</i>	Low flatsedge
	<i>Cyperus retrorsus</i>	Pinebarren flatsedge
E	<i>Cyperus rotundus</i>	Nut-grass
	<i>Cyperus surinamensis</i>	Tropical flatsedge
E	<i>Eleocharis acutangula</i>	Acute spikerush
	<i>Eleocharis baldwinii</i>	Baldwin's spikerush, roadgrass
	<i>Eleocharis cellulosa</i>	Gulf Coast spikerush
	<i>Eleocharis flavescens</i>	Yellow spikerush, Pale spikerush
	<i>Eleocharis geniculata</i>	Canada spikerush
	<i>Eleocharis interstincta</i>	Knotted spikerush
	<i>Fimbristylis autumnalis</i>	Slender fimbry
E	<i>Fimbristylis cymosa</i>	Hurricane sedge, Hurricanegrass
	<i>Fimbristylis puberula</i>	Hairy fimbry
E	<i>Fimbristylis schoenoides</i>	Ditch fimbry
	<i>Fuirena breviseta</i>	Saltmarsh umbrellasedge
	<i>Fuirena scirpoidea</i>	Southern umbrellasedge
E	<i>Kyllinga brevifolia</i>	Shortleaf spikesedge
	<i>Kyllinga odorata</i>	Fragrant spikesedge
	<i>Kyllinga pumila</i>	Low spikesedge
E	<i>Lipocarpha aristulata</i>	Awned halfchaff sedge
	<i>Lipocarpha micrantha</i>	Smallflower halfchaff sedge
	<i>Rhynchospora colorata</i>	Starrush whitetop
	<i>Rhynchospora divergens</i>	Spreading beaksedge
	<i>Rhynchospora fascicularis</i>	Fascicled Beaksedge
	<i>Rhynchospora fernaldii</i>	Fernald's beaksedge
	<i>Rhynchospora filifolia</i>	Threadleaf beaksedge
	<i>Rhynchospora inundata</i>	Narrowfruit horned beaksedge
	<i>Rhynchospora microcarpa</i>	Southern beaksedge
	<i>Rhynchospora nitens</i>	Shortbeak beaksedge
	<i>Rhynchospora plumosa</i>	Plumed beaksedge
	<i>Rhynchospora rariflora</i>	Fewflower beaksedge
	<i>Rhynchospora tracyi</i>	Tracy's beaksedge
	<i>Scleria baldwinii</i>	Baldwin's nutrush
	<i>Scleria ciliata</i>	Fringed nutrush
	<i>Scleria ciliata</i> var. <i>pauciflora</i>	Fewflower nutrush
	<i>Scleria hirtella</i>	Riverswamp nutrush
E	<i>Scleria lacustris</i>	Wright's nutrush
	<i>Scleria reticularis</i>	Netted nutrush
	<i>Scleria verticillata</i>	Low nutrush
<u>Eriocaulaceae</u>		
	<i>Eriocaulon compressum</i>	Flattened pipewort
	<i>Eriocaulon decangulare</i>	Tenangle pipewort
	<i>Lachnocaulon anceps</i>	Whitehead bogbutton
	<i>Lachnocaulon minus</i>	Small's bogbutton
	<i>Syngonanthus flavidulus</i>	Yellow hatpins

Haemodoraceae

Lachnanthes caroliana

Bloodroot, Carolina redroot

Hypoxidaceae

Hypoxis juncea

Fringed Yellow stargrass

Iridaceae

Sisyrinchium angustifolium

Narroleaf blueeyed-grass

Juncaceae

Juncus marginatus

Shore rush, Grassleaf rush

Juncus megacephalus

Bighead rush

Lemnaceae

Lemna obscura

Little duckweed

Lemna valdiviana

Valdivia duckweed

Spirodela polyrhiza

Common duckweed

Wolffiella gladiata

Bog-mat, Florida mudmidget

Liliaceae

Aletris lutea

Yellow colicroot

Lilium catesbaei

Catesby's lily, Pine lily

Marantaceae

Thalia geniculata

Alligatorflag, Fireflag

Najadaceae

Najas wrightiana

Wright's waternymph

Orchidaceae

Bletia purpurea

Pinepink

Encyclia tampensis

Florida butterfly orchid

Eulophia alta

Wild-coco

Habenaria floribunda

Rein orchid, Toothpetal false reinorchid

Habenaria quinqueseta

Longhorn false reinorchid

Harrisella porrecta

Needleroot airplant orchid

E *Oeceoclades maculata*

African ground orchid, Monk orchid

Sacoila lanceolata

Leafless beaked lady's-tresses

Spiranthes laciniata

Lacelip lady's-tresses

Spiranthes longilabris

Longlip lady's-tresses

Spiranthes odorata

Fragrant lady's-tresses, Marsh lady's-tresses

Spiranthes vernalis

Spring lady's-tresses

Poaceae

Amphicarpum muhlenbergianum

Blue-maidencane

Andropogon glomeratus var. *glaucopsis*

Purple bluestem

Andropogon glomeratus var. *pumilus*

Common bushy bluestem

Andropogon gyrans

Elliott's bluestem

Andropogon ternarius

Splitbeard bluestem

Andropogon virginicus

Broomsedge bluestem

Andropogon virginicus var. *glaucus*

Chalky bluestem

Aristida beyrichiana

Southern wiregrass

Aristida palustris

Longleaf threeawn

Aristida purpurascens

Arrowfeather threeawn

	<i>Aristida spiciformis</i>	Bottlebrush threeawn
	<i>Axonopus fissifolius</i>	Common carpetgrass
	<i>Axonopus furcatus</i>	Big carpetgrass
E	<i>Bothriochloa pertusa</i>	Pitted bluestem, Pitted beardgrass
	<i>Cenchrus incertus</i>	Coastal sandbur
E	<i>Cynodon dactylon</i>	Bermuda grass
E	<i>Dactyloctenium aegyptium</i>	Crow's-foot grass, Durban crowfootgrass
	<i>Dichantherium aciculare</i>	Needleleaf witch grass
	<i>Dichantherium dichotomum</i>	Cypress witchgrass
	<i>Dichantherium ensifolium</i>	Cypress witchgrass
	<i>Dichantherium ensifolium var. unciphyllum</i>	Cypress witchgrass
	<i>Dichantherium leucothrix</i>	Rough witchgrass
	<i>Dichantherium portoricense</i>	Hemlock witchgrass
	<i>Dichantherium strigosum var. glabrescens</i>	Glabrescent roughhair witchgrass
E	<i>Digitaria bicornis</i>	Asia crabgrass
	<i>Digitaria ciliaris</i>	Southern crabgrass
E	<i>Digitaria longiflora</i>	Indian crabgrass
D	<i>Digitaria serotina</i>	Blanket crabgrass, Dwarf crabgrass
E	<i>Echinochloa colona</i>	Jungle-rice
E	<i>Echinochloa crus-galli</i>	Barnyardgrass
	<i>Echinochloa walteri</i>	Coast cockspur
E	<i>Eleusine indica</i>	Indian goose grass
	<i>Elionurus tripsacoides</i>	Pan-American balsamscale
E	<i>Eragrostis atrovirens</i>	Thalia love grass
E	<i>Eragrostis ciliaris</i>	Gophertail love grass
	<i>Eragrostis elliotii</i>	Elliott's love grass
	<i>Eragrostis virginica</i>	Coastal love grass
	<i>Eustachys glauca</i>	Prairie fingergrass, Saltmarsh fingergrass
	<i>Eustachys petraea</i>	Common fingergrass, Pinewoods fingergrass
	<i>Gymnopogon brevifolius</i>	Slim skeleton grass, Shortleaf skeleton grass
E	<i>Hemarthria altissima</i>	Limpogress
E	<i>Hymenachne amplexicaulis</i>	Trompetilla
	<i>Imperata brasiliensis</i>	Congongrass, Brazilian satintail
E	<i>Imperata cylindrica</i>	Congongrass, Cogongrass
	<i>Leersia hexandra</i>	Southern cutgrass
	<i>Leptochloa fascicularis</i>	Bearded spangletop, Bearded sprangletop
	<i>Luziola fluitans</i>	Water grass, Southern watergrass
	<i>Muhlenbergia capillaris</i>	Muhlygrass, Hairawnmuhly
	<i>Panicum dichotomiflorum</i>	Fall panic grass
	<i>Panicum dichotomiflorum var. bartowense</i>	Hairy fall panic grass
	<i>Panicum hemitomom</i>	Maidencane
	<i>Panicum hians</i>	Gaping panicum
E	<i>Panicum maximum</i>	Guineagrass
E	<i>Panicum repens</i>	Torpedo grass
	<i>Panicum rigidulum</i>	Redtop panicum
	<i>Panicum tenerum</i>	Bluejoint panicum
	<i>Panicum virgatum</i>	Switchgrass
	<i>Paspalidium geminatum</i>	Egyptian paspalidium
	<i>Paspalum conjugatum</i>	Sour paspalum, Hilograss
E	<i>Paspalum dissectum</i>	Mudbank crowngrass
	<i>Paspalum floridanum</i>	Florida paspalum
	<i>Paspalum laeve</i>	Field paspalum

	<i>Paspalum monostachyum</i>	Gulfdune paspalum
E	<i>Paspalum notatum</i>	Bahia grass
	<i>Paspalum praecox</i>	Early paspalum
	<i>Paspalum repens</i>	Water paspalum
	<i>Paspalum setaceum</i>	Thin paspalum
E	<i>Paspalum urvillei</i>	Vasey grass
	<i>Paspalum vaginatum</i>	Seashore paspalum
E	<i>Rhynchelytrum repens</i>	Rose Natalgrass
	<i>Saccharum giganteum</i>	Sugarcane plumegrass
E	<i>Sacciolepis indica</i>	Indian cupscale
	<i>Sacciolepis striata</i>	American cupscale
	<i>Schizachyrium rhizomatum</i>	Rhizomatous bluestem
	<i>Setaria parviflora</i>	Knotroot foxtail, Yellow bristlegrass
	<i>Sorghastrum secundum</i>	Lopsided Indian grass
E	<i>Sorghum bicolor</i>	Grain sorghum
	<i>Spartina bakeri</i>	Sand cordgrass
E	<i>Sporobolus indicus</i>	Smut grass
E	<i>Sporobolus indicus var. pyramidalis</i>	West Indian dropseed
	<i>Sporobolus junceus</i>	Pineywoods dropseed
E	<i>Urochloa mutica</i>	Paragrass
E	<i>Urochloa subquadriflora</i>	Signal grass, Tropical signalgrass
	<i>Zizaniopsis miliacea</i>	Southern wild-rice, Giant cut-grass
E	<i>Zoysia tenuifolia</i>	Mascarene templegrass

Pontederiaceae

Pontederia cordata

Pickerelweed

Smilacaceae

Smilax auriculata

Earleaf greenbrier

Smilax laurifolia

Catbrier, Laurel greenbrier, Bamboo vine

Smilax tamnoides

Catbrier, Bristly greenbrier, Hogbrier

Typhaceae

Typha domingensis

Southern cat-tail

Xyridaceae

Xyris ambigua

Coastalplain yelloweyed grass

Xyris brevifolia

Shortleaf yelloweyed grass

Xyris caroliniana

Carolina yelloweyed grass

Xyris difformis var. floridana

Florida yelloweyed grass

Xyris elliottii

Elliott's yelloweyed grass

Xyris flabelliformis

Savannah yelloweyed grass

E *Xyris jupicai*

Richard's yelloweyed grass

Xyris smalliana

Small's yelloweyed grass

Pteridophytes

Azollaceae

Azolla caroliniana

Carolina Mosquito Fern

Blechnaceae

Blechnum serrulatum

Swamp fern, Toothed midsorus fern

Woodwardia virginica

Virginia chain fern

<u>Dennstaedtiaceae</u>	
<i>Pteridium aquilinum</i> var. <i>caudatum</i>	Lacy braken fern
<i>Pteridium aquilinum</i> var. <i>pseudocaudatum</i>	Tailed braken fern
<u>Nephrolepidaceae</u>	
<i>Nephrolepis biserrata</i>	Giant sword fern
<i>Nephrolepis exaltata</i>	Wild Boston fern
E <i>Nephrolepis multiflora</i>	Asian sword fern
<u>Ophioglossaceae</u>	
<i>Ophioglossum petiolatum</i>	Stalked adder's tongue fern
<u>Osmundaceae</u>	
<i>Osmunda regalis</i> var. <i>spectabilis</i>	Royal fern
<u>Parkeriaceae</u>	
E <i>Ceratopteris thalictroides</i>	Watersprite
<u>Polypodiaceae</u>	
<i>Campyloneurum phyllitidis</i>	Long strap fern
<i>Phlebodium aureum</i>	Golden polypody
<i>Pleopeltis polypodioides</i> var. <i>michauxiana</i>	Resurrection fern
<u>Psilotaceae</u>	
<i>Psilotum nudum</i>	Whisk-fern
<u>Pteridaceae</u>	
E <i>Pteris vittata</i>	China brake
<u>Salviniaceae</u>	
E <i>Salvinia minima</i>	Water spangles
<u>Schizaceae</u>	
E <i>Lygodium microphyllum</i>	Small-leaf climbing fern
<u>Thelypteridaceae</u>	
<i>Thelypteris interrupta</i>	Interrupted maiden fern, Hottentot fern
<i>Thelypteris kunthii</i>	Southern shield fern
<i>Thelypteris palustris</i> var. <i>pubescens</i>	Marsh fern
<u>Vittariaceae</u>	
<i>Vittaria lineata</i>	Shoestring fern

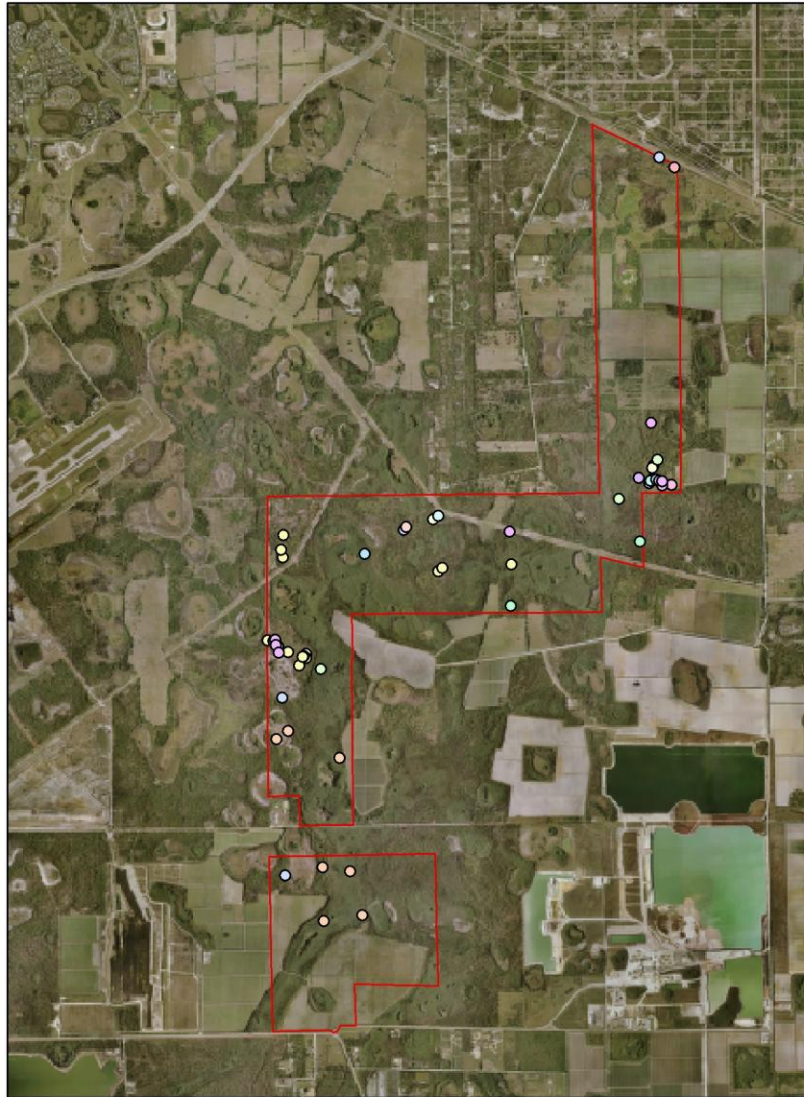
E = Not Native to the site

CE = Not Native to the site, persisting from cultivation only

D = Doubtfully Native to the site

Appendix 1: Wild Turkey Strand Preserve Rare Plant Locations

Wild Turkey Strand Preserve Rare Plant Locations Overview



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

Wild Turkey Strand Preserve Rare Plant Locations North



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
North of Powerlines, Southeast End**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
North of Powerlines, Southeast End 2**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
South of Powerlines, Central**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
South of Powerlines, Central, West End**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
South of Powerlines, South, West End**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
South of Powerlines, South, East End**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
South of Powerlines, South**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

**Wild Turkey Strand Preserve
Rare Plant Locations
South of Powerlines, Site 90**



Data collected Oct. 2004 - July 2005 by
Steven W. Woodmansee and other IRC staff
Map prepared by Steven W. Woodmansee and Keith Bradley
The Institute for Regional Conservation
Miami, FL
www.regionalconservation.org

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