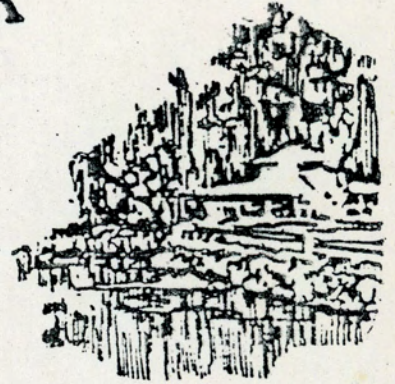


Arch Creek Park



Preservation, Restoration, Enhancement and Maintenance Program Plan



September
1983

**MEMBERS
OF
TRUST**

Wesley Wilson, President
Lou Stark, Vice-President
Pearl Stark, Secretary
Kathleen Miner, Treasurer
Henny Roth, At-large Member
Lee Ivy, At-large Member
Tom Pafford, At-large Member

ARCH CREEK TRUST NEGOTIATING COMMITTEE

Lou Stark
Lee Ivy
Rev. Charles Eastman

PARK AND RECREATION DEPARTMENT NEGOTIATING COMMITTEE

Gorman Daniels, North Division Superintendent
Morey Gascoigne, Sunny Isles District Supervisor
Emily Perry, Arch Creek Park Director

**CONSULTANTS
SELECTED BY
THE
COMBINED LIAISON COMMITTEE**

Roger Hammer, Director, Castellow Hammock Nature Center
Seymour Goldwebber, Dade County agricultural extension agent
Dr. Robert Knight, Research Horticulturalist
Dr. Taylor Alexander, retired biology professor, University of Miami
Dr. John Popenoe, Director, Fairchild Tropical Garden
Dr. Carl Campbell, University of Florida, Institute of Food and Agriculture

CHAIRMAN

Roger Hammer, Director
Castellow Hammock Nature Center

METRO-DADE PARK AND RECREATION DEPARTMENT

Bill Bird, Director
Dr. Chuck Pezoldt, Assistant Director



FLORIDA COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF FLORIDA
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

COOPERATIVE EXTENSION SERVICE
SCHOOL OF FOREST RESOURCES AND CONSERVATION

AGRICULTURAL EXPERIMENT STATIONS
COLLEGE OF AGRICULTURE

REPLY TO: 18905 SW 280 Street
Homestead, FL 33031

Sept. 16, 1983

Charles W. Pezoldt, Ph.D.
Assistant Director
Dade County Parks and
Recreation Dept.
50 SW 32nd. Road
Miami, Florida 33129

Dear Dr. Pezoldt:

I have reviewed the draft of the Arch Creek Park Preservation, Restoration, Enhancement and Maintenance Program Plan. This appears to be a reasonable plan which has been done thoughtfully and thoroughly.

It is not clear to me who is expected to carry out the duties enumerated in the daily checklists under the heading of Maintenance Recommendations. I would comment that the duties are quite a lot to expect of the present staff of the park. I assume this can be worked out among the people concerned.

Thank you for sending me the Arch Creek Program Plan. I will do my best to assist in this effort when called upon.

Yours sincerely,

Carl W. Campbell
Carl W. Campbell, Ph.D.
Professor of Horticulture

CWC:av

Fairchild Tropical Garden

10901 OLD CUTLER ROAD MIAMI, FLORIDA 33156
(305) 667-1651



John Popenoe, Ph.D., *Director*

September 7, 1983

Dr. Charles W. Pezoldt
Assistant Director
and Chief of Operations
Park and Recreation Dept.
50 S.W. 32 Road
Miami, Florida 33129

Dear Chuck,

I have carefully looked over the draft which outlines the Arch Creek Park Preservation, Restoration, Enhancement and Maintenance Plan.

I generally agree that this plan looks workable and fair and I hereby endorse it.













Sincerely yours,

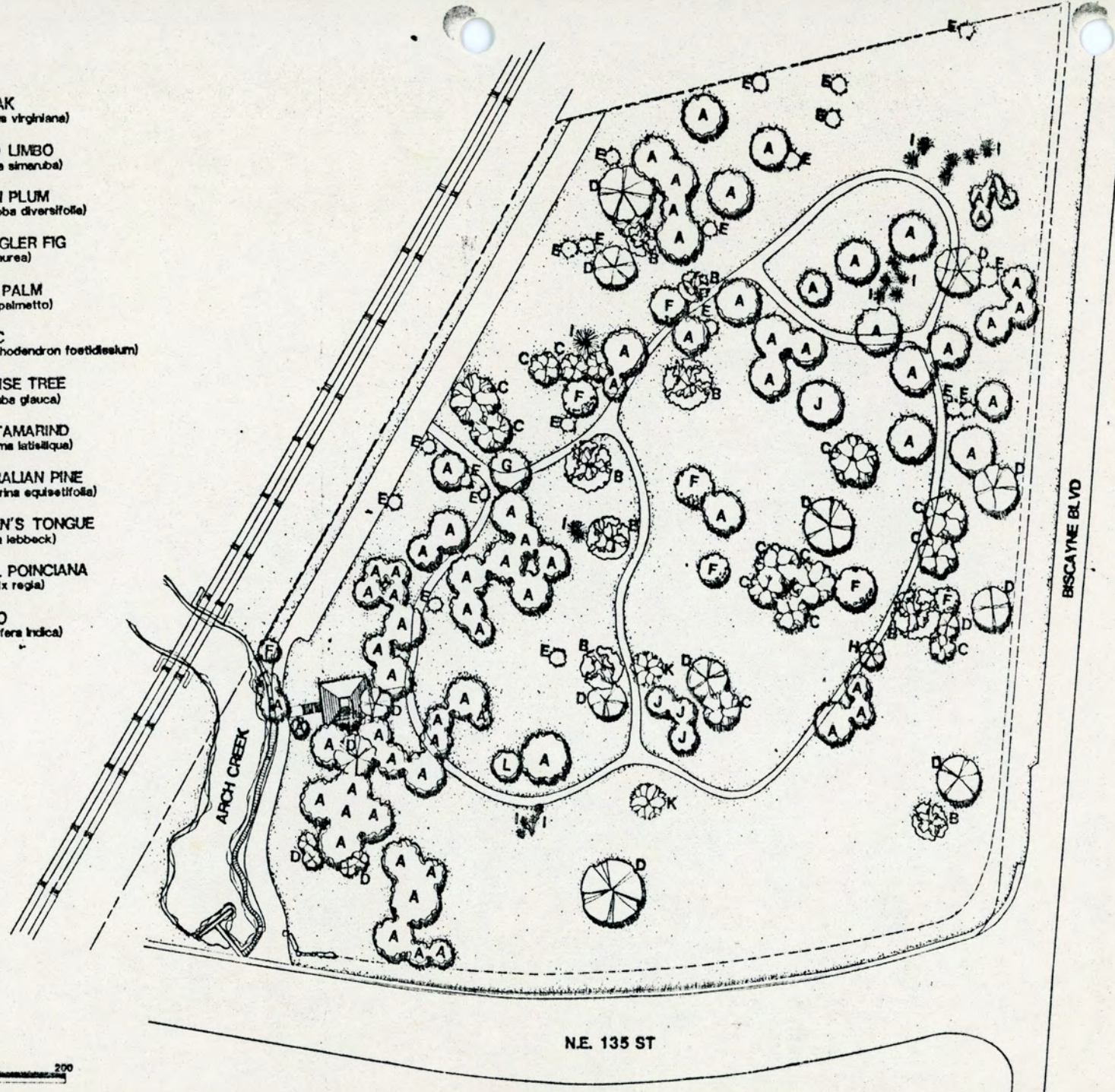
Fairchild Tropical Garden

A large, stylized handwritten signature in black ink that reads "John Popenoe". The signature is written over the typed name and title.

John Popenoe
Director

JP/bs

- A  LIVE OAK
(*Quercus virginiana*)
- B  GUMBO LIMBO
(*Bursera simaruba*)
- C  PIGEON PLUM
(*Coccoloba diversifolia*)
- D  STRANGLER FIG
(*Ficus aurea*)
- E  SABAL PALM
(*Sabal palmetto*)
- F  MASTIC
(*Maslichodendron foetidissimum*)
- G  PARADISE TREE
(*Simeruba glauca*)
- H  WILD TAMARIND
(*Lysiloma latifolia*)
- I  AUSTRALIAN PINE
(*Casuarina equisetifolia*)
- J  WOMAN'S TONGUE
(*Albizia lebbek*)
- K  ROYAL POINCIANA
(*Delonix regia*)
- L  MANGO
(*Mangifera indica*)



ARCH CREEK MEMORIAL PARK FOR CARL MERTES

INDEX

INTRODUCTION	Page 3
WORKING TOGETHER	Page 4
MEMORANDUM OF AGREEMENT	Page 5
HISTORY OF THE PARK	Page 10
WHAT THE PARK CONTAINS	Page 15
A LIST OF NATIVE VASCULAR PLANTS	Page 16
A LIST OF NATURALIZED EXOTIC PLANTS	Page 23
MAINTENANCE PLAN	Page 27
PLOT SHEET SAMPLE	Page 28
MAINTENANCE RECOMMENDATIONS	
HAMMOCK AREA	Page 29
RIGHT-OF-WAY	Page 31
INDIAN MOUND	Page 32
INTERPRETIVE AREA	Page 33
WAYSIDE AND TRAILS	Page 34
ROADWAY	Page 35
CREEK	Page 36
RECOMMENDED NATIVE PLANT SPECIES	Page 37

INTRODUCTION

Through cooperation between the members of the Arch Creek Trust and the Metropolitan Dade County Park and Recreation Department a plan for preservation, restoration, and maintenance has been prepared by competent professionals fully knowledgeable in these subject areas.

The plan will serve as the foundation for action by the Arch Creek Trust and the Park and Recreation Department.

Sincerest appreciation is expressed to all those who assisted in making this plan possible, and to those who are truly interested in preserving, restoring and maintaining the beautiful Arch Creek Park resource in perpetuity.

WORKING TOGETHER

Two major organizations are responsible for the success of Arch Creek park. These organizations are the Arch Creek Trust and the Metropolitan Dade County Park and Recreation Department.

A Memorandum of Agreement has been prepared to define the operational relationship of these two agencies. The agreement is intended to guide a team effort for the preservation, restoration, and maintenance of Arch Creek Park.

The Memorandum of Agreement is prepared to allow the organizations to work together for the daily operations of Arch Creek Park. The agreement does not replace the power of the Dade County Commissioners as duly constituted under law.

MEMORANDUM OF AGREEMENT

The Arch Creek Trust of Florida, hereinafter known as the Trust, a non-profit corporation organized under the laws of the State of Florida, has for many years assisted the Metropolitan Dade County Park and Recreation Department, hereinafter known as the Department, in various projects supportive of the Arch Creek Park at Miami. An Agreement is hereby established between the Department and Trust in order that the function of the Trust as it relates to Arch Creek Park will be clearly understood by all concerned. It is the goal of the Department and the Trust to develop and operate the Park consistent with its purpose.

The purpose of the Arch Creek Trust, a not for profit organization, is to preserve, protect, defend and enhance the natural character of the Arch Creek area; to recommend to the State of Florida, Metro-Dade County and/or the City of North Miami as to how best to preserve, protect, defend and enhance the natural flora, fauna, archeological artifacts and natural character of the Arch Creek area; and to bring to the attention of the public the needs of the area and support to those working to preserve it.

Because it is felt that this Agreement can be more appropriately prepared after the Department and Trust have jointly gained experience, this Memorandum of Agreement will suffice from this date until May 1, 1985. During this period, therefore, it is understood by the Trust and the Department that:

1. The Trust will assist in outlining the goals and objectives of staff people by:
 - a. The Trust may make recommendations concerning job descriptions for the Department employees who work at Arch Creek Park. The final

decisions on job descriptions will be that of the Personnel Division of the Department in accordance with all Civil Service rules.

- b. The Trust may have one representative on any Department Personnel Committee interviewing candidates for positions at Arch Creek Park.
 - c. The Trust may make recommendations concerning job evaluations on each member of the Arch Creek Park staff to the Director of the County's Park and Recreation Department. The Director will have the right to decide if the Trust's recommendations will be made a part of the employee's personnel file in accordance with Civil Service Rules.
2. The Trust shall approve a Master Site Plan and Master Maintenance Plan. The Department agrees that they will keep an accurate inventory of plant materials that exist within the park and that a regular physical review of the park resources will be conducted a minimum of five days per week. A report on the inventory shall be given to the Trust twice each year at their semi-annual meetings. A regular work plan will be developed and an update of the work plan and work progress will be made a matter of information to the Trust at their regular meetings. Trust assistance will be requested by the Department where appropriate.
 3. The Executive Board of the Trust or three representatives appointed by them shall approve the use by the Department of any chemical insecticides, pesticides or fertilizers at Arch Creek Park. Further, the Executive Board of the Trust or the representatives appointed by them shall approve the removal, trimming or planting, digging, artifact, or plant removal at Arch Creek Park.

4. The Trust, through its Executive Board or a meeting of its general membership, will be asked to contribute to the goals and objectives outlined by the Department for the Park's annual budget, and will offer advice and consent on the final draft to be prepared by the Park and Recreation Department.
5. The Trust will be granted permission to operate concessions at Arch Creek Park provided they have a "Permit to do Business on County Property" which has been duly executed by the County Manager's office. The Department assumes no responsibility or liability for the banking or accounting of funds raised by the Trust for Arch Creek Park.
6. The Department will provide the steel structure or foundation for the bridge when funds are available which is to be constructed at Arch Creek Park and will submit site plans to the Trust's Executive Board for approval before construction commences. The Trust will provide the artist and the necessary funds to pay him or her for the reconstruction of the natural bridge project on the original site. The Department reserves the right to approve the artist after submission of the artist's credentials to them. The Trust shall set up a Trust Fund to deposit monies collected in conjunction with the restoration and preservation of Arch Creek Park.
7. Should a Junior Auxiliary be formed, it will be a part of the Trust.
8. All correspondence and communication bearing on the operation of this Memorandum of Agreement shall be directed to the Office of the Superintendent of Parks and Recreation, North Division.

9. The Trust will enable the Department to conduct regular audits of the Trust's financial records. It is understood that the Trust will continue to keep their own financial system of receipts, deposits and disbursements of monies.
10. The Department shall continue to cooperate with the Trust in the holding of special events designed to promote the Trust, its membership and Arch Creek Park.
11. The Department agrees to provide commensurate recognition for any special sponsorships or donations which may be secured by the Trust.
12. The Department shall retain the right of approval on any third party agreements which impact the normal operation of the Arch Creek Park or that may obligate the Department to perform in any manner whatsoever.
13. The Trust is currently involved in fund raising for several projects within Arch Creek Park, including the bridge. It is agreed that all solicitations for private funding for capital funding and ongoing support within Arch Creek shall be the responsibility of the Trust and all solicitations for public funding shall be the responsibility of the Department.
14. The Department and the Trust shall jointly prepare and publish a guide book which will be distributed and sold, the Trust retaining all net (after costs) proceeds.

15. A committee of three from the Arch Creek Trust and a committee of Dade County Park and Recreation shall meet monthly to assess the progress of the implementation of this agreement.

16. The Trust agrees to make no changes in their charter, constitution or bylaws without notifying the Department in writing.

The County agrees to cooperate with the Trust's increased role as outlined above and through whatever other joint efforts may be adopted.

The Department agrees that the intent of this Memorandum of Agreement is to further the relationship between the Trust and the Department in order that all Dade Countians may benefit.

Executed this _____ day of _____, 1983.

Bill Bird, Director
Dade County Park & Recreation Department

HISTORY OF THE PARK

Arch Creek, and the area surrounding it, was one of six Tequesta Indian occupation sites built along Dade County estuaries. The Tequestas established other campsites at the Oleta River, Surfside, Little River, the Miami River, and Snapper Creek. Arch Creek, however, was unique. It had a natural limestone bridge spanning 60 feet, from which the Indians could fish and which provided a raised, dry highway to the Everglades.

Other factors contributed to the idyllic setting at Arch Creek. There was an oak hammock near the creek, which provided shade, as well as edible plants, nuts and berries. Biscayne Bay, less than a half mile away, was a prime food source for the Tequestas; there they caught shellfish, shark, manatee and turtle. North of the hammock were pine flatlands, which sheltered the all-important coontie plant (*Zamia integrifolia*), whose roots the Indians ground to make an edible starch product.

Tequesta habitation sites characteristically have midden areas, or Indian garbage dumps. The gradual decomposition of refuse, including plant material and animal bones, produces a rich black soil. Many artifacts have been preserved in the soil, and archaeologists have uncovered many of them, such as bone points, shell tools and pottery shards. During their centuries of occupation (from c. 400 A.D. to c. 1200 A.D.), the Arch Creek Tequestas had what appears to be a fairly comfortable lifestyle, supported by the abundant natural resources at the site.

The Tequestas were the first people to recognize the value of Arch Creek, but they were not the only ones. Around 1858 two ambitious pioneers used the creek and its natural bridge as a site for a coontie starch mill. These early entrepreneurs learned how to clean the poisonous roots, and dammed up the waterway under the bridge, diverting the flow

through a sluice they carved out of a solid limestone bank. The water turned a wooden wheel attached to a nail-studded grinder, which mashed the cootie roots into a paste-like pulp. The resulting starch was then soaked and strained to remove any remaining poison. Laid out in wooden racks, the starch dried quickly, and the sun bleached it white. But coontie starch was not as successful as the pioneers thought, and the mill was abandoned several years later. The water sluice was filled in and paved over, and was not discovered until archaeologists excavated it in 1972.

During the early 1800's the natural bridge was part of the only passable connection between Ft. Dallas in Miami and Ft. Lauderdale, in what is now Broward County. It served a valuable function in the Seminole Indian Wars, and formed part of the Capron Trail (also known as Military Trail). By the late 1800's a few more people had settled around Arch Creek. Many of these settlers came from Elmira, New York to homestead the rich land and take advantage of the tropical climate. They began the city known as North Miami, and were primarily an agricultural community, growing and exporting thousands of crates of tomatoes and pineapples each year. When the railroad was built part of it ran alongside Arch Creek for some sections. The Arch Creek Depot opened in 1903, followed soon by a post office and a school.

Many of the pioneer North Miamians used the Arch Creek Bridge as a picnic and sightseeing spot. They fished from the bridge, and a few baptisms were performed in the clear water of the creek. The Metropolis Newspaper, reported that one Clarence H. Billings "had cleaned out the obstructions in Arch Creek so that he could operate his launch, the 'Laura' which drew only twenty inches of water, for sightseeing trips between Miami and the Natural Bridge. It was a good tourist trip because of the deep gorge near the Natural Bridge, the bridge itself, the tropical foliage covering the banks of the winding streams, the trees covered with immense orchids, the alligators sunning along the

banks and the quail and duck shooting". (Peters, 1976.)

A refreshment stand, which also dispensed souvenirs and postcards, stood at the north end of the bridge for many years. It was plastered with conch shells, and called "the shellhouse" by the locals. By 1920, Arch Creek had a population of 307. During the land boom, 400 acres in the area sold for \$33,000,000 in just two and one half hours. The money was reportedly carried to a bank in wooden barrels (Muir, 1953).

For the next thirty years, Arch Creek continued to grow and develop. In 1952 it was incorporated into the City of North Miami. During the 1950's, it was the home of the Sea Breeze Trailer Park. The tall oaks sheltered almost a hundred trailers near what is now N.W. 135th Street.

In 1957, the first of many threats against the future of the natural bridge materialized. The bridge was endangered by a plan to drain low lying areas as part of a flood prevention program. The Army Corps of Engineers wanted to blow up the bridge, or re-route the creek. A 1957 newspaper article announced that "the bridge must be sacrificed for better drainage of the area". Fortunately, protests from members of the local Audobon Society, the Historical Association of Southern Florida and the Dade Conservation Council prevented any of this destructive action.

Things remained quiet until the 1970's, when Arch Creek became the property of the Chrysler Automobile Corporation. Their plans called for the construction of an automobile showroom, and a new and used car agency. In 1972, Chrysler requested a zoning change from the City of North Miami, which would have allowed them to pave the area and build a garage on the property. Vigorous opposition came from the Tropical Audubon Society, the Miami-West India Archaeological Society, the Keystone Point

Homeowners' Association, and the members of the Arch Creek Trust. After almost a year of intense lobbying the State of Florida agreed to purchase the land for a state park. The State's Land Acquisition Trust allocated \$822,000 to buy 7.9 acres of property east of the creek.

A group of local citizens went to Tallahassee in February 1973, to finalize the agreement. On the night they returned, the natural bridge collapsed and fell into the creek. Rumors of sabotage ran through the community, and the Metro-Dade Police Bomb Squad was called out. Nothing was discovered, and experts generally agreed later that the fall was probably due to constant vibrations from passing trains, or erosion, or just old age and decay. In the years that followed, there were various efforts to restore the bridge, clear the property of trash and save additional land in the area.

In 1978 Dade County leased the land from the State and began making plans to turn it into a passive recreation facility. Clean-up crews appeared, and construction started on a small museum and nature study center. A nature trail was constructed in the hammock area. The Arch Creek Park was formally dedicated on April 25, 1982. Today, Arch Creek is an eight-acre site at the junction of N.W. 135th Street and Biscayne Boulevard, and offers many opportunities for botanical, historical and archaeological study. It has a museum/nature center modeled after an early Florida pioneer home, displaying Indian artifacts dug from the grounds, and live animals from the nearby hammock. Remains of the original coontie mill are still visible across the creek, and the Park exists as the only preserved archaeological site in the County.

There is a year 'round program of activities at the park, ranging from lectures by environmentalists, historians and archaeologists to monthly films featuring environmental subjects. Popular workshops and classes offer palm frond weaving, beekeeping and nature

crafts. Guided trail walks are held every week, and many Dade County schoolchildren visit on a regular basis.

The Arch Creek Trust is a citizen's advisory group formed during the tumultuous years of early preservation efforts. It continues to raise funds to restore the natural bridge, and for the preservation and maintenance of the hammock within the Park. The goal of the Trust members is to make this remarkable site accessible and available to all the residents and visitors in Dade County, and to bring the ghostly history of the Tequesta Indians alive.

WHAT THE PARK CONTAINS

A comprehensive inventory of plants that exist at Arch Creek Park was conducted by consultants. They are listed in two categories:

- (1) Native Vascular Plants and
- (2) Naturalized Exotic Plants.

The list follows:

A LIST OF NATIVE VASCULAR PLANTS

ARCH CREEK PARK
MIAMI, FLORIDA

24 JULY 1983

ACANTHACEAE - Acanthus Family

Blechum brownei Green Shrimp Plant

AGAVACEAE - Agave Family

Agave americana Century Plant
Yucca aloifolia Spanish-Bayonet

ANACARDIACEAE - Cashew Family

Toxicodendron radicans Poison-Ivy

AQUIFOLIACEAE - Holly Family

Ilex cassine Dahoon Holly

ARECACEAE - Palm Family

Roystonea elata Royal Palm
Sabal palmetto Sabal Palm; Cabbage Palm
Serenoa repens Saw-Palmetto
Thrinax radiata Jamaican Thatch Palm

ASCLEPIADACEAE - Milkweed Family

Asclepias tuberosa sp. rolfsii Butterfly Weed

ASTERACEAE - Aster Family

Ambrosia artemisiifolia Common Ragweed
Aster subulatus Aster
Baccharis halimifolia Saltbush
Bidens pilosa Spanish-Needle
Calyptocarpus vialis Dwarf Horseweed
Conyza canadensis
Erigeron quercifolia Dog Fennel
Eupatorium capillifolium
Eupatorium serotinum
Flaveria linearis Yellowtop
Gaillardia pulchella Blanketflower
Heterotheca subaxillaris Camphorweed
Melanthera aspera
Mikania sp.
Pectis prostrata
Pluchea symphytifolia Bushy Fleabane

ASTERACEAE (Continued)

Solidago leavenworthii	Goldenrod
Solidago sempervirens	Goldenrod
Tridax procumbens	
Verbesina virginica var. laciniata	

BORAGINACEAE - Borage Family

Cordia sebestena	Geiger Tree
Heliotropium curassavicum	Heliotrope

BRASSICACEAE - Mustard Family

Lebidium virginicum	Peppergrass
---------------------	-------------

BROMELIACEAE - Pineapple Family

Tillandsia balbisiana	Reflexed Wild Pine
Tillandsia circinnata	
Tillandsia fasciculata	Stiff-Leaved Wild Pine; Cardinal Air Plant
Tillandsia recurvata	Ball-Moss
Tillandsia setacea	Needle-Leaved Wild Pine
Tillandsia usneoides	Spanish-Moss
Tillandsia utriculata	Giant Wild Pine
Tillandsia valenzuelana	Soft-Leaved Wild Pine

BURSERACEAE - Torchwood Family

Bursera simaruba	Gumbo-Limbo
------------------	-------------

CACTACEAE - Cactus Family

Opuntia sp.	Prickly-Pear
-------------	--------------

CAPRIFOLIACEAE - Honeysuckle Family

Sambucus canadensis	Elderberry
---------------------	------------

CELASTRACEAE - Bittersweet Family

Schaefferia frutescens	Florida Boxwood
------------------------	-----------------

CHRYSOBALANACEAE - Chrysobalanus Family

Chrysobalanus icaco	Coco-Plum
---------------------	-----------

COMBRETACEAE - Combretum Family

Laguncularia racemosa	White Mangrove
-----------------------	----------------

CONVOLVULACEAE - Morning-glory Family

Ipomoea Indica
Ipomoea Triloba

Morning-Glory
Morning-Glory

CYPERACEAE - Sedge Family

Cyperus Brevifolia
Cyperus Distinctus
Cyperus Globulosus
Cyperus Ligularis

EBENACEAE - Ebony Family

Diospyros Virginiana

Persimmon

EUPHORBIACEAE - Spurge Family

Chamaesyce Blodgettii
Chamaesyce Hirta
Chamaesyce Hypericifolia
Chamaesyce Hyssopifolia
Chamaesyce Ophthalmica
Croton Glandulosus
Phyllanthus Amarus
Poinsettia Cyathophora
Poinsettia Heterophylla

Spurge
Spurge
Spurge
Spurge
Spurge

Painted Leaf

FABACEAE - Pea Family

Acacia Farnesiana
Cassia Aspera
Cassia Occidentalis
Crotalaria Rotundifolia
Dalbergia Ecastophyllum
Erythrina Herbacea
Galactia Parvifolia
Lysiloma Latisiliquum
Piscidia Piscipula
Sophora Tomentosa
Stylosanthes Hamata
Vicia Acutifolia
Vigna Luteola

Sweet Acacia

Rabbit-Bells
Coin Vine
Coral-Tree
Milk Pea
Wild-Tamarind
Jamaican Dogwood; Fishpoison Tree
Necklace-Pod
Pencil Flower

Cow-Pea

FAGACEAE - Oak Family

Quercus Virginiana

Live Oak

LAMIACEAE - Mint Family

Salvia Coccinea

Tropical Sage

LAURACEAE - Laurel Family

Nectandra Coriacea
Persea Borbonia

Lancewood
Redbay

LEMNACEAE - Duckweed Family

Lemna Sp. Duckweed

LOASACEAE - Loasa Family

Mentzelia Floridana Poor-Man's Patches

MALVACEAE - Mallow Family

Malvastrum Corchorifolium False Mallow
Sida Acuta Teaweed

MELIACEA - Mahogany Family

Swietenia Mahagoni West-Indies Mahogany

MORACEAE - Mulberry Family

Ficus Aurea Strangler Fig
Ficus Citrifolia Short-Leaf Fig; Wild Banyan

MYRSINACEAE - Myrsine Family

Ardisia Escallonioides Marlberry
Myrsine Floridana Myrsine

MYRICACEAE - Bayberry Family

Myrica Cerifera Wax-Myrtle

MYRTACEAE - Myrtle Family

Eugenia Axillaris White Stopper
Eugenia Foetida Spanish Stopper

NYCTAGINACEAE - Four O'Clock Family

Boerhavia Diffusa Red Spiderling
Guapira Discolor Blolly

OLEACEAE - Olive Family

Forestiera Segregata Var. Segregata Florida Privet

ONAGRACEAE - Evening Primrose Family

Ludwigia Octavalvis

ORCHIDACEAE

Encyclia Tampensis Butterfly Orchid
Eulophia Alta Wild-Coco

PASSIFLORACEAE - Passionflower Family

Passiflora suberosa

Corky-stemmed Passionflower

PHYTOLACCACEAE - Pokeweed Family

Petiveria alliacea
Phytolacca rigida
Rivina humilis

Pokeweed
Blood-Betty

PINACEAE - Pine Family

Pinus elliottii var. *densa*

South Florida Slash Pine

POACEAE - Grass Family

Andropogon virginicus
Cenchrus incertus
Chloris petraea
Paspalum setaceum
Setaria geniculata
Setaria macrosperma
Sporobolus indicus
Sporobolus virginicus
Stenotaphrum secundatum
Tripsacum dactyloides

Sandspur
Finger Grass
Foxtail Grass
Dropseed
Dropseed
St. Augustine Grass
Eastern Gama Grass; "Indian Corn"

POLYGALACEAE - Milkwort Family

Polygala grandiflora

POLYGONACEAE - Buckwheat Family

Coccoloba diversifolia

Pigeon-Plum

PORTULACACEAE - Purslane Family

Portulaca oleracea

Purslane

PTERIDOPHYTES - Ferns

Polypodium aureum
Polypodium phyllitidis
Polypodium polypodioides
Thelypteris kunthii
Vittaria lineata

Serpent Fern; Golden Polypody
Strap Fern
Resurrection Fern
Marsh Fern
Shoestring Fern

RHIZOPHORACEAE - Mangrove Family

Rhizophora mangle

Red Mangrove

ROSACEAE - Rose Family

Prunus myrtifolia

West-Indian Cherry

RUBIACEAE - Madder Family

Borreria verticillata	Bedstraw
Galium hispidulum	Firebush
Hamelia patens	Wild-Coffee
Psychotria nervosa	Wild-Coffee
Psychotria sulzneri	Indigo Berry
Randia aculeata	
Spermacoce assurgens	
Spermacoce tetraquetra	

RUTACEAE - Rue Family

Zanthoxylum clava-herculis	Hercule's-Club
Zanthoxylum fagara	Wild-Lime

SAPOTACEAE - Sapodilla Family

Chrysophyllum oliviforme	Satinleaf
Mastichodendron foetidissimum	Mastic

SIMAROUBACEAE - Quassia Family

Simarouba glauca	Paradise Tree
------------------	---------------

SMILACACEAE - Greenbriar Family

Smilax auriculata	Greenbriar
-------------------	------------

SOLANACEAE - Nightshade Family

Physalis viscosa var. elliotii	Ground Cherry
Solanum americanum	

TILIACEAE - Basswood Family

Triumfetta semitriloba	Burweed
------------------------	---------

ULMACEAE - Elm Family

Celtis laevigata	Sugarberry
Trema micrantha	Florida Trema

URTICACEAE - Nettle Family

Boermeria cylindrica	Button-Hemp
----------------------	-------------

VERBENACEAE - Verbena Family

Callicarpa americana	Beauty Berry
Citharexylum fruticosum	Fiddlewood
Lantana depressa	Lantana

VITACEAE - Grape Family

Ampelopsis arborea
Parthenocissus quinquefolia
Vitis rotundifolia
Vitis shuttleworthii

Pepper Vine
Virginia Creeper
Wild Grape
Wild Grape

ZAMIACEAE - Cycad Family

Zamia pumila

Coontie

Prepared by members of the Native Plant Workshop
Metro-Dade County Park and Recreation Department

24 July, 1983

A LIST OF NATURALIZED EXOTIC PLANTS

ARCH CREEK PARK
MIAMI, FLORIDA

24 JULY 1983

ACANTHACEAE - Acanthus Family

Odontonema strictum

AGAVACEAE - Agave Family

Sansevieria thysiflora

Snake Plant

ANACARDIACEAE - Cashew Family

Mangifera indica

Mango

Schinus terebinthifolia

Brazilian-Pepper

APOCYNACEAE - Oleander Family

Allamanda cathartica

Yellow Allamanda

Catharanthus roseus

Madagascar Periwinkle

ARACEAE - Arum Family

Syngonium podophyllum

Arrowhead Vine

ARECACEAE - Palm Family

Cocos nucifera

Coconut Palm

Ptychosperma elegans

Solitaire Palm

ASTERACEAE - Aster Family

Emilia fosbergii

Tassle-Flower

Wedelia trilobata

Wedelia

BIGNONIACEAE - Bignonia Family

Tabebuia pentaphylla

Pink Trumpet Tree

CACTACEAE - Cactus Family

Cereus undatus

Night-Blooming Cereus

CASUARINACEAE - Beefwood Family

Casuarina equisetifolia

Australian-Pine

COMMELINACEAE - Spiderwort Family

Commelina diffusa
Rhoeo spathacea Oyster Plant

CRASSULACEAE - Orpine Family

Bryophyllum pinnatum Live-Leaf

CUCURBITACEAE - Gourd Family

Momordica charantia Balsam-Pear

CYPERACEAE - Sedge Family

Cyperus alternifolius Umbrella Plant
Cyperus rotundus Nut-Grass

DIOSCOREACEAE - Yam Family

Dioscorea blubifera Air-Yam

EUPHORBIACEAE - Spurge Family

Acalypha wilkesiana Copperleaf
Bischofia javanica Toog; Bishopwood

FABACEAE - Pea Family

Abrus precatorius Rosary-Pea
Albizia lebbeck Woman's-Tongue Tree
Bauhinia variegata Orchid Tree
Crotalaria spectabilis
Delonix regia Royal Poinciana
Desmodium tortuosum
Indigofera spicata Creeping Indigo
Mucuna pruriens Cow-itch
Rhynchosia minima

LILIACEAE - Lily Family

Asparagus sprengeri Asparagus Fern

MALVACEAE - Mallow Family

Malvaviscus arboreus Turk's Cap; Sleeping Hibiscus
Thespesia populnea Seaside Mahoe
Urena lobata Caesar-Weed

MELIACEAE - Mahogany Family

Melia azedarach China-Berry

MORACEAE - Mulberry Family

Ficus elastica

Rubber Tree

MUSACEAE - Plantain Family

Musa sapientum

Banana

MYRSINACEAE - Myrsine Family

Ardisia solanaceae

Shoe-Button Ardisia

MYRTACEAE - Myrtle Family

Eugenia uniflora

Surinam-Cherry

NYCTAGINACEAE - Four O'Clock Family

Mirabilis jalapa

Four-O'Clock

OLEACEAE - Olive Family

Jasminum sambac

Arabian Jasmine

ORCHIDACEAE - Orchid Family

Vanilla sp.

PAPAVERACEAE - Poppy Family

Argemone mexicana

Mexican Poppy

POACEAE - Grass Family

Cynodon dactylon

Bermuda Grass

Dactyloctenium aegyptium

Crowfoot Grass

Eleusine indica

Goosegrass

Neyraudia reynaudiana

Burma-Reed

Panicum maximum

Pennisetum purpureum

Napier Grass

Rhynchelytrum repens

Natal Grass

Sporobolus pyramidalis var. *jacquemontii*

Dropseed

POLYGONACEAE - Buckwheat Family

Antigonon leptopus

Coral-Vine

PTERIDOPHYTES - Ferns

Nephrolepis cordifolia

Tuber-Sword Fern

Pteris vittata

Brake

MAINTENANCE PLAN

Maintenance of Arch Creek should be approached in three components:

(1) Regular maintenance by area. The areas are defined as:

- (A) Hammock
- (B) Right-of-way
- (C) Indian Midden
- (D) Interpretive Area
- (E) Trail
- (F) Roadway area
- (G) Arch Creek

(2) Removal of certain Exotic Naturalized Plant Species and

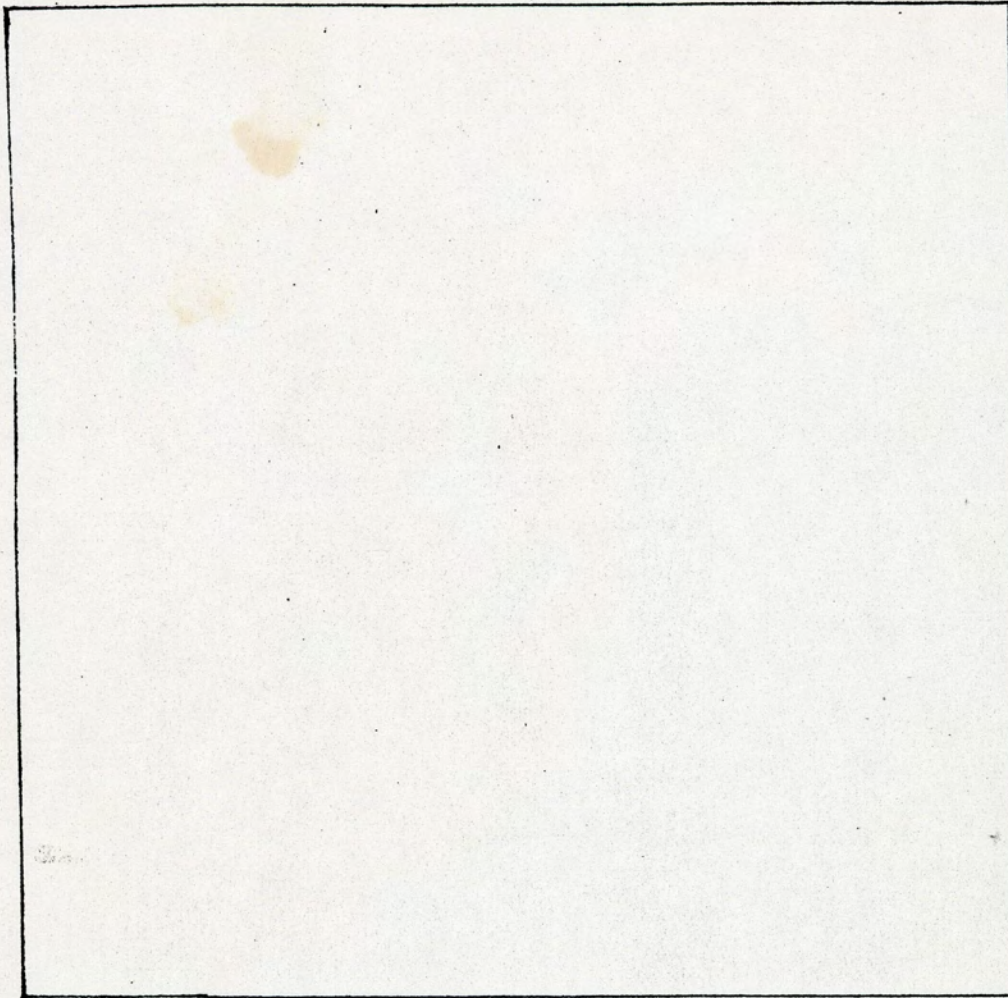
(3) Re-establish the Native Plant Community.

Although the basic maintenance plan is written, the approach to the removal of exotic plants and new plantings should be done on a plot-by-plot basis.

It is suggested that the Consultant Committee work one or more plots at a time and make final recommendations for removal and/or establishment of plants. Detailed drawings of each plot should be made on respective plot sheets.

ARCH CREEK PLOT BOOK

PLOT # _____



Existing native plants _____

Exotic plants to be removed _____

New native plants to be planted _____

Maintenance plan _____

Certification _____ Arch Creek Trust

Chief of Consultant Committee

MAINTENANCE RECOMMENDATIONS

ARCH CREEK PARK
MIAMI, FLORIDA

Hammock Area

1. Removal of Exotic Naturalized Plant Species:

- A. Those plant species which have long ago proven their invasive character should receive immediate attention. At Arch Creek, these species would include:

Australian-Pine
Rischofia
Shoe-Button Ardisia
Woman's-Tongue Tree
Orchid Tree
China-Berry
Air-Yam
Brazilian Pepper
Syngonium

- B. Exotic species such as royal poinciana, mango and rubber tree could be retained to serve as temporary shade and protection for native trees and understory plants until they become well established.
- C. The control of invasive grasses (i.e. Burma Reed, Natal Grass and Napier Grass) through mechanical means should precede the re-planting of native grasses and understory plants. At present, exotic grasses appear to be the park's greatest threat.
- D. Native vines such as morning-glory and wild grape should be pruned back off of those trees which they are engulfing.

2. Re-establish Native Plant Community

- A. Efforts should be made to encourage seedlings of native plant species throughout the park.
- B. Suitable native plant material should be acquired to help re-establish a viable native plant community and to discourage the spread and re-invasion of exotic plant species.
- C. Efforts should be made to re-introduce only those native plants that were historically indigenous to the area.
- D. Discourage the spread of epiphytic strangler figs in mature oaks and sabal palms. A specimen near the nature trail should be retained for interpretive purposes.
- E. Care must be taken not to remove exotic plants in large plots if suitable native plant material is not immediately at hand to revegetate the site. Mulch would be useful to discourage invasion of disturbed soil by exotic species and to improve soil conditions.

- F. The seaside mahoe tree (*Thespesia Populnea*) planted next to the nature center building is a large, spreading and invasive tree and should be removed. It is not native to Florida.

MAINTENANCE RECOMMENDATIONS

ARCH CREEK PARK
MIAMI, FLORIDA

Right-of-way Daily Checklist

1. Complete cleaning of litter, bottles, glass and cans to be performed twice a week, preferably on Monday and Fridays.
2. Continuous observation to avoid accumulation of debris or hazardous materials is required.
3. Cut U.S. 1 area with sling blade once every three weeks.
4. Cut 135th Street with rotary mower once a week.

MAINTENANCE RECOMMENDATIONS

ARCH CREEK PARK
MIAMI, FLORIDA

Indian Midden Daily Checklist

1. Check for vandalism.
2. Patrol area for litter and hazardous materials.
3. Establish schedule for weed elimination.
4. Establish fertilizing schedule.

MAINTENANCE RECOMMENDATIONS

ARCH CREEK PARK
MIAMI, FLORIDA

Interpretive Area Daily Checklist

1. Check for vandalism
2. Patrol area for litter and hazardous materials.
3. Schedule cleaning of all garbage cans with detergent and water once every two weeks.
4. Check plant materials.
5. Establish watering schedule.
6. Schedule tree and shrubbery pruning or removal when needed.
7. Establish fertilizing schedule for all trees and shrubs.

MAINTENANCE RECOMMENDATIONS

ARCH CREEK PARK
MIAMI, FLORIDA

Walkways and Trails

1. Check for pot holes and eroded shoulders.
2. Check mulch and add mulch monthly, (use Australian pine mulch, not melaleuca)
3. Check for debris.
4. Check signs to make sure they are straight and painted.
5. Check trail edge to the foliage line and trim small grass areas once and every two weeks.
6. Maintain trail width at four feet.

MAINTENANCE RECOMMENDATIONS

ARCH CREEK PARK
MIAMI, FLORIDA

Roadway Daily Checklist

1. Complete cleaning of litter bottles, glass and cans to be performed twice a week, preferably on Monday and Friday.
2. Continuous observation to avoid accumulation of debris or hazardous materials is required.
3. Check for holes daily.
4. Check for patch needs, monthly.
5. Check daily that cars are parked in appropriately marked areas.

MAINTENANCE RECOMMENDATIONS

ARCH CREEK PARK
MIAMI, FLORIDA

Creek Daily Checklist

1. Establish weed control plan for canal bank.
2. Establish aquatic weed control plan. Use diquat on duck week is the only chemical that can be used in the creek itself.
3. Check bank area daily following rain for erosion.
4. When Bridge is complete, check daily for litter.
5. Clean litter out of water.

RECOMMENDED NATIVE PLANT SPECIES

ARCH CREEK PARK MIAMI, FLORIDA

The following is a listing of native trees, shrubs and understory plants whose natural range includes north Dade County in the area of Arch Creek Park. The Range maps in "Atlas of United States Trees, Volume 5: Florida" by Elbert L. Little, were used as reference.

CANOPY TREES

South Florida Slash Pine
Gumbo-Limbo
Blackbead
Satinleaf
Fiddlewood
Pigeon-Plum
Willow-Bustic
Black Ironwood
Gulf Licaria
Wild-Tamarind
Mastic
Lancewood
Jamaican Dogwood
Paradise Tree
Sugarberry
Live Oak
Redbay
Bald Cypress
Persimmon
Inkwood
Sweetbay

Pinus elliottii var. *densa* *
Bursera simaruba *
Pithecellobium guadalupense *
Chrysophyllum oliviforme *
Citharexylum fruticosum *
Coccoloba diversifolia *
Dipholis salicifolia
Krugiodendron ferreum
Licaria triandra
Lysiloma latisiliquum *
Mastichodendron foetidissimum *
Nectandra coriacea *
Piscidia piscipula *
Simarouba glauca *
Celtis laevigata *
Quercus virginiana *
Persea borbonia *
Taxodium distichum
Diospyros virginiana *
Exothea paniculata
Magnolia virginiana

SMALL TREES & SHRUBS

Cocoplum
Marlberry
Silver Palm
White Stopper
Spanish Stopper
Blolly
Rough Velvetseed
Firebush
Simpson's Stopper
West Indies Cherry
Myrsine
Florida Trema
Tallowwood; Hog-Plum
Wild-Lime
Hercule's-Club

Chrysobalanus icaco *
Ardisia escallonioides *
Coccothrinax argentata
Eugenia axillaris *
Eugenia foetida *
Guapira discolor *
Guettarda scabra
Hamelia patens *
Myrcianthes fragrans
Prunus myrtifolia *
Myrsine floridana *
Trema micrantha *
Ximenia americana
Zanthoxylum fagara *
Zanthoxylum clava-herculis *

Wax-Myrtle
Saw-Palmetto
Florida Privet
Dahoon Holly
Wild Sage
Sumac
Wild Coffee
Wild Coffee
Spanish-Bayonet
Red Mulberry
Coastal Plain Willow
Rusty Lyonia
Coral-Bean
Buttonbush

Myrica cerifera *
Serenoa repens *
Forestiera segregata var. *segregata* *
Ilex cassine *
Lantana involucrata
Rhus copallina var. *leucantha*
Psychotria nervosa *
Psychotria sulzneri *
Yucca aloifolia
Morus rubra
Salix caroliniana
Lyonia ferruginea
Erythrina herbacea *
Cephalanthus occidentalis

UNDERSTORY

Coontie
Boston Fern
Eastern Gama Grass
Lantana
Beach Creeper
Prickly-Pear
Ageratum
Twin-Flower

Zamia pumila *
Nephrolepis exaltata
Tripsacum dactyloides *
Lantana depressa *
Ernodea littoralis
Opuntia austrina
Ageratum littorale
Dyschoriste oblongifolia

The above-listed understory plants are all available at native plant landscape nurseries. The species list could be expanded according to availability.

Three (3) species of native trees have been planted at the park whose natural range indicates that they were not historically present there. These species are listed below:

Royal Palm
West Indies Mahogany
Florida Boxwood

Roystonea elata
Swietenia mahagoni
Schaefferia frutescens

(* Indicates naturally occurring native species at the park)