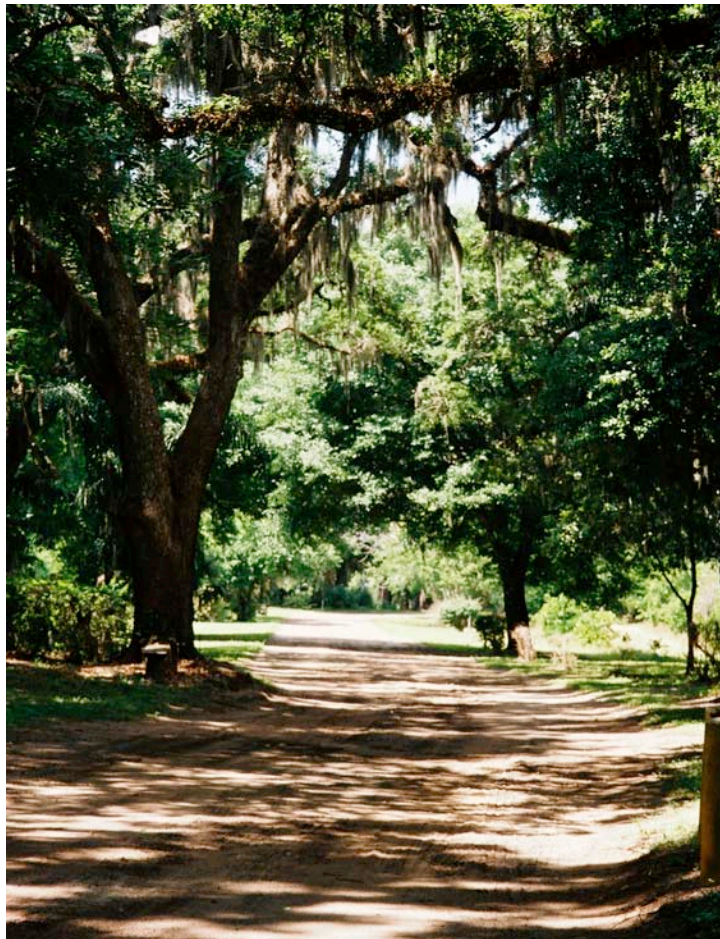


## The Genius Reserve: Management Assessment and Concept Plan



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Concept Plans Prepared by Forest Michael, L.A.



*I poked around...thoroughly enjoying myself and hating to leave. Here I had discovered Cross Creek, romantic old Florida, ancient trees, jungle quietude.*

Jim Forsyth on visit to Genius Reserve, 1953

## PROJECT GOAL

The Genius Reserve in Winter Park as a historical landscape, a last remaining tie to the romantic Old Florida Marjorie Rawlings revealed in *Cross Creek*. This report is a preliminary step in what is hopefully a long-term planning process to preserve and restore the Morse-Genius legacy as a cultural reserve of Old Florida. A treasured site mixing Nature with a sustainable human presence-- a place providing a glimpse of an earlier generations aesthetic ideal, while providing a "working laboratory" in landscape restoration.

Genius Reserve is evident in this view across Lake Berry.



New vista from Ward House to Lake Mizell across Genius Drive.

## **COMPLETED TASKS**

- A) Inventory of site utilizing aerial maps and field research
- B) Collection and Interpretation of historical records, including photos, aerial photos, and post cards to complete Genius Drive Survey.
- C) Report analyzing major changes in historical landscape and identification of management projects.
- D) Concept design for the Genius Drive.
- E) Concept design for Cedar Grove.
- F) Potential Management project goals.
- G) Wind Song & Ward House Border Plantings

## **INITIAL INVENTORY**

The 2002 Genius Reserve Study broke the site into 9 units:

Ecological  
Restoration  
Pastoral  
Garden  
Grove  
Ward House  
Paths  
Buffers  
Genius Drive

## **DETAILED INVENTORY**

In the intervening year, the site was analyzed and inventoried utilizing the Florida Natural Areas (FNAI) system. This spring students under the supervision of Dr. Bill Grey completed a detailed FNAI inventory map for the Genius Reserve. The attached map is based on photo interpretation of high-quality aerial photography combined with ground-truthing analysis. This enhanced site inventory allows the project team to better prioritize projects to meet planning goals. The various inventory categories are analyzed utilizing FNAI criteria to establish the basis for a more detailed management plan.

## **ECOLOGICAL**

Ecological units are those areas with relatively healthy, native habitats. Clearing of shrubs and under story define these areas, found primarily on the south side of the reserve, and along its eastern edge. These habitats (classified as 4382, Mixed Upland Hardwoods with Native/Undisturbed Groundcover and 4383, Mixed Upland Hardwoods with Dense Fern Groundcover) are primarily hardwood with a palmetto under story. The primary species are Live Oak (*Quercus virginiana*), Pignut Hickory (*Carya glabra*), Laurel Oak (*Quercus laurifolia*). Southern Magnolias (*Magnolia grandiflora*) the primary second tier canopy specie. Coral Bean (*Erythrina herbacea*), saw palmetto (*Serenoa repens*) and beauty bush (*Callicarpa americana*) dominate the understory that also includes a wide mix of ferns. A combination of Red Maple (*Acer rubrum*) and black cherry (*Prunus serotina*) define the transition area towards lakes Berry and Virginia. Along the lakefront, healthy stands of Bald Cypress (*Taxodium distichum*), black gum (*Nyssa sylvatica*), and Sweet Bay (*Magnolia virginiana*) are the dominant canopy specie.



## Management Objective:

- (1) Although fire once pared these areas keeping them in a natural state, this option is no longer viable. A continual process of selective undergrowth maintenance should continue.
- (2) Studies to calculate the quality of wildlife habitat could proceed through continued site analysis.\*

## RESTORATION

Restoration is defined as though areas overrun with exotic species. These areas (9101) have a dense exotic canopy dominated by Earpod and Chinaberry Trees. Understory exotic species include flame vine, turks cap, and potato vine. In addition, hardwood habitats suffering from the aforementioned invasive exotics (9102) also need restoration. The primary problem posed by exotic species such as the African Earpod is that they literally choke out natives, which impairs the quality of wildlife habitat and the long-term ecological health of the site. Exotic species can overrun entire habitats and destroy their usefulness for wild life, as was the case with the flame vine draping the live oaks adjacent to the central grove. The management strategy pursued in this case (eradicating the flame vine) has brought this massive live oaks back from the “edge of extinction.” Nevertheless, some pines perished in this area just to the west of the Central Grove (see section 435).

The following list orders proposed management projects according to habitats most damaged by invasive exotics. It is highly recommended that any restoration project be part of a comprehensive management plan. Otherwise, the Foundation risks investing in a piecemeal approach that will provide piecemeal results.

1. The proposed Cedar Grove offers a restoration concept for the northwest section of the Reserve dominated by exotics. The approximate cost in planting materials (2/3 red cedar, the rest a mix of Long-leaf pine, Magnolia, and Sabal Palm) is \$20,000. However, this design is only a concept and it does not take into account the degraded area immediately to the west running down to Lake Mizell. Further study analyzing slope gradient and moisture conditions is necessary for this shoreline area. From this analysis a landscape palette could be determined for restoring this highly degraded site.



Mature Cedar on site.



2. The section of land lying immediately to the west of the Orange Grove (9101 and 435) needs closer analysis to determine an appropriate restorative use. For instance, if invasive exotics were removed from the Banana “grove,” a productive fruit garden could be re-established. However, this would require more staff maintenance and other questions of utility abound.

3. Outside of the northwest quadrant shoreline exotics are relatively rare. Large stands of cattails, however, are hardly signs of a healthy environment. Planting of native emergent aquatics (duck potato, pickerel weed) could proceed after terrestrial habitats are restored to a more healthy state.

**Management Objectives:**

- 1) Remove invasive species identified in report
- 2) Determine the botanical make-up of restored areas. See Cedar Grove Plan as example.

**CEDAR GROVE RESTORATION PLAN**

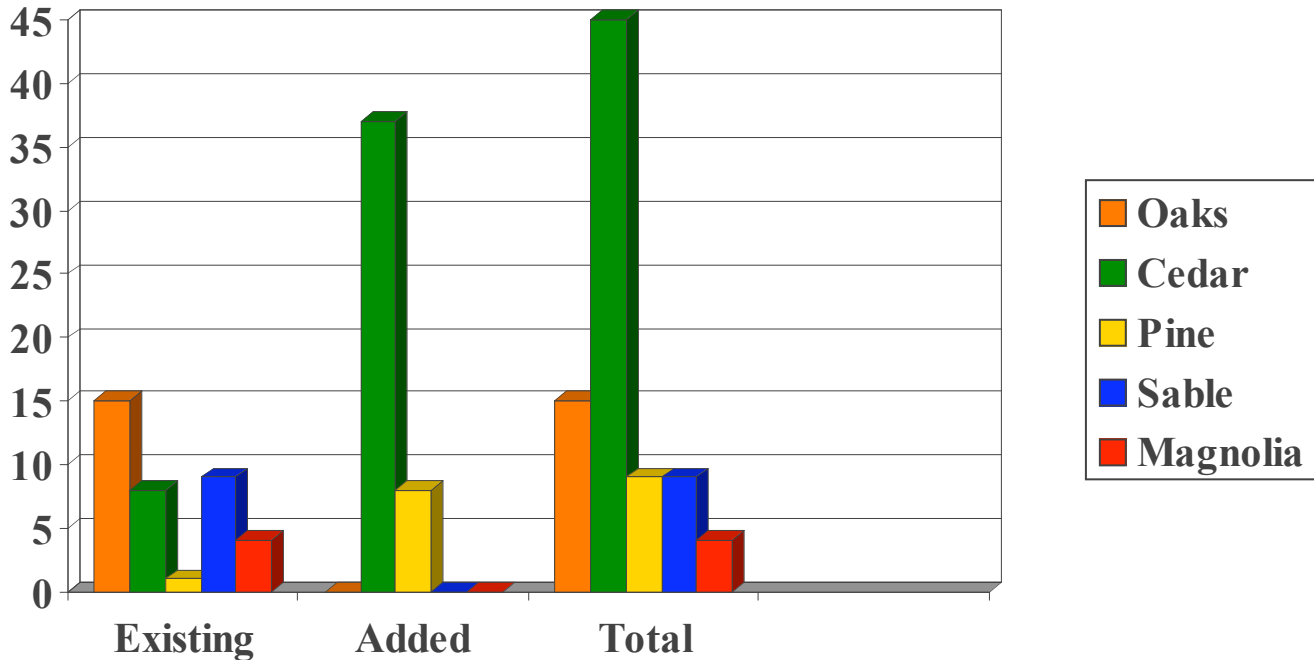
Invasive exotics have literally choked out the native stand of Red Cedar that once existed. The domination of exotic species has created a literal ecological desert under this dense exotic canopy. The proliferation of non-native species creates design as well as ecological problems. The tangled mix of Chinaberry, Earpod, Camphor trees produce an incoherent setting. This section stands in stark contrast to the pastoral setting of live oaks found immediately to the south. A good restoration plan not only returns ecological health, it fosters landscape coherence.



Low-coherence scene at left, and high-coherence scene at right

*A coherent setting is orderly; it is organized into clear areas. People can readily discern the presence of a few distinct regions or areas, and those make it easier to make sense of, or understand, a place. Coherence can be increased by having some repeating themes and unifying textures.*

The goal of the Cedar Grove design is to create a coherent, ecological landscape that users could readily explore and learn. Students guided by Dr. Stephenson prepared an initial series of concepts designs that Forest Michael, landscape architect, unified into a concept design. The remnant natives on the site were inventoried, then a palette of two-thirds cedar and a mix of magnolia, sabal palm, and long leaf pine were included. These later species were located according to soil and moisture conditions.



## GARDEN

Gardens were defined as areas either currently flowering or potential sites for enhancing historic structures.

The border plantings near the historic Wind Song home and the Ward House integrate a series of native plantings that provide flowering gardens to reflect the nature of the existing landscape. For instance, the border plantings screening the Wind Song home include flowering exotics (i.e. gardenias, bird of paradise) to reflect the more formal Wind Song landscape. The Ward House, by contrast, is flanked by a series of native flowers that offer prime butterfly habitat. This planting system is less resource intensive (water and chemicals) while producing wildlife habitat where none currently exists. The species planted flower most of the year and although dormant in the winter months they reseed themselves. This offers the opportunity for cultivating new plants for re-planting elsewhere on the site.

Management Objectives:

- 1) Utilize planting regimen established at Ward House as model if any additional garden sites are established.
- 2) Maintain a regular weeding regimen.\*

## **GROVE**

Groves are remnants of historical working landscape that once defined Winter Park and Florida. They are classified as Active Citrus Grove (221) and remnant or demonstration citrus crop (2211). It is no accident the state flower is the Orange Blossom. The Genius Reserve Central Grove, the largest remaining grove within the city, centers the site and defines it. Sacred groves are as old as human history, and the Genius grove offers an ideal centerpiece for future plans.

Management Objective:

- 1) Maintain the "Central Grove" as a living example of "Old Florida."
- 2) Provide native border for remnant grove (2211) running along Genius Drive near Ward Gate.
- 3) Complete citrus planting north (2211) of Ward House to complete grove setting.

## **PASTORAL LANDSCAPE**

The Pastoral landscape is a pleasant mix of open space and canopy trees that covers approximately 25 percent of the Genius Preserve. It is identified by a Live Oak canopy with modified understory conditions (427): This ideal, almost park setting is best reflected by the sylvan strand running between the Ward House and the exotic habitat to the west of the Ward Gate. It mirrors in size, and in many landscape derivatives Winter Park's Central Park. Sunlight dappled meadows and a rising canopy of majestic oaks provide one of the most beautiful and coherent vistas in Winter Park. However, invasive Earpod trees on its northern edge and along Genius Drive threaten this section.

MANGEMENT OBJECTIVE:

- 1) Follow the existing management regimen to keep the park in its pastoral state.
- 2) Utilize selective logging to eliminate exotic stands that impede this unique aesthetic.

## **WARD HOUSE**

The initial design concept for the Ward House was "home in the grove, estate in a garden." Integrating the Ward House into a grove is part of a larger potential vision of the Genius Reserve becoming a tended garden that incorporates a variety of landscapes from the natural and wild to cultivated and aesthetic.

Design Goals Fulfilled:

1. Connection to a Vernacular Landscape
2. Visual Connection to the site
3. Buffering from existing development
4. Connection to existing paths and drives

In the last year, the Ward House has been integrated into the Genius Reserve site. Purchasing a section of the adjacent lot and the new border planting provides a much more prominent setting for the Ward House. In addition, this winter's freeze made it easier to remove "runaway exotics" (primarily turks cap), opening up a new vista from the Ward House to Lake Mizell. The Live Oaks on Genius Drive with a citrus under story now reveal an unmatched view of Old Florida.

While a section of exotics were paired away, the existing turks cap was sculpted to line the access road off Genius Drive to the Ward House and old packing plant. Genius Drive was



also enhanced by transplanting oaks and azaleas from the “old border planting” to provide a more coherent and aesthetic recognition of the Ward House.

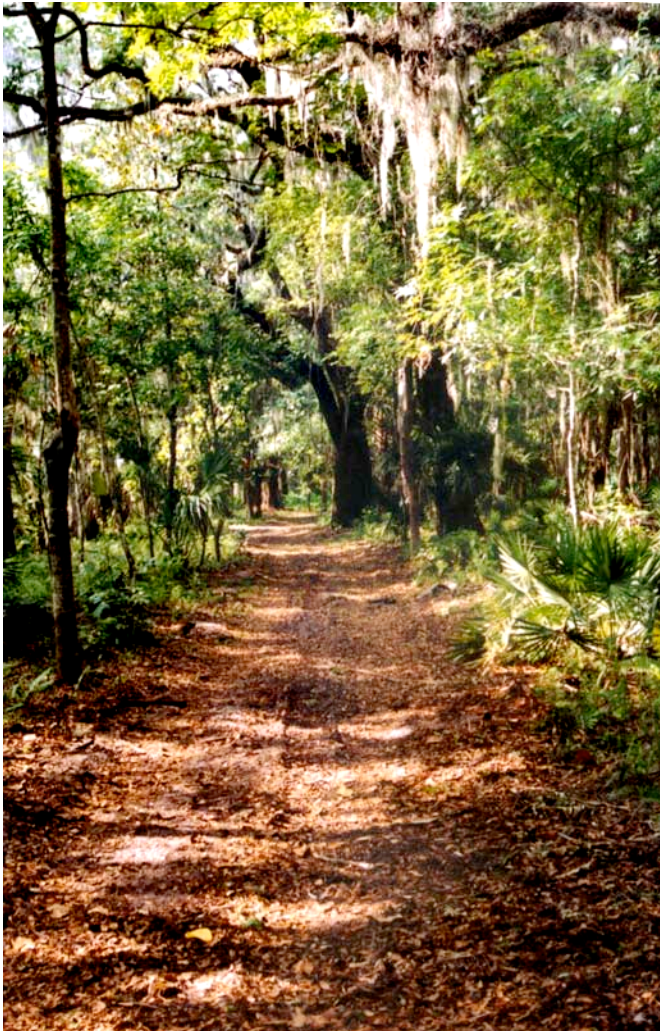
The new orientation to the Ward House leaves this wonderful example of vernacular Florida architecture rather bare. In addition to completing the grove setting, through planting and replanting of citrus, the house needs a landscaping plan. Ideally, plants would represent a mix of native and ornamental species already found on the site. Again, the goal would be to provide a simple and pleasing transition from the surrounding grove and native border.

#### Management Objectives

- (1) Complete citrus plantings and replanting to complete grove setting
- (2) Develop a landscape plan for the Ward House

### **PATHS**

Paths are foot trails that connect the property. The site needs a circulation plan, especially now that Genius Drive is completely inventoried. A system of paths already exists but it would be good management practice to maintain important sections before they are overgrown. The “Jeanette Walk” is the most obvious installment of this goal.



Running between the Ward House and the Central Grove, Jeanette McKean regularly sauntered this path. Lined with a bevy of native Hickories and Oaks, it is the best example of Florida’s native hardwoods in Winter Park. It is also an important transition between the ecological sections of the site and the restoration areas. The problems inherent in this transition are obvious. The nefarious potato vine has infiltrated this area, but it represents an ideal “work” station for student labor.

#### Management Objective:

- 1) Map an interconnected path system
- 2) Maintain the “Jeanette Walk” from the Ward House to the Central Grove.\*



## BUFFERS

Buffers of native plant and trees not exist to screen out the large, sparsely landscaped homes that are out of scale with the Genius Reserve. A plan exists to the buffer the fence running between the Ward Gate and the Ward House. Given the fact that this linear stretch does is not being impacted in the same manner as the Wind Song or Ward homes, plantings could be less mature to further cost savings. In a three to five year period, these native species can provide an effective buffer with little resource investment (initial watering running through the first winter).

### Management objectives

- 1) Implement border planting between the Ward Gate and Ward House.
- 2) Maintain buffers with watering through the winter months as needed.
- 3) Weeding of Ward and Wind Song buffers as needed.\*

## GENIUS DRIVE

Genius Drive is a historic gem. Charles Morse desire to create a true winter park is revealed along the graceful curves of Genius Drive. Morse's vision captured the region's natural beauty in an alluring manner by turning Genius Drive every 50 feet, allowing onlookers to take in the scenery at a close and careful pace. The botanical elegance Morse cultivated in the garden across the street from his home, Osceola Lodge, found its way along Genius Drive. A 1953 photo of Genius Drive carries the caption, *Draped with Spanish Moss, a mighty Live Oak tree arches across beautiful Genius Drive, which...beckons to appreciative eyes this pageant of Nature as the best in Winter Park, Cultural capital of Central Florida*"(Orlando Sentinel Star, February 22, 1953).

Fifty years later the remnant historic plantings (camellia, bougainvillea, hibiscus, azalea, and lantana) need care and replacement after the last freeze. If desired, sections of native flowering plants can be interspersed with the aforementioned species to enhance the sustainable quality of this historic drive. In addition, exotic trees that infringe on the native canopy and aesthetic view should be removed.

Parking is another future issue for the Genius Reserve and, logically, Genius Drive. The most degraded section of the Genius Reserve lies across from the Ward Gate, to the west of Genius Drive. Parking could be established along the fence line separating the Reserve from the Windsong subdivision. In addition to the fence, a flowing creek separates these two properties. Walking from this area into the Reserve ingratiates the visitor with a remarkable difference in scenery looking into and out of the Reserve as shown below. The scene below to the right is a priceless introduction to the Reserve.



Management Objectives:

- 1) Enhance and maintain the historical plantings along Genius Drive.\*
- 2) Remove invasive exotic tree when they infringe on the native canopy and aesthetic.
- 3) Ascertain parking sites as part of pathway plan.

## GENIUS DRIVE CONCEPT PLAN

As stated, Genius Drive is an amazing historic gem. The entire drive has been inventoried. This spring students guided by Dr. Stephenson prepared a series of concept designs for a section of the Drive where the recent freeze presented a series of issues. Forest Michael, landscape architect, unified this work into a concept design that is attached. The goal was to produce a prototype design that could be utilized in an effort to preserve, restore and enhance historic plantings along Genius Drive.



## CONCLUSION: COMPREHENSIVE MANAGEMENT PLAN?

As stated in the introduction this report is a preliminary step in what is hopefully a long-term planning process to preserve and restore the Morse-Genius legacy as a cultural reserve of Old Florida. The Genius Reserve holds an amazing historical legacy beyond its natural beauty. At the same time for this legacy to be maintained and the site's potential unlocked a comprehensive management plan is needed. While important steps have already occurred to protect the site's special standing, as mentioned earlier, a piecemeal approach will produce piecemeal results.

In their analysis of the Genius Reserve, the project team (Dr. Stephenson, Dr. Grey, and Mr. Michael, L.A.) strongly recommends that the Morse-Genius Foundation complete a comprehensive management plan--- if it plans to maintain the natural and cultural qualities on site. The Genius Reserve is a gem that sits in the midst of a hyper-intensified urban environment. As the surrounding landscape is radically altered the Foundation will need a systematic plan to insure the Reserve maintains its special heritage.

A comprehensive management plan would establish a guiding vision for the site, from which the Foundation could prioritize improvements, forecast costs, and establish a maintenance regimen. A working plan would also coordinate with Rollins College to best utilize faculty and student resources. This report identifies a series of potential projects and management objectives (with \* marking work that could be pursued by Rollins faculty and students). The project team listed ten potential projects the Foundation should consider in moving towards a comprehensive plan. These recommendations are of the most preliminary nature, put forth to stimulate thought and discussion in moving towards a more comprehensive vision for the Genius Reserve.



## POTENTIAL PROJECTS

1. Cedar Grove Restoration
2. Restoration of the Reserve's most degraded ecological habitat on the northwest section of the site (9101 on inventory map).
3. Restoration of Banana Grove located to the west of Central Grove.
4. Development of a pathway and parking plan.
5. Regular planting and maintenance of Genius Drive to preserve restore and enhance historic plantings.
6. Completion of citrus planting north of the Ward House and the creation of a landscape plan for the Ward House.
7. Utility use plans for use of the Packing Plant, Ward House, Stable, and Atrium.
8. Maintenance and project plan coordinated with Rollins College Environmental Studies Department to integrate land stewardship into college curriculum.
9. Insuring continued health of existing groves.
10. Vision concept to selectively utilize site as an outdoor laboratory for Winter Park secondary schools.