The Gardener's Journal
Reynolda Gardens of Wake Forest University
Spring 2012

The Olmsted Influence on the Reynolda Landscape

by **Camilla Wilcox**, *RGWFU curator of education*

It has long been thought that the Reynolda landscape bears the hallmarks of a design by Frederick Law Olmsted, who created parks and estates throughout the United States in the mid- to late nineteenth century. There are the characteristic sweeping views of pastoral meadows framed by trees; separate spaces in a more intimate scale; gracefully meandering walks and driveways; and naturalistic plantings. Some details of Olmsted landscapes are less easily recognized, but they are present, as well: Rock walls and bridges, iron gates, pergolas, a constructed lake, and formal gardens. With all of this evidence, it is reasonable to suspect that there may be some connection, and, in fact, there is. Each of the three men most directly involved with the development of Reynolda—Thomas W. Sears, Horatio R. Buckenham, and

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Some of the People, Some of the Time

by **David Bare,** *RGWFU greenhouse manager*

Landscape, no matter how it is defined, is a dynamic entity. Though the plaque outside our office designates Reynolda Gardens as being on the National Register of Historic Places, our landscape survives on a continuum of change. This is perhaps the central dilemma of the historic landscape: How do we manage and interpret the living entity in the modern world?

If there is one thing that has become clear as we begin to chip away at a list of landscape issues generated by the Cultural Landscape Report (available online at Reynolda.org), it is this: We are not who we used to be. We must make decisions in landscape maintenance that the creators of the landscape were never faced with.

The Gardens

Consider the appearance of the Greenhouse Gardens, which have been restored to the 1917 plan created by Thomas Sears. A modern, critical eye might find the plants chosen for the original plan to be floppy and weedy in a formal landscape. Today's plants tend toward compactness and variation in color and form from the original species. Often, they are barely recognized as the same species. These preferences are cultural and have developed over time. Whether the visitor understands and appreciates plants that might now be considered unruly or unkempt is, in part, determined by the Gardens' method of interpretation.

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Volunteers July 1, 2010 — June 30, 2011

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Ann Battenburg
Sandra Belmont
Barbara Bryant
Linda Bryant
Michael Carpenter
Beverly Culbreath
Phil Dickinson
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The Very Cool Phoenix Tree

by **Preston Stockton**, *RGWFU manager*

One of the many interesting trees that Thomas Sears, Reynolda's landscape architect, used in the original plans is the phoenix tree, *Firmiana simplex*. It was planted in the landscape near the residence. I had never seen this tree before I began work at Reynolda, but it did not take me long to wonder about the tall trees with apple green bark growing along the edge of the woods.

The phoenix tree is in the Sterculiaceae, or chocolate family. There are fifteen species in the *Firmiana* genus but only *F. simplex* is common in the American landscape. Native to China, Japan, and Taiwan, it is hardy as far north as Washington, DC. Due to certain properties of the wood, it is very desirable for the construction of certain Chinese string instruments, caskets, and furniture. In China it is often used as a street tree.

The phoenix tree is a deciduous tree that grows thirty to fifty feet tall, with a rounded canopy of fifteen to twenty feet. It has very large, palmate leaves, ten to twenty-four inches across, with three to five sharp-pointed lobes. The size of the leaves gives it a very tropical look and creates dense shade. They turn bright yellow in the fall, which makes it very easy to pick them out in the woods. The large size of the leaves can make fall clean-up a little difficult.

The bark is bright green when young but becomes an unusual whitish-green color with age. The branch scars and lenticels also add interest to the bark. (Lenticels, critical to a tree's cellular respiration, allow for the entrance of oxygen and exit of carbon dioxide during respiration and help with the exit of excess water absorbed by the tree. Their arrangement and shape can often be used to help identify certain trees.)

The yellow-green, star-shaped flowers occur in panicles on the end of the branches in late June or early July and are interesting but not especially showy. After flowering, the four-inch carpels, or pods, open when ripe, releasing a brown liquid resembling varnish; in fact, one of its other common names is varnish tree. The open pods also resemble small little umbrellas, or parasols; another common name for this tree is Chinese parasol tree. This tree has more names than the Royal Family!! The pods split open into four petal-like sections, with two to three wrinkled, pea-size seeds attached.

Many states classify this species as invasive, although it is not on the NCDA list. It has naturalized slightly in the woods here, but it certainly is not as bad as some other plants grown at Reynolda that have taken over the woods, such as ligustrum, English ivy, turquoise vine, elaeagnus, and mahonia. It develops a deep root system, but unwanted seedlings are easily removed the first year. After that you will probably need to dig them out with a shovel. I have three of these trees in my own yard and have no problems controlling it. But the seeds are spread by birds, so you will need to use caution if you live near natural areas where you do not want it to spread. One of Reynolda's neighbors recently told me that he had one coming up in his yard. He did not appear to be concerned but interested to see how it would develop.

This tree can be grown under most conditions found in Piedmont North Carolina. Although it can grow in partial shade, it has the best crown development and flowering in full sun. It grows very quickly when young if it has adequate moisture and good drainage. It is mostly pest and disease resistant in this area. With its large leaves, it is best to plant it in a protected area away from high winds.

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Growing Herbs from Seeds

by **Michelle Hawks**, *RGWFU horticulturist*

This article is not for the professionals; it is for those who would like to grow a few herbs for fun, fragrance, and flavor. If you find excitement in doing things yourself, like watching things grow, and want to add spice to your life, there is no better way than with herbs.

Growing herbs from seeds is a very satisfying way of increasing the number of different varieties that you grow. It can be a real money saver, as well. Some of the best varieties are uncommon and cannot be found in your typical garden centers. Some of my favorite herbs, which I enjoy growing, are basil, chives, parsley, dill, and fennel. You probably already have some favorite herbs you'd like to grow, but I would like to challenge you to do a little research and find some other useful herbs that are less familiar to you.

To me, starting seeds in flats, pots, or boxes is the only tedious part of herb growing. Come March, I'm envious of those who live in sunny climates, where herbs grow easily year-round. Still, if you want more than a half dozen varieties of herbs, you must learn to cultivate seedlings.

Herb seeds can be sown indoors during winter, so the seedlings will be ready to transplant outdoors in the spring. There are some very basic methods to starting herbs from seeds.

Equipment:

- Soil-less growing medium to sow the seeds in. Avoid using garden soil. Its texture and nutrient content might not be good for growing seeds.
- Seed trays. You can use yogurt containers, with holes punched in the bottoms; an egg carton, with a hole punched in the bottom of each section; or just go to your local garden center and get seed trays.
- A water bottle to mist the soil.
- Three-inch plastic flower pots to plant the small seedlings in, once they have grown.

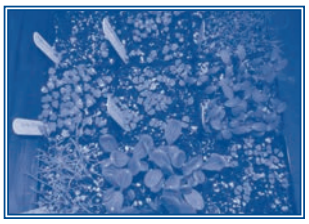
Procedure:

- Fill the seed trays with the soil-less mix.
- Use the water spray to wet the seed trays.
- Plant seeds at the right depth (see box).
- If seeds require darkness, cover them lightly with soil-less mix. Spray lightly with water again.
- Don't let the newly planted seeds dry out. Your goal is to keep the plants and seeds moist, without overwatering them.
- Cover the containers with plastic wrap to help conserve moisture and create humidity. Remove the plastic wrap completely once the seedlings germinate.

Herb seeds need as much as fourteen hours of light per day in order to develop properly. The addition of artificial lighting may be needed to ensure healthy growth, but do not leave it on for longer than fourteen to sixteen hours. When seedlings have two sets of true leaves, they are ready to be transplanted into larger or permanent pots, which will give the herbs room to develop. They should remain in the pots until their root systems are established.

When plants are grown from seeds indoors, they are in a controlled environment. The way to help young plants tolerate outside conditions is to harden them off by gradually introducing them to the outdoor environment over a period of several days. It's an easy process and will help plants grow better and stronger when you do plant them in the garden.

After you have followed the steps I have outlined, you'll be able to watch your herbs grow and start harvesting them in the early summer. You will also have something to boast about at your next dinner party, when you use the herbs you've grown and describe your success at growing herbs from seeds.



Seeds have different light requirements for germination. Many people follow a general rule for planting seeds, which is to cover them with soil to a depth that is one to three times their size. But for best results, follow the directions on your seed packet or consult a reliable gardening book for seed depth and light requirements. Seeds may need to be covered with soil or left uncovered. For example, the seeds of summer savory need light for germination, so no growing medium is placed on top, while basil seeds will need to be covered with soil. Soil temperature should be from sixty to seventy degrees Fahrenheit until the seeds sprout, then fifty-five to sixty-five degrees is best. Once you see sprouts, be sure to turn the containers every day or so to keep plants from growing unevenly.

The Olmsted Influence on the Reynolda Landscape

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Louis L. Miller*—worked at some time with an Olmsted firm, either under Mr. Olmsted himself or under his son, Frederick Law Olmsted, Jr.

Olmsted Connections

Horatio R. Buckenham worked in the Olmsted firm during the years when the office was located in the Olmsted home in Brookline, Massachusetts, and a vast array of projects was underway. Mr. Buckenham is listed as a draughtsman in many documents dated between 1884 and 1892, including the Emerald Necklace Parks of Boston, Massachusetts; the Cherokee, Shawnee, and Iroquois Parks of Louisville, Kentucky; and the Twombly estate in Madison, New Jersey.

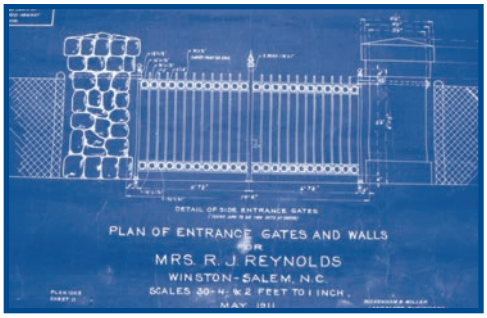
Louis L. Miller worked with the Olmsted firm under Frederick Law Olmsted, Jr. after the elder Mr. Olmsted retired. A trained engineer, he was engaged for a few, specific tasks. He and Mr. Buckenham formed a partnership, the firm of Buckenham and Miller, in the early 1900s, while the men were working on the development of Duke Farms, the estate of James B. Duke in Somerville, New Jersey. They worked together for over a decade. Several features at Duke Farms, including dams and bridges, are similar to those designed by the Olmsted firm during the years when Mr. Buckenham was employed there and appear in Buckenham and Miller designs for Reynolda.

When Thomas W. Sears began his work at Reynolda in 1915, he was also working on projects for the Olmsted firm. Before that, he had been engaged by the firm on a few design projects and photography assignments.

The Combined Effect

In 1911, the firm of Buckenham and Miller created a drawing, "Proposed Plan for the Mrs. K. S. Reynolds Estate," which is the first known document that illustrates how the property might develop. It includes a large lake; a formal garden; roadways; a farm complex; and recreational facilities, including a boathouse, a tennis court, and golf links. This drawing, along with other documents, indicates that extensive planning went into the function and engineering of the various parts, including drainage and water supplies, as well as into the beauty of functional features. The lake is sited according to existing topography; the dam is designed to handle the flow of the water; the greenhouse, gardens, and barn are arranged for ease of access; open viewsheds are delineated; and the roadways are sited for pleasant and safe travel. This attention to detail and engineering, vital to the Olmsted park landscapes, created the infrastructure that transformed a conglomeration of farms into an estate.

Once most of the infrastructure was in place, Thomas Sears' skills as a plantsman and landscape architect beautified all of these places and structures. He introduced a sophisticated, modern style, while his naturalistic plantings—characteristic of Olmsted park and estate designs—enhanced the natural scenery. He drew the formal garden plans in 1917 and 1921; planned plantings of trees and shrubs; designed gardens and landscapes around the buildings in the Village; and photographed many scenes around the estate.



Gate design by Buckenham and Miller

Planting design by Thomas Sears

*Each has been profiled in *The Gardener's Journal.* Archived articles may be accessed through the Reynolda Gardens website. Sears: Summer, 2005; Summer, 2006. Buckenham: Spring 2010; Fall, 2010. Miller: Spring, 2011.

A note to readers: After over forty years of association with Reynolda, I'll be retiring this summer, so this is my last article on landscape history for *The Gardener's Journal.* I hope that, as you walk the paths, trails, and roadways; visit the gardens; and enjoy the peace of the woods, meadow, and wetland, you will remember the engineers, designers, and gardeners I've introduced to you over the years. They made all of our lives better, wouldn't you agree?

Trout Lilies—A True Sign of Spring

by **Diane Wise,** *RGWFU head horticulturist*

Spring is probably my favorite time of year at Reynolda Gardens. From the Japanese weeping cherries in the formal garden to the wildflowers in the woods, nothing is as glorious as Reynolda. And perhaps my favorite part of the season is the spring ephemerals, those woodland perennials that emerge early each spring before the trees leaf out and block the sun from reaching the forest floor. These plants bloom, go to seed, and die back long before anything else appears. To me, they are a sign that winter is truly over, and spring is on its way.

Of the ephemerals, I particularly like the yellow trout lily, *Erythronium americanum*, a native North American wildflower, and one of the first to bloom each season. The genus *Erythronium* is a member of the Liliaceae family and contains about twenty-five species, most of which grow west of the Rocky Mountains. The yellow trout lily, one of only six species growing in the East, is particularly widespread, stretching from New Brunswick to Florida and west to Ontario and Arkansas. Its common name comes from its leaves, which are mottled with purple and resemble the coloring of a brook trout. In fact, the Cherokee would chew the leaves and spit them into streams and lakes, believing that it would make the fish bite.

A mature yellow trout lily has two basal leaves, about three inches long and one inch wide. It bears a solitary, one-inch, nodding flower on a leafless scape of three to four inches. The flower has six tepals (a combination petal and sepal), which are yellow on the front and tinged with brownish red on the back. Each flower lasts about five days and opens mid-morning, when sunlight reaches the forest floor, and closes each evening. If the sun is particularly bright, the tepals will curve backwards or reflex. If the day is dark, the flower may not open at all. Blooming at Reynolda usually starts in early March and lasts into April. By early summer, our trout lilies are dormant and have disappeared from view. All activity in the coming months will take place in the corm, a bulb-like structure deep underground. While bulbs have scales, corms are solid and starchy, but they both serve the same purpose—to store nutrients for the plant's use. The corm of a trout lily is about one half inch in length and is said to resemble a dog's tooth, hence another common name, dog tooth violet.

E. americanum likes slightly acid, humus-rich soil. It grows in colonies that are unusually long-lived, some up to 500 years old. Both the spreading ability of the corms and seed production from flowers allow the colonies to become extremely dense, containing up to forty plants of different ages in a square foot. Young plants have one leaf that looks like a blade of grass and a corm that is just below the surface of the soil. Over the next four to five years, contractile roots on the base of the corm will pull it down until it reaches a depth of three to five inches, where it will be protected from fluctuating temperatures and light. During this time, the single leaf will reappear each spring, growing in length and width. By year six or seven, the plant will send up a single leaf in January, followed by another leaf a few weeks later, and then a flower bud. The flower is pollinated by flying insects and wind, as most lilies are, and will then form a seed capsule about the size of a chickpea. The capsule contains up to twenty-five seeds and falls to the ground and opens when mature. Ants disperse the seeds by eating a nutritious appendage attached to each and leaving the seed to germinate and form a corm.

To see Reynolda's trout lilies, begin on the nature walk at the Boathouse. About fifty feet past the large pond, you will see steps on the left down to a path along the creek. The trout lilies are on each side of the path, as are other spring ephemerals, including bloodroot, *Sanguinaria canadensis*; sweet Betsy, *Trillium cuneatum*; and Virginia bluebells, *Mertensia virginica*.

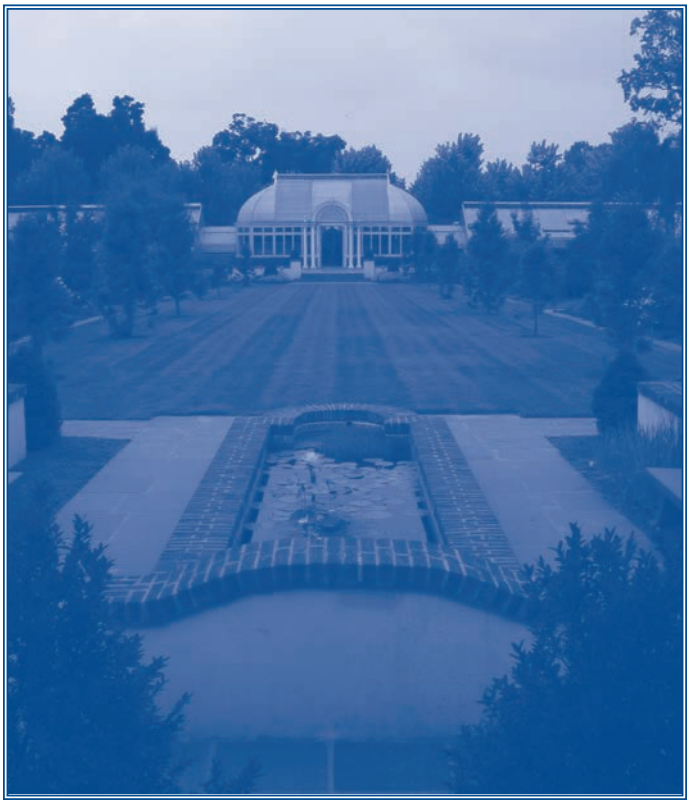
A note to readers: This is my last article for *The Gardener's Journal* also. After fourteen wonderful years at Reynolda Gardens, my health is making long hours of daily gardening difficult. No, I'm not sick; I simply need to take a little better care of my body in the years to come. I will still be at Wake Forest, only in a position that requires less physical effort. But I suspect you'll see me at Reynolda often; just as a volunteer, rather than as a staff member. It's been great fun.

Water Gardens for Birds

by **John Kiger,** *RGWFU assistant manager*

Quite often in gardening publications, you read about how to attract birds or butterflies to the garden. One aspect that people overlook is fountains, or simple water features. As most of you are aware, there are two fountains here at Reynolda Gardens. One, nestled amongst the tea houses, is referred to as the Lion's Head. The other, which is much smaller, is located in the lower east side of the garden. Both fountains offer an excellent place for meditation and relaxation, for there is something about the sound of running water that is very soothing.

Some time ago, I was assisting Michelle as she was cleaning the Lion's Head fountain, when the inspiration hit me to have a fountain at my house and incorporate it into my landscape. Question was, where would I find one? On a quest, I traveled to our local home improvement store, where I found several varieties, but none I was particularly fond of. I wanted something larger, but not large enough to break the bank. A few days later, I came across an old flower pot. This is not your typical flower pot. It is constructed of three inch thick, reinforced concrete, five feet in diameter, and approximately eighteen inches in depth. With the help of a few friends, we managed to wrestle it onto my trailer, which wasn't an easy task, since the pot weighs approximately eight hundred pounds. At home, removing it was quite simple. My neighbor has a backhoe, and he graciously set it off and placed it in my desired location.



Since this was a flower pot at one point, it does have five one-inch diameter drain holes in the bottom. This would make installing a pump easy, with no hole to drill. Speaking of pumps, the choices are many at our local hardware store. At Reynolda Gardens, the Lion's Head fountain requires a five hundred gallon per hour pump, a little over the top for my project, but I did purchase a Pondmaster three hundred gallon per hour pump. The pump comes with an eighteen foot long power cord, and, since I placed the fountain near an outside outlet, the length was perfect! One of the five drain holes was located directly in the middle, so I was able to feed the power cord through the opening and seal the hole shut, using a silicone caulk. The remaining holes were simple. I used four one-inch compression plugs, which I purchased from a local auto parts center. These plugs are made of rubber, with a bolt running through the middle. I simply inserted the plug into the opening and tightened with a seven-sixteenth socket. Not only did this work extremely well, but it allows me to drain and clean the fountain quickly.

Conceivably, the fountain was ready for water, but it needed color and, quite possibly, a sealing material to prevent leaks. Back at the hardware store, I purchased three one-gallon containers of concrete paint sealer—terra cotta color for the outside, black for the bottom (to hide the pump), and tan for the inside. After allowing twenty-four hours for it to dry, I filled it with water and began to enjoy the results of my effort.

I have had this fountain nearly three years, and I always keep it full. It is amazing how this simple feature attracts birds (and a few squirrels). Recently, I saw five different types of birds enjoying a drink at the same time. Bluebirds, cardinals, and robins I recognized, but there were two other species that I did not know. I must admit, it is probably time to purchase a bird identification book. If you think about it, my fountain, like the Lion's Head fountain at Reynolda Gardens, can be used not only as a simple source for relaxation but as an educational tool as well.

On your next visit, enjoy the beauty that is Reynolda Gardens. Stop and relax at the Lion's Head fountain and enjoy the aquatic plants and the relaxing sound of running water. Who knows? You may be inspired to install an "educational tool" of your own.

Some of the People, Some of the Time

Continued from page 1

It can be expected that similar issues will arise when we begin to replace the modern form and character of the hybrid tea roses with roses that are better able to survive without spraying. While some of these roses fit the ideal of the hybrid tea rose, others may give the impression of more informal shrubs.

The Cultural Landscape and the Environment

A dichotomy has developed between the historic landscape and the environment. As we have been clearing invasives surrounding the wetland, we have begun to hear from birders and wildlife enthusiasts who fear the clearing will reduce habitat for nesting and foraging birds. The original vistas from the house to the lake and from the front gate across the Golf Links and lawn to the residence were important elements in the original landscape intent. Lake Katharine was a short lived feature, beginning to fill up almost immediately upon completion. The value to wildlife is greater in its present state.

Ninety-eight percent of what we removed from the lake shore was invasive plants. This is true for the woodland landscape, as well, where English ivy is consuming the original woodland. Ironically, English ivy was listed in the Sears plan around the boathouse and pool. In fact, many of the invasives in the woodlands can be traced to the original plan. Invasive plants threaten the native woodlands and meadow, but research has uncovered evidence that some fruiting invasives actually support native bird populations. Research conducted at Penn State University found that bird populations were higher and distribution of fruit-bearing plants of many species, native and invasive, was greater in areas supporting invasive honeysuckles, compared to similar areas without them. It is certainly a concern that we have considered. We do not know what to expect once a plant as ubiquitous as English ivy is removed.

All of these issues resurface when we talk about the Golf Links Meadow project, as well. Our fledgling attempts to transform the existing field into a meadow met with positive reviews from the birders and wildlife watchers and disapproval from those expecting a neatly mowed view to the museum. While meadowlarks, a field nesting bird that had not been reported in the area for years, quickly took up residence, complaints from our acquaintances began to migrate in with them. Some did not like the "weedy" appearance. Others wanted what they used to have. "We used to play in this field when we were kids," said one e-mail. The savings in maintenance, gas, and carbon output were not even calculated into the decision to move the meadow to the rear of the front gate. This was a compromise that seems, like most compromises, to leave everyone half-satisfied.

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Gardener's Journal

Published twice yearly by Reynolda Gardens of Wake Forest University

Communications about Gardens development should be addressed to Preston Stockton, manager. Correspondence concerning *The Gardener's Journal* should be addressed to Camilla Wilcox, editor.

A calendar of events is published separately in January and August.

Website: www.reynoldagardens.org

Photos courtesy Reynolda House Museum of American Art Archives.

Printed on paper made of 50% sugar cane pulp and 50% recycled fiber, including 30% post-consumer fiber. No new trees used and elemental-chlorine free.

Some of the People, Some of the Time

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The contradiction between the sustainable and the historic, nature and culture if you will, may sometimes be at odds, but it arises from a common value. We all love this landscape and wish for its ecology, heritage, and culture to thrive.

Viewshed restoration projects 2012, top (right) to bottom:

- Sunset hill early view
- Sunset hill landscape restoration in progress
- Dam and bridge early view
- Dam and bridge landscape restoration in progress

The Very Cool Phoenix Tree

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I love the phoenix trees that I have growing in my yard. Recently, when I had some work done on my house, I think every workman asked me what they were. With bright green bark and short, clubby branches, phoenix trees are very striking in the winter. In the summer they are lush and tropical. It's endlessly fascinating throughout the year.

Wake Forest University

Reynolda Gardens

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