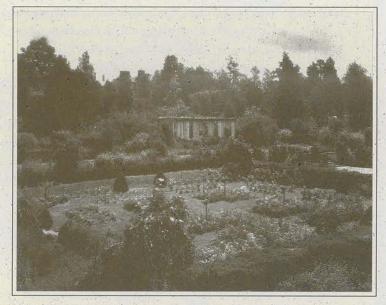
THE MORE THINGS CHANGE...

by Camilla Wilcox, curator of education

ver the past two years, the Reynolda Gardens staff has observed that restoring the plantings of the formal gardens is an ever-changing process. As gardeners, we expected that the gardens would change from one year to the next as plants grew, but we found that, even before the plants began to grow, the project itself began to change. As we researched the plants, persevered in our search for them, and made serendipitous connections, things that seemed impossible to accomplish in the beginning gradually began to seem possible. Two examples, one large and one small, illustrate the evolution that occurred



LATE 1920S PHOTO OF ROSE GARDENS ATTRIBUTED TO THOMAS SEARS. FOR MORE ON THE RESTORATION OF THE ROSE GARDENS, SEE ARTICLE ON PAGE 10.

between the project's inception and the installation of the plantings.

The larger example of the change can be seen in the two rose gardens near the greenhouse. Since it seemed unlikely in the beginning that we would find enough plants of the original varieties of roses to fill the two 1917 gardens as Thomas Sears intended them to be filled and because we knew that the plants would require careful maintenance, we first decided against attempting a restoration. As recently as the winter of 1997, when the first article on these gardens appeared in *The Gardener's Journal*; we were still planning to substitute other plants for roses, perhaps adapting a design in their space utilizing plants selected from the theme gardens. But now, as you will see in the article "The Rose Gardens Restored," the rose gardens, with some modifications, have been returned to their original locations. The

roses do require additional maintenance, and the plants have been hard to find, but we believe that the results are worth the care and attention the roses receive.

A smaller illustration of the evolution of the restoration project lies in the discovery of the heritage of a single plant. The daylily Florham' occupied several prominent spots in the garden, and the plant itself represented an important example of the horticultural boom of the turn of the century. (See Winter 1998 *TGJ* for more on the origin of Florham'.) Finding it or a suitable replacement was important to the appearance and interpretation of the garden. A widespread search did not uncover a source for this plant and, in the fall of 1997, the search appeared to have reached an end. The staff decided to replace Florham' with a very similar daylily, *Hemerocallis* 'Hyperion'. Bearing a striking resemblance to pictures and descriptions of Florham', 'Hyperion' is also an evergreen daylily with a large growing habit and lemonyellow, fragrant flowers. It has long been popular in home



A LITTLE of REYNOLDA for YOUR YARD—LANDSCAPE DESIGN

by John Kiger, building superintendent

As you know, Reynolda Gardens has undergone major renovations within the past two years. The staff of Reynolda Gardens is proud of what he have achieved, and we welcome the public to enjoy the newly renovated areas. Not only do we want people to enjoy the garden, but we also hope it serves as an inspiration to those who want to change or update their own landscaping at home by incorporating the ideas of Thomas Sears, who designed Reynolda Gardens, and the ideas of current staff members who design the modern gardens.

The best way to begin to create an appealing landscape is to put it on paper. Our renovation illustrates the importance of this step. The biggest change took place in the four quadrants of the sunken garden. Until 1995, flagstone paths led visitors through a mazelike structure of English boxwoods encasing flowering crabapple trees and seasonal flower beds. Although these areas were an outstanding feature of the garden, they were not accurate according to the original plans. By complying with the original plans of Thomas Sears, we have been able to recreate the quadrants exactly as they should be.

Mr. Sears probably used the same principles recommended by today's experts to design gardens and grounds that suited the purposes of the family who owned them. A North Carolina Cooperative Extension Service, publication Ag –248, organizes the steps for landscape design creation into six main areas.

CONTINUED ON PAGE 3



Symmetry is a hallmark of the design of Reynolda's formal gardens

THE MORE THINGS CHANGE

continued from page 1

gardens. After making the decision on Florham's replacement, we learned that the reason 'Hyperion' (1924) looked so much like 'Florham' (1899) was that it was one of its early descendents.

More surprises may lie ahead as we continue our research and get to know the garden. Our research in early twentieth century garden books and catalogs and current horticulture texts will continue and, as it does, we will make changes and/or find further confirmation of early decisions. Over time the unique conditions of the microclimate that has been recreated here will precipitate additional changes. With planting about 85% complete, and almost all of the remaining plants on order, assistant director Kim Tilley is currently evaluating plants to determine how well they survive the harsh summer environment of the sunken garden and how well they perform in the locations Mr. Sears chose for them. There may be periods in the next few years when the garden does not seem to be filled to capacity, as we wait for young plants to grow, await the arrival of custom-rooted or elusive plants, and determine appropriate substitutes for plants that fail.

For local gardeners and students, one of the strengths of the entire four-acre formal garden, including the restored area, is that it is always changing. Changes occur, not because plants are moved in and out for seasonal display as they are in many public gardens, but because they remain in place. Annuals go into the garden early in the year and usually remain until they have completed their life span. Perennials, like peonies and irises, remain for years in the same spot and offer a spectacular yearly show that is followed by the period of sometimes-unsightly growth and resting that is essential to the long-term health of the plants. Reynolda Gardens has no hidden growing areas where plants can "wait in the wings" until their peak, when they will take their turn on stage. As a result, visitors have the opportunity to gain a true picture of the life cycle of plants and to learn how plants interact with each other in gardens.

In a similar way, we hope that over the next few years visitors will gain a true picture of what it means to restore a garden of the past. Our successes and failures will be out in the garden for all to see. We hope visitors will enjoy viewing the ongoing process of the restoration project, understanding that we will make changes as the need for them becomes apparent. We're happy to eat our words when we've said that we can't possibly restore a planting, then discover later that we can. Or when we discover a plant that we were once sure we couldn't find. We present these gardens as our very best effort, the result of our first years of planning and planting, at the same time knowing that this garden, like any garden, will never be completely finished.



PLANTS for COLLECTORS FRAGRANT VIBURNUMS for the GARDEN

by Preston Stockton, director

everal years ago, a good friend of the staff's was bemoaning the fact that she and her husband were moving to a new house. She is a very fine plantsperson and had a well-established garden that she had developed and tended for many years. As a gardener, I certainly did understand when she said she just couldn't bear to leave her viburnums, a mature collection that was breathtaking when in bloom. I know that a few of them moved with her.

The viburnums are an outstanding group of shrubs for use in the landscape. A member of the honeysuckle family, Caprifoliaceae, the genus *Viburnum* is made up of about 225 species of mostly deciduous shrubs or small trees. They are native to North America, Central America, Europe, and Asia.

Viburnums vary so much in their characteristics that there is usually a viburnum for every landscape need. They range from two feet to 30 feet in height and have varied growth habits. Many have beautiful foliage with good fall color. Most produce fruit that attracts birds, and some of the fruit is very showy. Several are grown for their incredibly fragrant flowers, and these are the ones I love the most. Their spicy sweet fragrance lingers over the garden in the late afternoon. Every Southern garden must have at least one.

CONTINUED ON PAGE 4



LANDSCAPE DESIGN

CONTINUED FROM PAGE 2

1. Develop a plot plan.

This is achieved by measuring your property and constructing a base map using a ratio for the drawing of either 1 to 5 or 1 to 10. (1 to 5 means one inch equals five feet and 1 to 10 means one inch equals ten feet.) A ratio of 1 to 10 is the most commonly used. If your property is an acre or more, a scale of 1 to 20 may be needed. The base map should include all structures and existing trees.

2. Conduct a site analysis.

Walk around your property with a pencil and paper and make a note of what you see. Do you want to screen out undesirable structures? Does your house offer curb appeal? Do you wish to open certain areas that offer a desirable view? Also note any problems with drainage, light requirements, and soil compaction. You may want to conduct a soil test to determine the pH of the soil. This test is conducted free of charge by the North Carolina Cooperative Extension Service. For more information call them at 767-8213.

3. Assess the needs of your family.

Think of what your family enjoys doing outside. Do they or you enjoy sporting activities? Maybe you want to create a place to relax and enjoy a summer cookout.

4. Locate use areas.

This area should be considered along with family needs. A good example of a use area is one I created at my house. My children wanted a place to play basketball, and I wanted a place where I could have a small flower and vegetable garden. The problem was that the basketball usually found its way into my garden. To prevent this, I constructed a fence, thereby creating two separate areas that met all of our needs and uses.

5. Develop use areas.

A well-designed use area captures your attention right away. Effective use areas should accommodate all activities. Each should be designed according to the use planned for it and should tie in well with the overall landscape. When people are looking for a house to purchase, the first impression of a prospective home is often the landscaping surrounding it. If the landscape is not appealing, they may by-pass this one for another. In other words, effective use areas that are incorporated into an attractive landscape design increase your home's curb appeal. They create the desire to go further.



LANDSCAPE DESIGN CONTINUED FROM PAGE 3

Unify the landscape and building styles:

In designing your landscape, visualize how it flows with the construction of your house. Recently in my own yard, I wanted to create a symmetrical balance where one side mirrored the other. I have a large grouping of maple trees on the left side of ' my ranch-style house. In order to create a symmetrical balance, these trees would have to be removed. As can happen with all designs, plans changed. I decided to leave the trees and create an asymmetrical balance. I could achieve this by incorporating many plants of different sizes on the opposite end of the house, or by using one large single plant as a corner planting. I decided to plant a Foster holly at the corner to achieve an asymmetrical balance:

By FOLLOWING THESE GUIDELINES,

you should be able to create a landscape design that will be the envy of the neighborhood. Don't limit your landscape to just trees, shrubs, and flowers. Incorporate walkways, patios, water gardens, and other special touches. There are a number of books available on design and plant materials at all bookstores. So go out and have fun. Remember, the only limit to a design is the imagination.

PLANTS FOR COLLECTORS continued from page 3

The Koreanspice viburnum, *V. carlesii*, is one of the earliest to bloom, blooming as the leaves are emerging in early April. In the Pink and White Garden at Reynolda, this plant is used to frame each side of the steps from the upper garden. The Koreanspice viburnum is one of the most fragrant viburnums. What a treat when it is blooming. Native to Korea, this deciduous shrub has a rounded habit, five to six feet tall with an equal spread, and is relatively slow-growing. It prefers moist, well-drained acid soil, but it tolerates our local red clay. It grows in full sup to light shade but blooms best in full sup. The flowers

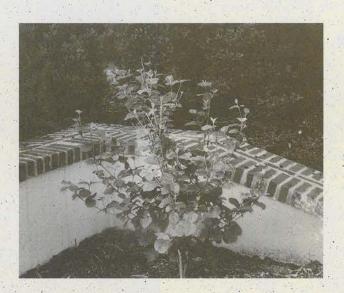
What a treat when it is blooming. Native to Korea, this deciduous shrub has a rounded habit, five to six feet tall with an equal spread, and is relatively slow-growing. It prefers moist, well-drained acid soil, but it tolerates our local red clay. It grows in full sun to light shade but blooms best in full sun. The flowers are pink in bud, turning white when fully open. It flowers in clusters that are two and one-half to three inches across. The fruit is black in the fall. It's not showy, but the birds like it. This species is a little hard to root so often nurseries offer grafted plants. This is not desirable because often the rootstock will sucker and overrun the *carlesii*. Be sure to buy own-root plants.

Some very good cultivars are offered at nurseries. 'Aurora' has very deep red flower buds that open pink and then turn white. 'Compactum' is a really nice variety for small gardens. 'Diana' is a very vigorous grower and is strongly fragrant.

The Burkwood viburnum, *Viburnum burkwoodii* is a cross between *V. carlesii* and *V. utile*. It blooms several weeks later than *carlesii* and is very fragrant but not as spicy. This plant is very adaptable and durable. It grows eight to ten feet tall with a rounded form, but I always lightly prune the one in my yard after it blooms to keep it a nice shape. If we have a mild winter, it will often stay semi-evergreen. The flowers are in clusters, three to three and one-half inches across. Pink in bud, it opens to waxy white.

One of my neighbors has a nice variety called 'Mohawk'. It is a backcross with *V. carlesii*. It has dark green leaves that turn a brilliant orange-red in the fall. The dark red flower buds are ornamental several weeks before they open. The open flowers are white and have a strong spicy clove fragrance. Its growth habit is more compact than *V. burkwoodii*. This is a really beautiful plant that I think I will have to have for my garden.

The fragrant snowball, *Viburnum* x *carlcephalum* has a more loose and open habit and blooms in late April. (As you see, by having all three of these viburnums you can have fragrance the whole month of April.) The snowball is a cross between *V. carlesii* and *V. macrocephalum*. It grows six to ten feet tall with a



Two carlesii viburnums are featured in the Pink and White Garden.

spread of eight feet. The flower clusters are five inches across. They are not quite as fragrant as the other two but are much showier. The buds are pink, opening to white. A good new variety is 'Chesapeake', which is much more compact than the species.

I am so glad to see that many of our local nurseries are carrying these plants again. Ten years ago gardeners really had to search to find fragrant viburnums for their yards. If you are ever in Raleigh in April, visit the J. C. Raulston Arboretum and see the viburnums in bloom. I'm sure you will be visiting your favorite garden shop on the way home.



Unusual vegetables for the summer and fall garden

by Mary Tapella, horticulturist

egetable gardens begin while the snow is on the ground and fireplaces are blazing. Seeds are chosen and plans are made while gardeners drool over stacks of seed catalogs, thoughts drifting toward spring flowers and summer bounties of fruits and vegetables piled high on picnic tables. By this time of the year most of us have harvested our spring crops and are ready to begin reaping the rewards of our summer gardens as well as planning our fall plantings. The vegetable patch at Reynolda is no different. The tomatoes, peppers, cucumbers, and squash are in full growth, and harvest time is near. Besides these wonderful must-have summer plants, there are some unusual and interesting selections that have been added this year.

Mirah Leaf Amaranth Amaranth virides

Amaranth is a very interesting plant with an ancient history. It has been used worldwide as a food source, as an ornamental flowering plant, and as a vegetable substitute for spinach. Since spinach grows best in cool temperatures, amaranth can be grown here instead because it thrives in higher temperatures without bolting or going to seed. Amaranth is a good companion plant for potatoes because it draws nutrients from deep within the soil.

The Mirah leaf amaranth has red and green leaves and is described as having a "nutty, delicate flavor." I have seen this plant listed in some publications as Chinese spinach. It can reach two to three feet tall and requires a fair amount of nitrogen for best leaf production. Amaranth leaves contain more calcium than beets and other greens. The fact that amaranth plants contain at least 76 percent water and 18 percent protein means that it is an excellent source of plant protein as well as calcium, iron, and vitamins A and C. Leaves should be harvested when plants are in their seventh through the ninth week of growth, when nutrient contents are the highest.

The leaves can be cooked as you would spinach. Steaming them about ten minutes retains the rich vitamin content. The more mature stems should be cooked alone for eight to ten minutes. They taste a little bit like artichoke.

Malabar Spinach Basella alba and B. rubra

Malabar or climbing spinach is another summer plant that can be grown instead of spinach. It is grown here as an annual vine reaching ten to twelve feet. The red-stemmed variety has red-maroon stems with dark green leaves. If you have visited the herb garden at Reynolda, you might have seen the red-stemmed variety where it has been displayed as an ornamental vine along one of the fences for the past few years. This year it has earned a place in the vegetable garden and will be trellised among the bulb fennel and celeriac.

Basella is not difficult to grow. Simply provide good drainage, lots of sun, and regular feedings of nitrogen. The leaves may be harvested after the vine has reached several feet long. Pick the tip end growth first to encourage branching.

Though the red and white climbing spinach both impart an delicate flavor, the red variety loses its color during cooking.

CONTINUED ON PAGE 6

Vegetable garden volunteers

The vegetable gardens are maintained by a group of volunteers who work on Tuesday and Thursday mornings through the growing season.

Susan Andrews
Joe Boroff
Jennifer Cannino
Helga Dinovi
Janet Doellgast
Andrea Hupert
Sharon Johe
Pat Lackey
Bertie Leonardi
Eleanor Leverenz
Helene Mockov
Mary Norris
Jim Nottke
Sophia Rothberger
Karen Wilson

Education volunteers

Volunteers lead groups of students one or two mornings a week from September through May.

Susan Andrews Betty Arnold Zanne Baker Barbara Bryant Helga Dinovi Pam Faino Barbara Griffin Billye Keith Jones Virgie Kinch Cynthia Leonard Peggy Lyle Dina Nieuwenhuis Ellen Reynolds Dawn Rodgers Jane Rogers Carol Romano Judy Scurry Roberta Smith Doug Turner Carolyne Wallace

Laura Warren



Reynolds grant received

Reynolda Gardens has received a \$25,000 grant from the R. J. Reynolds III and Marie Reynolds Foundation. The funds will be used for direction and information signs, brochures, and garden benches.

Thanks and kudos

In addition to the individuals and groups listed elsewhere in this issue of *The Gardener's Journal*, many others have also assisted with the garden restoration project, including

JANE WALLACE ALLING
of the McLean
Library, Pennsylvania
Horticulture Society
KARL SCHNEIDER of the
National Agricultural
Library
MICKI CROZIER of the
American Sedum

Society
Hawks Ridge Nursery
SCOTT KUNST of Old
House Gardens
Presby Memorial Iris
Gardens

Horticulturist Mary Tapella has been elected president of the North Carolina Herb Association Piedmont Chapter.

UNUSUAL VEGETABLES

continued from page 5

Celeriac Apium graveolens var. rapaceum

Celeriac, a biennial vegetable usually grown as an annual, is grown for the unusual knobby, rough root. It has been a staple winter vegetable in Germany and Eastern Europe for ages but is little grown in England and America. It is, however, gaining in popularity in the U.S.

Until the root begins to form, celeriac bears a strong resemblance to Italian parsley. As celeriac develops, it begins to look more like celery, but the bitter-tasting leaf stalks are shorter and less bulky than regular celery. Celeriac is much easier to grow than celery, but like celery it also prefers a cool climate. Directions often say that it should be planted outside "after the apple blossoms fall" (approximately late-April) to ensure that night temperatures are above 45 degrees. Celeriac needs a potassium-rich soil, making it a good companion for leeks and scarlet runner beans. Since it is not a true root crop, an early one-time supply of nitrogen is helpful. Several weeks before harvesting, pull back the soil, clean off sucker growth from the root crown, and recover crowns with soil.

A favorite of French chefs, celeriac imparts a sweet celery taste with a hint of parsley. Root crowns may be harvested when they reach two to two and one-half inches across. They can be eaten raw or cooked like celery or turnips. The more bitter leaves can be used in stews and soups.

The variety I have selected is 'Diamont' celeriac, a French variety considered more vigorous and reliable than others and slow to bolt.

Egyptian Garlic Allium cepa var. viviparum

This plant is also known as garden rocambole, walking onion, tree onion, or top onion. One of the many unique qualities of this plant is that it does not produce the large underground bulb that characterizes most onions. Instead, small bulbils form on top of the three-foot stalk where onion flowers usually appear. The small underground root structure divides and forms several scallion-size plants that can be pulled and eaten. The process by which this plant reproduces gives it the name walking onion or top onion. The weight of the bulbils produced on the tops of the stalks causes the stalk to break, forcing the bulbils to the ground where they take root and grow.

In our area, Egyptian onions are best planted in the fall in a well-drained, sunny area. Place them five to six inches apart and about one inch deep. Find a permanent spot, for once these unusual plants establish themselves they will "walk all over" for quite some time. Some people report having a continual supply for ten to twenty years!

Both the scallion-size base bulbils and the top bulbils can be used as regular onions. They keep better than garlic and have a very strong flavor.

Florence Fennel . Foeniculum vulgaris var. azoricum

Florence fennel or finnocchio, an annual fennel grown as a cool season vegetable, is related to celery, carrots, and parsley. It is grown and used extensively in southern Italy and other Mediterranean countries. This plant's unusual feature is the large bulbous base made up of overlapping stems that rest just above the ground. Sometimes referred to as the "apple," it is this swollen base that is used. (Fennel seeds for culinary use are harvested from another perennial fennel.)

Requiring a long growing season and maturing in 80 to 110 days, it may be planted as a fall crop; however, I'm going to try planting in early summer and harvesting in the fall. The plants are not as large as other fennel, reaching a final height of about two feet. Growing requirements include cool moist conditions and a nearly neutral pH, so I have placed it in the coolest area of the vegetable garden. Plants may be blanched when they reach one foot tall and the base is about one inch across. To accomplish this, pull the soil up several inches to just cover the basal area of the plant. Blanching a few



weeks before harvesting keeps it from taking on a strong licorice flavor.

To harvest the bulb, either pull it out of the soil or cut it one inch above the soil level when the base is two to three inches across. Bulb fennel imparts a light anise or licorice flavor. Culinary uses include steaming, stir-frying, and eating it shredded raw in salads or as you would use celery. The leaves can be used in salad dressings, teas, or added to soups and stews. In northern Italy it is often found on antipasto platters, and in England you may find it offered in a cold soup or served on fish.

The variety'Zefa Fino', which is the one planted at Reynolda, is listed as one of the best varieties due to its resistance to bolting.

Luffa Luffa aegyptiaca

Vegetable sponge, dishcloth, and towel gourd are some of the names given to this member of the cucumber family because of the versatility of its products. Not only are the fruits edible but so are the flowers and seeds. Most often though, this gourd is dried for the interior "sponge" that is used commercially as sponges, cleansing scrubbers, slippers, and mats.

This annual vine is native to Asia, Africa, and Australia, but the Polynesian varieties are best suited for American gardens. Luffa needs a long, hot growing season. It can be staked or left to trail along the ground; however, trellising the vines seems to produce more fruits.

Sow seeds where the plants will grow, placing the seeds one and one-half inches deep. Germination takes two to three weeks. Choose a spot with full sun and rich soil. Keep plants well-watered or soak seeds overnight prior to planting. To harvest fruits for eating, cut and use them when they are six to seven inches long, cooking as you would summer squash or okra. They can also be eaten raw like cucumbers.

To harvest for use as sponges, allow fruits to reach 18 to 24 inches or harvest when stems yellow and color fades. To prepare a fruit, cut it from the vine, then let it air dry for two weeks. Open the large end



and shake out the seeds. Soak it overnight, then peel off the brown outer skin and dry the gourd in the sun. For a softer sponge, boil it for several minutes. Remove the skin by pulling on the "strings" along the outer coating. Wash out the center and dry the gourd in the shade. For a whiter sponge, soak it for about one-half hour in a weak bleach solution or in peroxide.

What more can you ask of one plant? You get edible fruit and sponges, too. Everyone should try growing these at least once.

Next time you visit Reynolda, stop by the vegetable garden and check on the progress of our unique additions.

Rose garden maintenance award

A certificate of achievement for outstanding rose garden maintenance in 1997 was awarded to Reynolda Gardens by All-America Rose Selections, Inc. Reynolda Gardens is one of 136 public gardens nationwide that display collections of the best new rose varieties introduced each year. AARS public gardens meet strict requirements, especially in the areas of upkeep and display. All-America Rose Selections is a non-profit association for rose research and promotion.

Program volunteers

Plant clinic leaders and Tuesday Gardening volunteer speakers in the fall of 1997 and winter/spring 1998:

Greg Bogard Dennis Burnette Dr. Robert Gibson Karen Harris Dan Hill Bill Imus Margie Imus Mary Nell Jones Charles Maney Rob Means Martina Moore Mary Pegram Roger Richardson **Jim Rhodes** Frank Sink Jimmy Speas Linda Sprinkle Members of the Triad Orchid Society Members of the Winston-Salem Rose Society

James Woodel



THE HORTICULTURE DETECTIVE on the TRAIL of AZALEAS

by Kim Tilley, assistant director

Socating sources for plant material for the restoration became a major project, and a valuable learning experience for me, quite unexpectedly last spring. Among the plants that it became my responsibility to find were the azaleas. Luckily for me, there were only a few, because it became a more difficult task than I expected in the beginning.

The original plans specified 77 Ghent azaleas, which are also known as Azalea gandavensis or Rhododendron gandavensis. The first of the Ghent hybrids were produced in 1820 by P. Mortier in Ghent, Belgium. To create them, he crossed a flame azalea (R. calendulaceum) with a pinxterbloom azalea (R. periclymenoides). Both azaleas are natives of the southeastern United States. Repeated crosses and the introduction of other species into the mix resulted in the production of scores of Ghent hybrids over the next century. These deciduous azaleas were a popular landscape plant during the period in which Reynolda's gardens were designed. Although there were many named Ghents available in 1917, Thomas Sears called the azaleas by the descriptive terms"soft pink," "white,""scarlet," and "clear orange" on his 1917 plan.

The popularity of Ghent azaleas declined in the years between 1917 and 1997, when we began the search to try and replace them in the restored garden. After checking several local and mail order sources, we realized that these azaleas, which were such an important feature of the garden, would be difficult to find. I began contacting as many azalea experts I could find. They included:

- Azalea Society of America
- Barbara L. Bullock, curator of azaleas and rhododendron, U. S. National Arboretum,
- Azalea Works, a nursery in Bethesda, Maryland,
- Jim Darden, chairman of the department of horticulture science at Sampson Technical College in Clinton, N.C. and the author of *Great American Azaleas*,
- Bill Alexander, landscape curator at Biltmore Estate,

- Fred C. Galle, former director of horticulture at Calloway
 Gardens and author of *Azalea*, a book that is known as one of
 the finest books written on the subject, and
- Azalea Trace Nursery in Huntington, Maryland.

Everyone I contacted was very patient and helpful with my search but, to my disappointment, none of them offered words of encouragement for finding these old varieties.

After corresponding with the experts, I compiled an extensive list of nursery people who specialized in azalea production. Some had never heard of the Ghents; others had heard of them but never see any for sale.



Wanda Hanners, who owns Azalea
Trace Nursery with her husband,
was extremely helpful. During many
long phone conversations, I learned
that she and her husband grow
thousands of azaleas on their
property and use these plants to
propagate and distribute plants
throughout the United States and
beyond. These azaleas are part of their
landscape, which she described as
wooded sloping hills covered with
azaleas. She said that when the plants
are in full bloom, it is like nothing you
have ever seen.

I had great hope that Mrs. Hanners would be able to help. She sent me her complete

list of azaleas, consisting of 38 computer-printed pages that included names, quantities, and availability for thousands of azaleas. We hoped to match colors and growing habits to plants she could propagate for us, but even with all these possibilities, none of them were close enough for our satisfaction.

I thought my luck had changed when I found a small three-paragraph article about native azaleas in the spring of 1997 *Garden Design* magazine. The article and accompanying photograph featured an old planting of Ghents growing in the Hunnewell Garden near Boston. I became very excited once again and hoped this would be the breakthrough, but my excitement quickly diminished. I had no luck in finding a phone number or address for Hunnewell Garden. L'contacted Arnold Arboretum in Boston, which had no information on Hunnewell. I contacted *Garden Design*, but they were unable to supply more information. I had reached another dead-end. It became clear that substitution, involving the same kinds of difficult choices we had made on some





KIM TILLEY PLANTING THE EXBURY HYBRID AZALEAS.

other plants, would be necessary with the azaleas.

After reviewing all the information acquired during my months of corresponding throughout the country, the staff decided to go with recommendations made by the experts like Fred Galle and Barbara Bullock. Mr. Galle and Ms. Bullock felt that the Exbury Hybrids were as close as we could come to what we were looking for. The Exbury hybrids are common in nurseries, and I was able to find all the colors locally. We chose 'Fireball' (scarlet), 'Northern Lights' (white), 'Orchid Lights' (pink), and 'Gibraltar' (orange).

In addition to the Ghents, other azaleas were installed to complete the border planting. A white-flowering azalea, known in Mr. Sears' day as Azalea ledifolium is now classified as Rhododendron mucronatum. 'Delaware Valley White' a cultivar of ledifolium, will

represent this group. We found the last three azaleas on the original list with little trouble. They are the native azaleas pinxterbloom and pinkshell, and 'Hinamayo', a cultivar of Rhododendron obtusum.

During your visits you will
notice that there are many types
of plant material in the garden,
but you will not find a mass
planting of azaleas, as there are in
many Southern gardens. The many
hours of searching, reading, and poring

over azalea descriptions resulted in the installation of only 81 plants, but these 81, combined with all Reynolda has to offer, will be memorable.

Success from the GROUND UP

by Tom Pratt, greenhouse manager

icture this. The time has come. You must now prepare for some 700+ children to visit your home this fall. They will range in age from preschoolers to 17 years old. Your goal is for each child visiting to be attentive, excited, learn a lot, and most important have fun. Well, relax. The burden is not on you. It falls upon Camilla Wilcox, Reynolda Gardens curator of education. Mrs. Wilcox and her volunteer staff of 21 help inform and educate school children of all ages at Reynolda Gardens.

Education programs at the Gardens are certainly not new. For close to 25 years now, school students from all over the area have been invited to come share our beautiful gardens. Whether it be a small



STUDENTS (right to left) MATTHEW PRATT, DONOVAN JACKSON, AND BRIAN WOOD DISCUSS PLANT LIFE WITH CAMILLA WILCOX.

kindergarten group or a large middle school group, they all come with a common goal to learn, as one student told me, "what's going on at Reynolda Gardens."

Mrs. Wilcox and her wonderful volunteers set up programs that are varied as well as informative. Over the course of the school year, three seasonal programs are offered—a fall, a winter, and a spring program. The fall program concentrates on an outside look at our gardens and trails, weather permitting. On beautiful fall days,

children are led through the gardens and trails, learning about many aspects of nature and its changes while observing all the autumn colors that are about. As the weather turns to the cold of winter, the school programs are centered within the greenhouses. Our young visitors are given a first-class guided tour of the wonders of the greenhouse. The children learn of the tropical world with our bromeliads and orchids. They learn of arid climates when they venture into our desert cactus collection. Their visit includes a discussion on propagation, and the students take plants home to show their moms and dads. With the arrival of spring and warm weather, the school visits move again to the outside. The spring programs start at the Boathouse on





THE ROSE GARDENS RESTORED

by Camilla Wilcox, curator of education

estoring the two rose gardens designed in 1917 for public enjoyment and education has involved making changes in the original plan. The most striking difference from the original garden is a reduction in the overall number of rose plants and in the numbers of individual cultivars.

Landscape architect Thomas Sears' 1917 plan for the rose gardens at Reynolda specified 50 cultivars, a total of 1,739 plants, in two gardens that were each about 720 square feet in size. Located in the sunken

area adjacent to the greenhouse range, these gardens were enclosed by neatly trimmed low boxwood hedges. Specimen Japanese hollies, saucer magnolias, benches, and grass paths consumed much of the space, leaving comparatively little room for such large numbers of plants. A reduction in the numbers of rose plants has created ample room for each plant to grow well.

Additionally, the use of modern scientific cultural practices and new technology impacts upon the appearance of the gardens, but in more subtle ways.

- Today the plants and flowers themselves may not look as perfect as the landscape architect and the gardens' owners probably hoped they would. Pest and disease treatments that are safe for gardeners and the public sometimes don't completely eradicate problems. Modern horticulturists would not use many of the dangerous, hard-hitting chemical compounds that were regularly prescribed for plant care during the early part of the century, especially in a garden that is open to visitors of all ages.
- Re-adopting less refined cultural techniques, like those in evidence on photographs of the rose gardens taken in the 1920s, would create stressful conditions for these delicate plants. When the gardens were originally installed, it was

common practice to till soil before planting and leave it uncoveted, cultivating around plants as weeds appeared. Now these beds have been amended with organic material, cultivated, and mulched, giving them the best growing conditions we can provide.

- The type of grass used for paths is much more rugged than the original grass, and the method of installation will ensure its continued good appearance and function. In 1997, Bermuda grass was laid over a base mixture of sand, plastic net, and peat moss that is designed to prevent compaction of roots. Ordinary grass paths, like those specified in the early plan, would not survive under the feet of over 100,000 visitors each year.
- Each rose bush requires five gallons of water each week. Our hot, dry summers can easily put plants under severe stress. The roses will benefit from a new zoned irrigation system that will give them, as well as the grass paths, shrubs, and trees around them, the correct amount of water each needs.

Even with these changes, the feel of the garden is very much in keeping with the original concept. Plants are in their original location as much as possible. Where it has been necessary to make substitutions, plants have been chosen from among roses on the original list that are similar in bloom color and growth habit to ones that are missing. The garden on the west side close to Reynolda Road contains, as intended, numerous hybrid teas and some



THE ROSE GARDENS AS THEY LOOK TODAY.



polyanthas, most in shades of pink. The garden on the east side contains both of these types as well as ramblers, teas, and hybrid perpetuals in a wider palette.

Many rose names are familiar to rose hobbyists. Cécile Brünner, Marie Pavié, Mrs. John Laing, Paul Neyron, Clotilde Soupert, and Frau Karl Drushki are all appearing with increasing frequency in mail order catalogs. Other roses may not be quite so familiar, among them Grüss en Teplitz, Mrs. Aaron Ward, Ophelia, and Mme Segond Weber, which are available from specialty nurseries.

It isn't necessary, however, to be a historian, a hobbyist, or even a gardener to enjoy the restored rose garden. Roses of every scent and color will bloom at intervals throughout our long Piedmont growing season, inviting every visitor to stroll and linger in these lovely gardens.

Planting began in the fall of 1997 and will continue until all of the custom-rooted plants have arrived from the nurseries where they have been propagated. The rose gardens will be in the testing stage for the next several years, as staff horticulturists determine how well the plants are adapting to local climate and conditions and then make the necessary adjustments.

Success from the Ground Up continued from page 9

the banks of the old Lake Katharine. There classes are divided into small groups that are then led by one of our volunteers. Each group goes on a walk along the nature trails where students learn about plant life from the forest floor to the tallest of trees. Next, it's over to the formal gardens where children learn about roses, herbs, and vegetables. As the groups wind back down to the Boathouse, many questions are asked and answered by the children and their leaders.

As a spectator of sorts to the school classes as they come and go, I see many wonderful things. The first thing I see, which is not hard to notice, is the excitement in the students' eyes as they gather before their visit begins. There are the giggles and restlessness in anticipation of what lies ahead. Next, I see the parents who help chaperone, who are also excited by watching their children and others enjoy the life around the gardens. And finally, I see the excitement of the volunteers who give us so many hours of service. Not only have I witnessed the tough questions asked of them, but I've also seen the laughs and smiles on their faces as they go along their way.

Success in education is measured in so many technical ways these days. At Reynolda Gardens I count the ooohs and aaahhs, and I think our team is doing just fine.

YET ANOTHER HORTICULTURAL PUZZLE—How to Grow the ROSE STANDARDS

Rose standards were the central feature of each of the restored rose gardens, the polyantha rose 'Baby Dorothy' in the West Garden and the polyantha'Mrs. W. H. Cutbush' in the East Garden. Since neither plant was commercially available in 1997 when the time came to order plants for these gardens, and since rose standards are notoriously difficult to grow, the staff decided to wait and get the rest of the garden in hand before making a decision on purchasing and placing these plants.

The main problem with growing rose standards is usually caused by the method used to create them. Today standards, which are sometimes known as tree roses, are typically formed by grafting a cutting of the desired rose onto a single stem of another rose plant. Often, the resulting plants prove to be too delicate to survive harsh winters because the bud union (the place where the two plants meet) is too high off the ground to protect it completely from cold and wind, often resulting in the death of the desired top growth. Unless standards are grown in pots and removed to a greenhouse in the winter, many last only a few years.

In the spring of 1998, many of the rose plants for the restored garden had been planted, and the rest of the roses had been ordered. It was time to make a decision about the standards. The standards were an important feature of these two gardens, and we felt they should be a part of the restoration, yet we were reluctant to replant them, knowing that they might not survive. We knew we couldn't purchase them outright. In fact, we knew that we can't get 'Baby Dorothy' at all. We might be able to get 'Mrs. W. H. Cutbush', though not in the form we need. So, we thought, what should we do? Should we substitute another variety that we can purchase in tree form? But then what — will we be able to protect the plants in the winter, and, if so, how? What happens if we fail and lose them? We were in a quandary.

Then, some new information opened up a second possibility. An entry in the 1930 edition of *The Cyclopedia of*



PUBLISHED TWICE YEARLY BY REYNOLDA GARDENS OF WAKE FOREST UNIVERSITY

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

Photographs by Ken Bennett and Preston Stockton, Historic photograph courtesy Reynolda House archives.

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

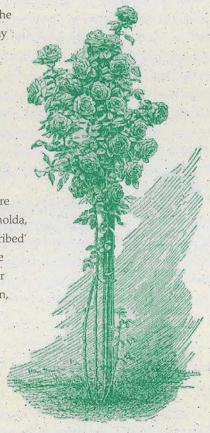
Layout by David Fyten

For a list of sources for plants mentioned in The Gardener's Journal, please send a SASE to Reynolda Gardens, 100 Reynolda Village, Winston-Salem, NC 27106.

How to grow rose standards continued from page 11

Horticulture edited by L. H. Bailey describes an alternative to the style of rose standard culture with which most gardeners today are familiar, as apparently were many gardeners in 1930. Mr. Bailey wrote; "Standard or 'tree' roses are sometimes grown, but they require so much care in keeping down suckers and staking and tying, that they are little known in this country. They are grown abroad when a few excellent blooms are desired or where space is limited....Sometimes an effect approaching the true tree rose is produced by tying up a few very strong canes to a stake."

It's possible that the style with which we are familiar—where the top is grafted to a stem—is the style that was used at Reynolda, but now we know that it's also possible that the method described' by Mr. Bailey could have been used here instead. Adopting the second method would likely produce hardier standards for our garden. Flowers would rise above the other roses in the garden, giving height and interest to the center of the garden, a role Mr. Sears undoubtedly intended the standards to fill. The options for culture of these important plants are still under consideration. Watch the rose garden for the solution to this latest horticultural puzzle.





Printed on recycled paper with 60% postconsumer waste.

WAKE FOREST

UNIVERSITY

REYNOLDA GARDENS

100 Reynolda Village Winston-Salem, NC 27106 Non-Profit Org.
U.S. Postage
PAID
Winston-Salem, NC
Permit No. 69