The Gardener's Journal

Reynolda Gardens of Wake Forest University

Winter 2002

Gifts received from July 1, 2000 until June 30, 2001 totaled $66, 444.

Benefactor
Anonymous
Bruce and Anne Babcock
Mr. Charles Babcock Jr.
Mr. and Mrs. F. James Becher Jr.
Mr. and Mrs. Royall Brown
Nancy and Scott Cramer
Garden Club Council of Winston-Salem and Forsyth County
Mr. and Mrs. Charles J. Young

Patron
Anonymous
Mary Louise and John Burress
Charles M. Frost
Little Greens Garden Club
John and Grace McKinnon
Mr. Dalton and Mrs. Sarah Ruffin
Mrs. Ann Lewallen Spencer
Mr. and Mrs. Robert G. Stockton
Dr. Richard B. Weinberg and Dr. Catherine A. Rolih

Sponsor
Dr. and Mrs. B. Ram Baliga
Club of Twenty Gardens
Mr. and Mrs. E. C. Hanes
Dr. and Mrs. Keith Kooken
Dr. and Mrs. William McCall Jr.
Mr. and Mrs. Nicholas Millhouse
Mrs. Shirley B. Snell
Jane and Lew Stringer
Village Tavern
Bill and Judy Watson
Dr. and Mrs. Richard Weaver
Mr. Robert and Mrs. Robin Weisner

Family
Anonymous
Dr. and Mrs. Elms L. Allen
Mrs. Emily H. Allen
John Asel
Mr. and Mrs. L. M. Baker Jr.
Dr. and Mrs. Bill Bazemore
Don and Kay Bergey
Dr. and Mrs. Malcolm Brown
Shasta and Barbara Bryant
Mr. and Mrs. Robert Cash
Mr. James A. Cavenaugh Jr.
Mr. William E. and

Continued on following page

A Brief History *of the* Lake Katharine Wetland

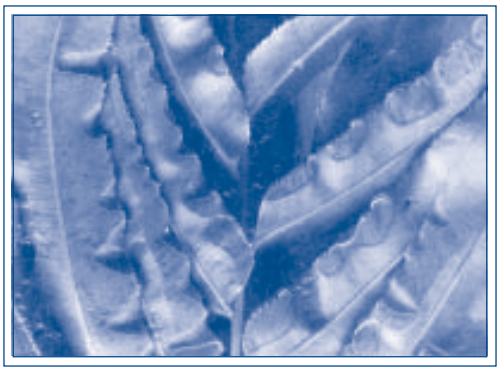
by **Camilla Wilcox**, curator of education

Cattails, marsh grasses, and wetland trees rarely seen in urban environments feed and shelter all kinds of animals in the wetland that was once Lake Katharine. Butterflies and dragonflies dart among swamp smartweed, arum, and jewelweed plants in marshy hummocks. It is a stopover for migratory and homeland for resident birds, a hunting ground for raptors. Reptiles and amphibians—turtles, frogs, snakes, and salamanders; and small mammals—muskrats, beavers, chipmunks, and squirrels—carry on their daily lives undisturbed in this urban sanctuary. Although obviously an artificial wetland—a dam remains at its west end and cut banks distinctly outline its approximately sixteen acres—it has clearly been here a long time.

Continued on page 2

ken bennett

Students observe the Lake Katharine wetland from the boathouse porch.



The Growing Fern Collection

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

When I was packing up some old pictures the other day, I came across a group of shots of Reynolda before the restoration. They were black and white photos of a cold winter evening, with snow on the ground. One shot was of a pattern a fern frond made where it pressed against the glass of the conservatory. Condensation saturated the leaf, gluing it to the cold pane, where the warm and humid interior met the January reality of the outside world. The picture reminded me that, if there is one group of plants whose needs are completely met in the conservatory, it is the tropical ferns. High shade provides ample indirect light. Vents, doors, and fans lend good air circulation, and the gravel-covered benches provide the all-important

Continued on page 8

Mrs. Nancy E. Colvin
Mr. and Mrs. Thomas H. Crichlow Jr.
James P. and Joyce H. Dickerson
Mr. and Mrs. James W. Douglas
Mr. Frank E. Driscoll
Dr. and Mrs. John R. Earle
Dr. and Mrs. John H. Felts
Mrs. Nelida M. Flatow
Flower Lore Garden Club
Friends Sage, Persi, and Battie
Greenbrook Garden Club
Cathy and Richard Guidetti
Charlie and Ginny Gunn
Betty Halverson
F. Borden Hanes Jr. and Ann Hanes
Mrs. Gordon Hanes
Mr. and Mrs. Stephen W. Harper
Mr. and Mrs. James E. Holmes Jr.
Mr. and Mrs. K. B. Jennings
Edith A. and Kenneth A. Johnson
Mr. and Mrs. Leon R. Kendrick
Mr. and Mrs. F. Thomas King
Bob and Elen Knott
Cynthia and Monty Leonard
Tony and Bertie Leonardi
Dr. Stephan B. Lowe and
Ms. Naila Gazale-Lowe
Gail Lybrook and David Hobbs
Rick Mashburn and Ken Frazelle
Dr. and Mrs. Quincey A. McNeil Jr.
Ms. Ellen Mincer
Dr. and Mrs. William G. Montgomery
Mr. and Mrs. Harold S. Moore
Bruce and Sandra Nash
Ms. Ruth J. Newman
Mr. and Mrs. Robert Nicolosi
Ms. Dina Nieuwenhuis
N.C. Unit Herb Society of America
Mrs. Sonya Patterson
Mrs. Elizabeth G. Perkinson
Mrs. Virginia D. Perry
Ms. Susan D. Pfefferkorn
Margaret and Paul Phillippi
Gary and Sandy Poehling
George and Susan Ragland
Shirley Rogers
Walter Roufail
Mr. and Mrs. James M. Ruffin
Dr. and Mrs. C. Glenn Sawyer
Mr. and Mrs. Andrew J. Schindler
Mr. and Mrs. A. Lincoln Sherk
Mr. and Mrs. Robert D. Shore
Mr. and Mrs. Ian Silversides
Bill and Janet Snow
Cornelius and Carol Strittmatter
Dr. and Mrs. Gerald T. Taylor
Dr. and Mrs. James F. Toole
Triad Orchid Society
Twin City Garden Club
Mr. and Mrs. Harry B. Underwood
Mr. and Mrs. Hans W. Wanders
Weeds and Seeds Garden Club
Mr. and Mrs. W. F. Womble
Elizabeth L. Wyeth
JoAnn and Bryan Yates

Donor
Anonymous
Jones and Martha Abernethy
Dr. and Mrs. William B. Alsup Jr.
Charles and Lorna Beck
Dr. and Mrs. Edwyn T. Bowen Jr.
Mr. and Mrs. John B. Brady
Mr. W. Mark Breedlove
Michael and Stephanie Brooks
Dr. A. Robert Cordell

Continued on following page

Wetland

Continued from page 1

Some who have lived in Winston-Salem for many years only reluctantly call this wetland beautiful and admit to its importance as a wildlife sanctuary. After all, the lake was a popular attraction for over fifty years, and their thoughts turn to regret over what has been lost.

Boathouse and frozen lake, c. 1920

But through all those years, even though the surface of the water seemed undisturbed, the lakebed was gradually filling, as silt and sediment entered from the streams that fed it. This condition was to be expected of an artificial lake. Streams always carry silt and sediment, which is usually deposited gradually as they flow. When they flow naturally, this doesn't cause much trouble. When a hole is dug for a lake, however, this characteristic of streams becomes problematic. One of the challenges for the engineers who designed Lake Katharine was to prevent these particles from accumulating in the lake and gradually filling it up. In their original plan, they placed a concrete configuration called a sand dam where Silas Creek emptied into the lake. A catch basin was added nearby soon afterwards. Even with these preventative measures in place, the lake had to be dredged in 1924, only eleven years after it was completed. Beyond that information, recorded in an account book, there is little information available in estate records on any maintenance that might have been required or conducted on the lake after that. It's possible that the lake may not have been dredged again, even though it very likely needed it.

Almost thirty years later, construction began on the campus of Wake Forest College. Buildings were located on high, rolling hills that had been part of Reynolda estate. During construction, runoff poured downhill and into Silas Creek and Bottom Branch, which flow into the north side of the lake. Other buildings and roads were constructed upstream, as well, around the same time. Massive loads of silt suddenly inundated the lake basin, easily overwhelming any measures previously installed to protect it. Within a very short time, the lake was full of mud. Pleas were made by members of the community to college authorities to take steps to stop or reverse the process, but, once the lakebed had filled, there was nothing anyone could do. It was left to nature to find its own equilibrium.

Even without this historical information, the wetland's age, stability, and rate of formation could be estimated by observing the species, size, and health of plants that grow in various locations. Most disturbed landscapes revert to their natural state according to predictable patterns. Forest that has been cleared for agriculture will restore itself gradually, given no other intervention, over a couple of centuries, as

plant species take hold, grow, mature, and die. Land where ponds and lakes have been built follow a different pattern in the beginning but will usually eventually resemble previously-cleared farmland and follow a similar progression. For example, when a stream-fed pond has been built, reversion usually begins when plants such as water lilies begin to grow near the shore. Soil deposited and retained near their roots dries out, and land plants take hold. Water lilies then move farther out toward the center of the pond, and so on. If there is no dam to contain water artificially, trees, shrubs, and herbaceous plants typical of drier areas begin to grow from the shoreline inward. The process continues until the pond is essentially reabsorbed into the surrounding landscape.

THERE ARE NO NATURAL LAKES in our immediate region. There are, or were, natural wetlands, including a small area within the boundary line of Lake Katharine, but most of the land that was submerged consisted of wooded hills and streams. The process of recovery began slowly, almost unseen, then accelerated suddenly in a short period of time; consequently, recovery is not proceeding with textbook precision, as it would in the case of a small pond where changes might come more gradually. In the end it cannot recover completely, for two main reasons, both related to the presence of the dam. First, soil cannot regain its original contour because silt and sediment, normally carried in streams, is being deposited in the blocked lakebed, rather than continuing to flow downstream. (It is estimated that deposits are as deep as twenty-five feet in some places.) Second, much of the lakebed will remain wetter than it was originally because water emanating from springs and streams is being retained instead of draining away. Soil deposits, water retention, and altered water flow have created a variety of conditions that did not exist here before the lake was built. Soil and water conditions have undergone a fundamental change, which cannot be undone without causing a major disruption to the complex ecosystem that has become established here.

A survey of plant life and an observation of water resources in the lakebed not only provides valuable insight into nature's response to this human intervention but also gives us a glimpse of how the area might look and function in the future. Alder trees, which require a reliable water source, typically hang over the banks of stable, non-seasonal pools; several small groves of alders appear to be established and thriving around the old shoreline. Black willows, which typically gain a foothold where soil is consistently sodden but not pooling, such as

View of orchard across lake, c. 1920

Continued on page 4

Mr. and Mrs. George W. Crone Jr.
Mrs. Margaret G. Crutchfield
Larry and Linda G. Davis
Patricia R. Dixson
Mr. and Mrs. Charles G. Duckett
John and Lu Dunkelberg
Mrs. Lucy W. Eaton
Mrs. Margaret P. Foster
Dr. Robert L. Gibson
Mrs. Richard Glaze
Howard Gray
Ms. Kim Hackel
Mr. and Mrs. Smith M. Hagaman
W. Helene Halverson
Dr. and Mrs. John W. Hammon
Dr. and Mrs. James H. Hampton
Heaven Sent Roses
Mr. and Mrs. William F. Hohman
Dr. and Mrs. Robert J. Holmes
Mrs. E. R. Howard
Mrs. Dudley Humphrey
David and Cathy Hurd
Mrs. Fred S. Hutchins Jr.
Mr. and Mrs. Logan Jackson
The Jaeger Company
Mr. and Mrs. John G. Johnson
Ms. Sara H. Johnson
Dr. and Mrs. Robert Kelly
Dr. John Keyes and Ms. Janice Purdy
Ms. Earline Heath King
Mr. and Mrs. Philip G. Kinken Jr.
Mrs. Barbara Kirk
Dr. Robert I. Kohut
Mrs. R. Lawrence Kroovand
Ms. Patricia M. Lackey
Dr. W. A. Lambeth Jr.
Mr. Douglas Leckie
Dr. and Mrs. Dan Locklair
Rachel Malcolm
Mr. and Mrs. George L. Mann
Mr. G. B. Manning
Mr. and Mrs. James E. Martin
Mr. and Mrs. Larry Martin
Mrs. Thelma D. Matthews
Dr. and Mrs. Robert L. Means
Dr. and Mrs. Henry S. Miller
Mrs. Annie Laurie Morgan
Ms. Deanna Carlisle Moss
Mrs. Caroline Mountcastle
Dr. and Mrs. R. Charles Moyer
Mrs. Alex M. Nading
Dr. F. D. Pepper Jr.
Dr. and Mrs. Russell Perry Jr.
Mr. and Mrs. Jimmy R. Pettit
Pilot Mountain Garden Club
Mr. and Mrs. William E. Rabil Jr.
James C. Ratcliff
Bruce and Donna Resnick
Mrs. Thomas B. Rice
Mr. and Mrs. James S. Rodgers
Mr. and Mrs. H. C. Roemer
Glenn and Diana Salmons
Margaret Savoca and Bruce Bradford
Mr. and Mrs. Lyttleton Scott
Sedge Garden Nursery Inc.
Mr. and Mrs. John Shore
Sally W. Slusher
Dr. David L. Smiley
Mr. and Mrs. Donald G. Smith
Kenneth P. Sommerkamp
Ms. Ann Spencer
Bunky and Dick Stockton
The Summit School
Jean and Henry A. Taylor
John A. Taylor Sr.

Continued on following page

Mrs. Mills Taylor
Mr. and Mrs. William F. Thomas
Tony and Virginia Vargas
Mr. and Mrs. Stuart Vaughn
Ms. Frances D. Vazquez
Mr. and Mrs. Douglas D. Walker
Susan B. Wall
Mr. and Mrs. William R. Wallace Jr.
Dr. James M. Walter Jr. and
Ms. Michelle A. Portman
Ginny Weiler
Doug and Mary White
Mrs. William H. White (Jean)
Dr. and Mrs. Ethan R. Wiesler
Mrs. Marcus Wilkinson
Charles and Anne Wilson
Mr. James Woodel and
Mr. Kimmey Tilley

Friend
Virginia B. Adams
Mrs. John L. Bacon (Laurel)
Margaret Beach
Mrs. Frankie D. Bell
Ms. Myra T. Blackburn
Mrs. Helen H. Blum
Wilba P. Brady
Mr. and Mrs. Nicholas B. Bragg
Mr. and Mrs. Zachary T. Bynum Jr.
Mr. and Mrs. Vernon C. Carlton
Mr. Richard D. Carmichael
Ms. Cindy Christopher
Lou and Tim Creef
Mrs. Kay Curl
Egbert L. Davis Jr.
Mrs. Susannah Dickey
Dr. and Mrs. James T. Dobbins Jr.
Mrs. Janet Doellgast
Toni Pegg Doub
Mr. and Mrs. Herbert DuToit
Mr. and Mrs. John W. Dyer
Mr. and Mrs. John Friedenberg
Dr. E. Reed Gaskin and
Mrs. Jean Gaskin
Mrs. Izoria S. Gordon
Mr. and Mrs. William R. Griffin
Martha Haire
Mrs. Lynne Hart
Mrs. Anne Lashley Hester
Ms. Alix Hitchcock
Mr. and Mrs. Lawrence N. Holden
Mrs. Judith Hoots
Mr. and Mrs. Wallace J. Humalo
Ed and Edith Hurdle
O. D. Hutcherson
Mrs. Pat Jacques
Don and Pat Johansson
Mr. and Mrs. Paul A. Jones
Dr. Janet L. Joyner
Pam Kahl
Elizabeth W. Lamberti
Mr. and Mrs. Don Lanning
Bernice G. Lansford
Mrs. Suzanne W. McCarthy
Dr. Charles E. McCreight
Mrs. Carroll McCullough
Ralph and Patricia Messick
Dr. and Mrs. J. Rodney Meyer
Mrs. Martha C. Mitchell
Mrs. Beverly Moore
Dr. Mary Lou Moore
Mr. and Mrs. Thomas O. Moore III
Mr. and Mrs. William Mack Morris
Mr. and Mrs. Edward T. Mulvey Jr.
Albert Oettinger Jr. and
Sophia Rothberger-Kraal

Continued on following page

Wetland

Continued from page 3

stream banks, have reached mature size in the area closest to the confluence of Silas Creek into the lakebed. As they have grown, the soil there has dried significantly, and their health is declining. Nearby, red maples and sycamores, which thrive in moist, but not wet, soils are almost mature size. Farther west, toward the dam, these same species of trees and others, several species of shrubs, and some herbaceous plants, grow close together. The deposited soil there is relatively dry, and it has created an island-like formation near the dam. Cattails and other herbaceous plants grow in a wet meadow over a large area nearby. The outline of watercourses throughout is easily traceable. Silas Creek flows steadily on the north side, joining with Bottom Branch before pooling and rushing over the dam. A smaller, unnamed stream meanders through the south side. During rainy periods, its backwash comes close to, and sometimes flows under and occasionally into, the boathouse on the south shore of the old lake. A line of red maples on its banks marks this stream's progress through the wetland. We can predict that if the process continues without further intervention, some areas will become higher and drier and come to support dry copses and woodlands. Streams will continue to traverse the area, and small pools will become more or less permanent. Zones near streams, pools, and springs, as well as areas that do not drain well because of blockage downstream, will remain wet and continue to support typical wetland plants.

WE KNOW HOW THE STORY ENDED, but where did it begin?

In the early 1900s, Mr. and Mrs. Reynolds engaged contractors and engineers to design and build the lake, which they hoped to use for fishing and other recreational purposes. (Within a few years, water piped from the lake would also irrigate the many ornamental plantings in the formal gardens and around the family home.) The lake was an important element in Reynolda's landscape design. Correspondence and notes written by Mr. and Mrs. Reynolds, contractors, engineers, and employees, indicate that the house and lake were sited in tandem. Locations that did not accommodate both were rejected. In November of 1909, John Ambler, a local civil engineer working with Louis Miller of the New York and New Jersey design firm Buckenham and Miller, gauged the flow of Silas Creek to see if enough water was available to fill the lake. He drew the topographic map for the lake in the summer of 1910.

Mrs. Reynolds, for whom the lake was named, was involved in all stages of the construction of the lake. In September of 1910, the lake was sited and a bountiful water source discovered in what is now the large field near Coliseum Drive, a location which was then known as part of the Gray farm. Mr. Reynolds wrote to his son that his "…mother now has 40,000 gallons of running water per day at Gray springs. The water shoots out of a two inch pipe ten feet above the level of the bank of the branch and can be piped to the dam of the lake and pumped 200 feet high without any cost of operating the pump."

Construction on the spillway for the dam began on August 7, 1911. In May of the following year, Superintendent Snowden's weekly report stated that workers were "…hauling a few rock from Old Town to complete the wall of arch, and cement. The laborers have been engaged in digging rock for dam…the core-wall of the dam is complete and the arch and wall are complete except the top stones of the north west pilaster. "The stones Mr. Snowden referred to may have been the distinctive stones that were used on the dam and on the foundations of many estate buildings. Most were found nearby. Fragments of diabase dikes (finger-like ribbons of magma from an ancient volcano), they attained the round shape as they weathered over geologic time. They are iron-rich, hence the rusty brown color.

On May 27, 1912, Mrs. Reynolds wrote to Mr. Miller to report that the dam and bridge were

complete and to inquire about adding "…a small island in the lake where it would look well, and at the same time be in deep enough water to make a good fishing station."She reasoned, "This could be very easily made while we are cleaning out the lake bottom. "In July, she was researching methods for building a fishing lake that wouldn't attract mosquitoes. She wrote to both Louis Miller and the U.S. Department of Commerce, Department of Fisheries to learn how to prepare the lake bottom in order to accomplish these goals. Her letters focused on different aspects of lake construction. From Mr. Miller, she wanted to learn how to prepare the lake bottom in order to "…prevent having mosquitoes and also the best thing for fish." She asked several questions, then concluded, "…in fact, send me all the information you can give me on this matter. "In her letter to the Bureau of Fisheries, her focus was on creating a high quality fishing lake. She ended this letter with a request to hold off sending her previously-ordered fish until she was satisfied that the lake was correctly prepared. The responses from both offices were essentially the same: all underbrush should be removed, then the surface of the soil should be plowed and smoothed. The fisheries department official added that "At least one third of the lake bottom should be covered with three and one-half feet of water, the lesser depth near the shore. The shallow portions should be planted with such desirable forms of vegetation as *ceratophyllum*, *potomogeton*, and *elodea*." He assured Mrs. Reynolds, "If the water supply is adequate in volume and has a perfect circulation the lake will not be a breeding ground for mosquitoes."

On January 31, 1913, the lake was almost full, according to a letter from Mrs. Reynolds' secretary, Evie Crim, to Mr. Miller. The final cost of the lake and dam, included in a 1914 list of assets, was $12,134.65. The cost of the two boats docked there was $100.61.

The lake construction project was a success. A spectacular view of the lake from a large porch of the family home was framed by woods on either side of a grassy hillside known as Sunset Hill. Friends and family gathered at the lake often. Even when the family wasn't in residence, others continued to enjoy it. A legal document was drawn up, releasing the owners from responsibility in case of accident, although it is not clear whether or how often the document was used or by whom. Friends wrote to Mrs. Reynolds while she was away, remarking on the beauty of the lake. In January of 1917, a friend wrote, "The Reynolda Lake looked so pretty today frozen over. "In April of 1918, another wrote, "I am so sorry you can't enjoy the drive around your beautiful lake with us—the dogwoods, cedars, and pines have never been more beautiful."

Hiawatha Pageant, 1921

After Katharine Reynolds Johnston died in 1924, family and friends continued to enjoy the lake she

Continued on page 6

Mr. Ellis E. Pardue
Ms. Alice E. Parrish
Linda and Dick Patton
Mrs. Freida M. Pearce
Ms. Elizabeth G. Perkinson
Bob and Viane Piper
Dr. and Mrs. H. C. Pollard
Ken and Joanne Raschke
Mrs. Edgar P. Roberts (Della)
Mrs. Joyce Robertson
Mrs. George D. Rovere
Mrs. Edward F. Rowe
Mrs. Hana Rozsypal
Ms. Mary-Carol Sapp
Mr. and Mrs. William C. Scurry
Mr. and Mrs. J. William Sexton
Mrs. Tori Sheek
Bill and Dawn Sides
Mrs. Ramona R. Snavely
Ms. Carla Jean Stockton
Mrs. Virginia K. Stoelzel
Dr. and Mrs. Allston J. Stubbs
Jean and Bill Temples
Charles and Nancy Thomas
Mrs. Donna T. Torreyson
Marian F. Townsend
Mrs. Josephine R. Vance
Ms. Amy Verner
Ms. Sharon Vinsant
Mrs. Beverly B. Wachtel
Dr. Mo and Mrs. Helen Waite
Mrs. Opal C. Weatherly
Ms. Beverly J. West
Mrs. Rosemary Wheeler
Mrs. Patricia H. Wood

Other
Anonymous
Dr. Nina S. Allen
Mrs. Rupert W. Bagby
Mrs. Marcia T. Baker
Mrs. William Benbow
Mr. Gregory Bogard and Mrs. Clare Bogard
Mr. and Mrs. Glenn W. Dobbs
Marvin L. Ferrell Jr.
Nancy K. Fiorey and Myra F. McGonigle
Hillcrest Garden Club
Hope Valley Garden Club
Mr. and Mrs. W. H. Merwin
Cynthia Moore
Mrs. Ruth Pepper
Ms. Helena C. Reed
Dr. and Mrs. R. L. Wyatt

Gifts in memory of
Charles M. Frost
Mr. and Mrs. Stephen W. Harper
Mrs. E. R. Howard
Mrs. Mary Ruth Howard
Pam Kahl
Della Pulliam
Bill and Janet Snow
Dr. and Mrs. S. Clay Williams

Nancy Beck Johnson
Claudia Belk
Mrs. Basil Boyd

Christina Messick
Mr. and Mrs. James E. Messick Jr.

Bess Richardson
Bill Marshall

Continued on following page

Annie Stanton
Ms. Jane Rogers

Marcus Troxell
Mr. and Mrs. Robert G. Stockton

Mimi Whaling
Betty and James Dominick
Madeline and Ramon Hoots

Pfohla Wilmoth
Ms. Alice E. Parrish

Gift in honor of
Patty Brown
Alice Parrish

Matching Gift Companies
Deutsche Bank Americas Foundation
ExxonMobil
Lucent Technologies
RJR Tobacco Company
RMIC

Volunteers
Jones Abernethy
Marge Asel
Anne Babcock
Brenda Bahel
Sarah Bare
Greg Bogard
Barbara Bryant
Kay Bergey
Leslie Clifford
Linda Davis
Jean Dixon
Elise Donnelly
Mike Garner
Pat Jacques
Billye Keith Jones
Barbara Kendrick
Pat Lackey
Cynthia Leonard
Bertie Leonardi
Eleanor Leverenz
Heather McCleery
Ellen Mincer
Nancy Moltman
Bev Moore
Lucy Moore
Ann Morehead
Dina Nieuwenhuis
Jim Nottke
Jane Rogers
Carol Romano
Judy Scurry
Betty Sink
Roberta Smith
Ramona Snavely
Cathy Tindall
Zack Tickle
Candi Turner
Jeff Turner
Philip Van Horn
Amy Verner
Bev West
Becky Wheeler
Benton Williams
Charlie Williams
Mary Hollis Williams
Winston-Salem Rose Society
Bill Wise
JoAnn Yates

Wetland

Continued from page 5

had created. A newspaper article referred to a picnic there hosted by a Reynolds daughter in 1925. Family letters in succeeding years refer to fishing and boating, but documentation is not extensive through the following years. It seems that almost everyone who lived in Winston-Salem during that time has some special memory of the lake. Those who have lived here longest may remember private parties and picnics there, hosted by the Reynolds and Babcock families. Many people remember fishing from its banks; walking on the lakeside trail with the Audubon Society on bird counts; or simply sitting on the hillside or strolling along the road overlooking it.

RED CLAY HAS OVERWASHED the sandy beach on the north side of the lake near the dam, where local children presented an elaborately staged pageant, "Hiawatha, an Indian Passion Play," in 1921. Patches of sand are still visible, a small archeological discovery for those willing to attempt an exploration through brambles and underbrush. The neatly-kept orchard that was once up the hill from the beach is gone, covered over with woodland trees and vines. The bird population has changed from the days when the lake was an open waterway, but still, one or two herons patrol the shoreline. Sandpipers occasionally stop in; mallards stay and raise their young. Last spring three pairs of Canada geese engaged in dramatic territorial displays, then all six moved on, apparently finding that this was not a good nesting ground for them, after all. There are probably more reptiles, amphibians, and small mammals here now, with the increase in food and shelter that has come with the environmental changes over time. Children still come to Lake Katharine, not to fish, row, and present pageants but to learn about natural history. Most of the 2,000 school students who visit each year with their teachers, and the young naturalists who spend a week here each summer, view the life of the wetland from the covered porch of the former boathouse, now the Boathouse Education Center. For these urban young people, a visit to such a unique environment creates lasting memories, and perhaps marks the beginning of a lifelong love and respect for the natural world. Adults come to the banks of the wetland for the peacefulness that comes from watching its everchanging life. They often bring their children to see frogs and turtles sunning on rocks and logs.

COULD MRS. REYNOLDS have predicted, on the day her lovely lake was declared full, that in fifty years, it would be almost gone, changed for good? Probably not. Did her descendants predict, in creating the 129-acre Reynolda Gardens of Wake Forest College, which includes the former Lake Katharine, that they would be providing the community with a haven that would prove to be indispensable in the years ahead? It seems they may have. A paragraph in the 1961 deed of gift begins, "Whereas it is recognized by the grantor that with the increasing turbulent pace of our civilization and with the vibrant growth of the metropolitan area of the City of Winston-Salem there is an evergrowing need in Forsyth County for land areas to be set aside, preserved and enhanced in the beauty of their natural state, which land areas can become a refuge for relaxation and contemplation and a haven for reflective outdoor leisure…."Their foresight has proved to be truly prophetic over the years, as the urban environment has squeezed us closer together, and life has become sometimes unbearably fast-paced. For years, people have come here for relief of the normal pressures of modern life, but visitation has been higher than ever in the past few months, as many have turned to this quiet place for sanctuary in a difficult time. It is hard to predict the nature of pressures that will come to us in the decades ahead, or how much we humans, and the animals with which we share our world, will need such sanctuary, but we know that, through the commitment of the university to honor the spirit of the gift of Mr. and Mrs. Reynolds' heirs, the Lake Katharine Wetland will continue to be a place of refuge for all of us.

Tulip Magnolias

by **Preston Stockton**, director

One of the things I really love about the formal gardens at Reynolda is the framework created by the trees. The formal gardens are probably best known for the weeping cherries that border them, offering March color in sweeps of deep pink; but just as beautiful for spring color are the sixteen tulip magnolias, *Magnolia x soulangeana*, that anchor the corners of the quadrants. This is a wonderful selection of magnolia to consider for the home landscape.

There are more than ninety species of magnolia, about half of which can be found in gardens worldwide, in the genus named after Pierre Magnol (1638-1715), who was a professor of medicine and director of the botanic garden at Montpelier in France. Hundreds of hybrids and cultivars are available in addition to the species, with new introductions each year. Several years ago, I went to a magnolia lecture given by the late J.C. Raulston. He talked for over two hours before the moderator very kindly cut him off. Until then, I never knew what a varied and extensive genus it is.

virginia weller

Tulip magnolia flowers

Magnolias are among the most beautiful landscape plants, ranging in size and form from small shrubs to large trees, both deciduous and evergreen, with flowers ranging from white to yellow, and from pink to rose to purple. They have a wide range of hardiness, from tropical to temperate species, and are easy to grow, making them suitable for almost any garden.

All Southern gardeners are familiar with the Southern or bull bay magnolia, *M. grandiflora*; but the most popular magnolia for general planting is the tulip or saucer magnolia. This magnolia is a cross between *M. denudata* and *M. liliflora*. It was first recorded in France in the 1820's by Monsieur Soulange-Bodin at Fromont, near Paris. There are several reasons this magnolia is so popular: it is more cold tolerant than the Southern magnolia (hardy to zone 4); it grows only twenty to thirty feet, as opposed to the massive Southern magnolia, which can grow sixty to ninety feet tall; and it has beautiful blooms in early April.

All of the early spring-blooming magnolias are Asian natives, and all are deciduous. The flowers on *M. x soulangeana* are borne in great profusion before the leaves appear. They are cup-shaped and five to ten inches long, white on the inside of the petals and light purple outside. There are some pure white and deep purple varieties available. Because these trees bloom before the leaves appear, it is best to display them against a solid background of evergreens. A big problem we have with the tulip magnolia in this area is the fact that the flowers often are damaged by late freezes. They should be planted in sheltered sites to protect from cold winds, and care should be taken to avoid low areas where cold air collects at night. One notable characteristic is that these trees will bloom when very young and small. I often see tiny trees, loaded with blooms, in home landscapes.

Tulip magnolias have a wonderful winter silhouette; then, they are displaying the qualities I love the most about them: the beautiful branching pattern, the branches tipped with fuzzy buds, and the smooth, silver-gray bark on older trees. The branches on older plants can also be cut in late winter and brought inside to force into bloom, a plus for flower arrangers impatient for spring. I will admit that the fall color is pretty disappointing, if not dreadful. The leaves basically turn a dull brown and fall off. Well, I have learned that a plant can't have everything!

Growing *M. x soulangeana* is easy. This tree prefers to grow in full sun but will grow in partial shade. It likes a deep, fertile, acidic soil and good drainage. It does not like to be excessively dry. One thing to remember is that the roots of the tulip magnolia are sensitive to disturbance or compaction. Its roots are thick and fleshy, and the root system has minimal lateral roots and root hairs. It is best to transplant this plant when the leaf buds begin to open in the spring to avoid having damaged or cut roots die back, which will happen if the tree is dormant. Like all other magnolias, this one takes light pruning well. Shaping is especially important when the tree is young. It is best to prune in the spring after the danger of frost is over.

We have replaced the tulip magnolias through the years as they have died, but the four original trees have remained in the southwest quadrant, which is known as the Pink and White Garden. The last few years have been hard on these trees, and they have deteriorated to the point that we will remove and replace them this winter. Late freezes the last two years and root disturbance from the completion of the renovation have accelerated their decline. We will miss these beautiful old plants.

Ferns

Continued from page 1

humidity. In fact, the conservatory is so accommodating to ferns that they regularly appear under the benches, in the pots of neighboring plants, in the drainage gutters, and on the brick support piers, having sprung from spores cast earlier. You might even say that some species, like the holly fern, *Cyrtomium falcatum*, have become a bit weedy. But weeds are generally plants we don't like, so I don't know if I'm ready for that designation yet.

Holly fern

Many interesting little sporelings have popped up here and there, and I have potted up the best of them to see what they will grow up to be. Ferns have a reputation for hybridizing, and the juvenile plant does not always resemble the adult. It seems that some of the parents of these ferns are no longer with us, so it has been difficult to identify them. We have also pursued more traditional methods of expanding the fern collection: scouring the catalogs, the Internet, and garden shops for new and interesting specimens. We have added fourteen ferns in the last six months and hope to make changes in the conservatory that will enable us to devote an entire section to ferns. Though they don't offer the flashy flowers or scents of some of the higher plants, ferns offer a diversity of colors and textures, habits, and forms that are unrivaled in the plant kingdom. Displaying them together will give us the opportunity to share the contrasts of these qualities at their finest.

Rabbit's foot fern

Undoubtedly the ferns that get the greatest attention in the conservatory are the two hare's or rabbit's foot ferns, *Davalia fejeenis*, that flank the conservatory entrance from the sales greenhouse. They have grown out of their pots and into the moist gravel of the greenhouse benches. These plants are native to Fiji and the Austral Isles where they grow as epiphytes on boulders and stream banks. If you peek under the skirt of fronds, you will see the fuzzy, creeping rhizomes that give the fern its name. There are also squirrel's foot and bear's paw ferns as well as further divisions of hare's foot into silver, Australian, giant, lacy, and Canary Island hare's foot ferns. It is easy to see how these creeping rhizomes could secure loose litter and begin the process of soil building in disturbed areas.

Kangaroo fern, *Microsorum diversifolium*, a recent addition to the collection, also displays a creeping rhizome to accommodate its epiphytic habit. This fern has dark green, leathery foliage in forking, finger-like fronds.

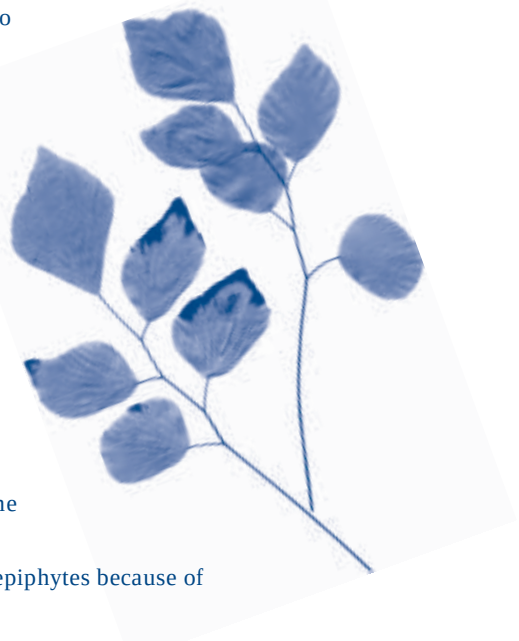
Our staghorn fern, *Platycerium bifurcatum*, has come home after a long journey. I got this plant as a bonus sporeling with an orchid I bought at the annual Reynolda Gardens orchid auction. I potted it up and grew it at my house for a couple of years before taking it to the greenhouse at Old Salem where I was then working. It traveled with me back to Reynolda when I left Old Salem to take the Reynolda Gardens greenhouse manager position. Staghorns grow in Java, Australia, Africa, New Guinea, and Indonesia, with one species in tropical America. They grow on tree trunks in their native habitats and are often cultivated on plaques of wood, though they can be grown in pots and in wire or wood slat baskets. They have two distinct leaf types: a nest-like production of sterile leaves that serves to anchor the plant and to trap litter and debris for food, and the antler-like, fertile fronds that are either erect or pendulous, depending on the species.

We anxiously await the arrival of the giant staghorn, *Platycerium superbum*, and the silver staghorn, *P. veitchii*, along with a fern of similar habit to the staghorn, known as *Aglamorpha*. P. veitchii grows naturally on cliff faces and boulders. The fronds are covered with white, woolly, star-shaped hairs that help keep the plant from drying out. The fertile fronds are erect and divided near their tips, giving an antler-like appearance. Sterile fronds of *P. superbum* are

gray-green and deeply lobed. Fertile fronds are deeply divided and hang from three to six feet. Given moderate humidity and filtered bright light, staghorns will succeed in the home, but because of the growth habit, they need to be taken to the sink for a thorough soaking occasionally. Staghorns require less water than other ferns.

Of all the ferns, the maidenhairs, *Adiantum sp.*, are the most beautiful and delicate. Foliage of the differing species is a variation on a theme—small, delicate, fan- to tear-drop shaped leaflets, held on thin, wiry stems that cause the fronds to react to the slightest air movement. Two fine specimens in the collection are the silver dollar maidenhair, *A. peruvianum*, and the delta maidenhair, *A. raddianum*. The silver dollar maidenhair has individual leaflets about two inches across, held on shiny, black stems. The delta maidenhair has tiny leaflets arranged much the same way. The fronds are arranged in tiers, and the variation in green, from the chartreuse of the new fronds to the spruce green of the old, gives the appearance of a green mist. The rosy maidenhair, *A. hispidulum*, and the trailing maidenhair, *A. caudatum*, can also be seen in the collection.

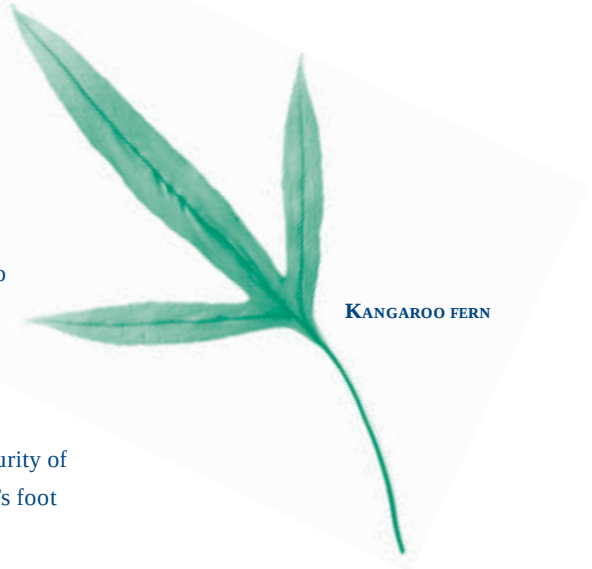
Tree ferns are another exciting addition to the collection. The nursery business has applied the term tree fern to a number of different ferns that form trunks. Some of these are recognized as genuine tree ferns, and some will never reach a height where they could be considered tree-like. Such is the case with the silver or dwarf tree fern, *Blechnum gibbum*. It forms an impressive rosette of foliage and, with age, reveals a stump-like trunk. The true tree ferns are in the families Dicksoniaceae, named for the Scottish physician and botanist James Dickson, and Cyatheaceae. Though the little speck of a plant that arrived here from the mail-order nursery in a two and a half inch pot has grown considerably, it is hard to believe this species can reach twenty feet tall. There are about twenty species of *Dicksonia* that inhabit cool, mountainous cloud forests in warm, temperate regions of New Zealand, Tasmania, and the American tropics. Because of their native habitat, many tree ferns can successfully survive outdoors in areas like San Francisco and parts of southwestern England and Ireland. Heat will be the challenge to their culture in our climate. The rough tree fern, *Cyathea australis*, is our other representative of this group. This, too, has been liberated from the original two and a half inch pot and is on its way to maturity. The rough tree fern does the soft tree fern one better, though. In the wild it can top out at fifty to sixty feet, though sixteen feet is more likely in cultivation. The fronds of this plant stretch from six to ten feet. Orchid growers appreciate tree ferns from an entirely different horticultural point of view. Aerial roots that surround the trunks of some species are valued as a growing medium for orchids and other epiphytes because of their resistance to decay.



MAIDENHAIR FERN

Representatives of some of the more common ferns can be found in the conservatory, as well. The button fern, *Pellaea rotundifolia*, is grown in windows above the kitchen sink in many a household. This popular little native of New Zealand has circular leaflets arranged oppositely along the rachis. Red-brown, scaly stems and glossy, dark green pinnae are also characteristic. These ferns need to dry out between waterings. They thrive in bright, indirect light.

Visitors are encouraged to come visit as we build our collection of these fascinating plants. Perhaps one day all of our ferns will approach the grace and maturity of our impressive pair of rabbit's foot ferns.



KANGAROO FERN

Lion's Head Water Garden, Summer 2001

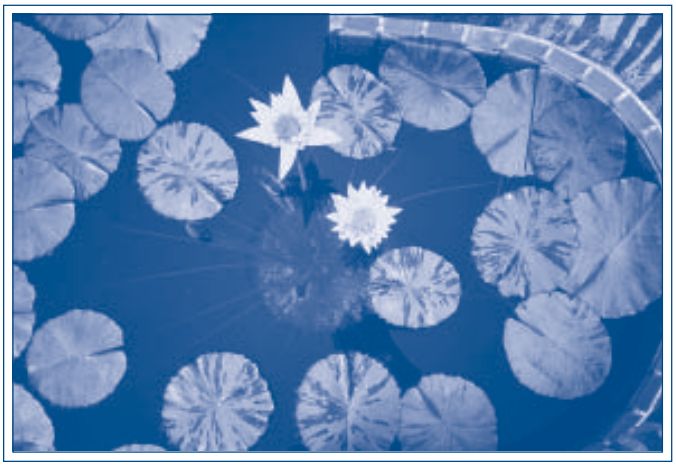
by **Mindy Mock**, *horticulture intern*

My fascination with water gardening began about ten years ago, when I built my first pond. I have enlarged it twice, and it's now a 5,000-gallon pond with a waterfall and small stream. When I was asked to design a planting for the lion's head fountain, which is the main water feature in the formal gardens, I was thrilled. It was devoid of plants and had about a dozen goldfish in it, so I would start with a clean slate. I quickly learned that experimenting with water gardening at home is one thing, but taking on someone else's water garden, especially one in a formal public garden, is quite another. It seemed that every resource I used to gather information on aquatic plants and water garden ecology had slightly different information from the last one, but, based on my own experience with plants I've grown, and with the help of several good books, I chose the following plants to provide a variety of foliage and blooming periods.

Lizard's tail or swamp lily, *Saururus cernuus*, is a hardy perennial with heart-shaped, bright green foliage. Arched spikes of fragrant white flowers appear in the summer. It requires sun to partial shade but will flower even in dense shade. In autumn, its leaves turn a beautiful crimson color. It grows best as a marginal plant, which means growing in one to twelve inches of water, as at the edge or margin of a body of water. It grows about one to two feet high. It can be divided in the spring, or stem cuttings can be taken in the spring and summer.

PICKEREL RUSH

Arrowhead, *Sagittaria lancifolia* 'Crushed Ice', is barely hardy in this area. Plants such as this are best overwintered by placing them at the bottom of the pond, which prevents freezing of the crown. During its growing season, it is best grown in two to twelve inches of water. It has dark green, spear-shaped foliage. White blooms with yellow centers are present from June through August. It reaches one to two feet high and requires sun to partial shade. To propagate, it is easiest to divide the stolons, but it may also be propagated by seed. Our arrowhead did not perform well last summer, possibly due to too much sun exposure and snail damage.



TROPICAL WATER LILIES

Pickerel rush, *Pontederia cordata*, is a familiar hardy perennial. It has slightly heart-shaped leaves with blue to purplish-blue flower spikes that grow from leaf bracts at the top of the stems during the summer. It can be grown in shallow water, up to eighteen inches deep. It prefers sun to partial shade. Clumps can be divided in the spring, April through May, and the old part of the plant should be discarded. Cuttings may also be taken in summer, or seeds can be collected in late summer.

Siberian iris, *Iris siberica*, will grow in most any normal well-watered garden, but it is said to grow twice as large in a water garden. Ours was not placed in the water garden until mid-July, so hopefully it will have the chance to become more established by next season. It does best in two to four inches of water during its growing season but should be removed from the water in the fall and buried in soil to the pot's rim to provide well-drained conditions for dormancy. To produce the best flowers, it should be grown in full sun. Its early summer flowers attract butterflies. The foliage is slender and grasslike.

Golden club, *Orontium aquaticum*, is an interesting hardy perennial that is native to the southern United States. Its lance-shaped, blue-green leaves have a silvery sheen on the undersides. It can grow up to eighteen inches tall and should be grown as a marginal plant, in no deeper than twelve inches of water. The flowers are interesting white, poker-like spadices with yellow tips, blooming in early spring, around March. It prefers sun to partial shade. It may be slow to become established and is best moved to the bottom of the pond during the winter to protect its crown from freezing. It may be divided in early summer if necessary.

Texas mud baby, *Echinodorus cordifolius* 'Marble Queen', is a beautiful specimen in any water garden. It has creamy white to yellow splotches of variegation on medium green foliage. Its flowers and blooming period are similar to arrowhead, but its flowers are produced on arching stems, which also bear small plantlets that can be used for propagation. It can reach two to three feet tall. It does best in sun to partial shade, planted about two inches deep in the water. It should be moved to the bottom of the pond in the winter, since it may not be reliably hardy in this area during especially cold winters.

Rush, *Juncus sp.*, is a hardy grass-like perennial with small, greenish-brown flowers which appear near the top of its stalks in the summer. The flowers mature to a small brown fruit. Our rushes are a dwarf variety that should not grow over one to two feet tall. Rushes require sun to partial shade in water no deeper than eight inches. They can be divided in spring or summer.

Two oxygenating plants are included in the water garden as well: pondweed, *Elodea canadensis*, and parrot feather or diamond milfoil, *Myriophyllum aquaticum*. Pondweed is one of the most efficient submerged plants for removing excess nutrients from the water. In addition to adding oxygen, it also provides a food source and spawning area for fish. Both plants grow best when planted in gravel or sand and placed on the bottom of the pond. Both can be prolific and may need to be thinned occasionally. Parrot feather is a serious problem in some waterways. As all gardeners who use this plant should do, we take care to prevent its spread beyond the water garden.

LION'S HEAD WATER GARDEN

The star of the water garden is a day-blooming tropical water lily, *Nymphaea* 'Pamela', which has very fragrant, pale blue flowers with yellow centers. It is an excellent bloomer, blooming prolifically June through October or later, with the best flowering period during water temperatures between 64 and 95 degrees Fahrenheit. Its new leaves appear as heavily blotched with purple, maturing to an almost solid green. Since 'Pamela' is a tropical, it is being overwintered in the conservatory.

GOLDEN CLUB

We were very pleased with our water garden last summer and hope it will be even better next summer as the plants become more established. Along with the new plants, the water garden has a new mechanical filter box on the pump, and beneficial bacteria are periodically added in warm weather to aid in the breakdown of organic waste products in the water. It was a pleasure to see visitors enjoying the water garden and the excitement of children when they discovered the fish. Once the new plantings were installed, we observed that quite a few baby fish had appeared, and, occasionally, a small frog could be spotted sunning on a lily pad.

There are many aquatic plant varieties that pond enthusiasts can choose from, and I wish I could list all of my favorites. The best way for you to discover your favorites is to just dive in and experiment for yourself. Don't let all the confusing information out there discourage you. Water gardening has become my favorite type of gardening because of the interesting varieties of aquatic plants available and the pond's attraction for a variety of wildlife. One of the biggest advantages of water gardening is that it is basically a self-watering garden. Now is a great time to plan your own while you are daydreaming of warmer spring and summer days. If you are interested in reading about other aquatic plants or water gardening ecology, here is just a sampling of books that can get you started:

- *Plants for Water Gardens (The Complete Guide to Aquatic Plants)* by Helen Nash.
- *The Ultimate Water Garden Book* by Jean-Claude Arnoux.
- *The American Horticultural Society's Complete Guide to Water Gardening* by Peter Robinson.

Summer 2001 Internship
By Mindy Mock, horticulture intern

The Twin City Garden Club has sponsored an internship for the past two years, giving a horticulture student the chance to gain valuable work experience and to be mentored by others in the profession. Mindy Mock received the award in 2001.

Plants have always been a part of my life. As a child, my grandmother and great-grandmother always had a big back yard full of lots of different plants, and they often had a big vegetable garden. I spent many summer days working there with them. A woman at my church often invited our youth group to visit her beautiful greenhouse. My father loved houseplants, and, between us, we had over sixty houseplants on our screened porch one summer. While I was still in elementary school, I attended a summer program at Reynolda Gardens, working in the greenhouse and taking nature walks. Even then, I wished I could work at the Gardens.

As often happens with teenagers, I put aside many of my childhood interests as I became more involved in school, part-time work, and social activities. My interest in gardening didn't reemerge until I married and had a home of my own. I became specifically interested in gardening for wildlife and tried to choose plants that would provide food or shelter for wildlife and also have ornamental value. My frustration with trying to keep my birdbaths clean and full evolved into a passion for water gardening after I discovered that a pond with recirculating water provided a constant supply of clean water for birds and other wildlife. When I enrolled in the Forsyth Technical Community College horticulture program, my goal was just to learn all that I could.

I began my internship at the Gardens after I graduated in May 2001. During the summer and early fall, I learned about rose garden care, vegetable, perennial, and herb gardening, greenhouse propagation, and equipment operations. I had the opportunity to meet many interesting people, including the people who work here, the volunteers, and the visitors; and to enjoy the beautiful gardens, to be outdoors and to observe the wildlife that inhabits the gardens, such as squirrels, chipmunks, rabbits, snakes, turtles, insects, and many species of birds. This was a busy and educational summer for me. Thanks to the Twin City Garden Club for giving me this opportunity.

Evolution *of the* Pink and White Garden

by **Lisa Kinnamon**, horticulturist

I have always had to learn things the hard way—or at least the hands-on way. I don't feel I can fully understand the way something works until I do it myself. Telling me what to do is not good enough; I need to know why I should do it. So when I came to Reynolda Gardens as a Twin City Garden Club intern two years ago and saw that the Pink and White Garden was struggling and that others had had enough of trying to grow plants that continually languished in our summer sauna, I thought I could help fix it.

The Pink and White Garden is one of the four quadrants in the lower garden that were completely restored to the original plan designed by Thomas Sears for Mrs. Reynolds in 1917. This was at the end of the Victorian gardening era, when mass plantings of colorful annuals were in vogue, and Mr. Sears was striving to create a perennial garden in which something different bloomed in every season, the haute couture of gardening at that time. For the most part, he succeeded. It was indeed a garden ahead of its time, but many of the plants that were popular hybrids then are now considered lanky and unattractive. Mr. Sears was unfamiliar with the southern climate and sometimes chose plants that didn't grow well, resulting in many empty pockets in the garden as plants died out.

When the garden was restored, the staff tried to be very accurate regarding plant selection, although they knew that some of the plants originally chosen by Thomas Sears would be problematic in our Southern climate. So they came up with the three-year rule: any plant that is not doing well after three years or that has been replaced three years in a row would be banished from the plan. There was no sense in maintaining the mistakes in the garden simply to preserve history. The staff could still develop a beautiful garden for visitors to enjoy while representing the plants and ideas of that period.

It had been three years, and many plants in the Pink and White Garden had suffered year after year. Everyone was ready to try something different, but I was fresh out of school and full of new ideas. I convinced them to give Thomas Sears' original plan one last chance.

Last spring, we planted gypsophila and lupines in soil mixed with Permatill, a product made of exploded slate, to increase the drainage, and we added lime to raise the pH. The plants looked great—until the first week of eighty percent humidity. As quickly as a mayfly spends its life, so did the gypsophila and the lupines. I

bowed to Mother Nature, the school of experience, and the three-year rule. Most importantly, I learned why the gypsophila and lupines would not grow here. It was not the heat, or the moist, sticky soil; it was the humidity. I joined the others in their frustration.

Each year, as plants melted in the humidity, we tried to fill in the empty spaces. These spaces included the large pockets of disease-prone, old-fashioned mums, originally grown as perennials, which wilted and rotted before they could even be planted. We filled their empty places with pink vinca, *Catharanthus roseus* 'Little Pinkie' and waited until fall to put in the mums. Since vinca was already included in the Pink and White Garden, we felt that it was okay to substitute it for the other plants. There were only ninety-one vincas on the original plan, but last spring we planted more than 252 plants, transforming the garden into what we came to call, in the summer, Vinca City.

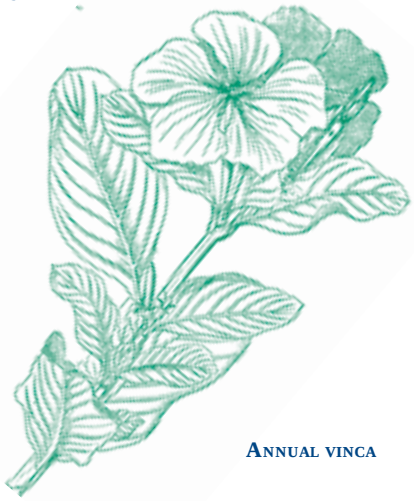
There were other plant problems, too. The tall garden phlox was consistently covered in powdery mildew and the hollyhocks with rust, which is a fungal disease that thrives in our humid climate and causes unattractive brown bumps to form on the underside of the leaves. Then there was the shade. A saucer magnolia, *Magnolia x soulangeana*, was planted in each of the four corners. The trees were now over eighty years old and almost completely shaded the garden, which was full of plants that needed full sun. These plants were lanky and weak, but Mr. Sears left no notes or instructions for adapting the garden as the trees filled in. We believe that the hollyhocks planted next to the trees were probably used to add height and structure and to fill in the space until the magnolias matured. For three years, the gardeners had tried the same plants again and again, adjusting the placement and quantities, only to watch them wither and wane. Now, the three years were up. It was time to rethink, regroup…redesign.

Continued on page 14

Pink and white garden, c. 1920

Pink and white garden, c. 1930

Snapdragons



Annual vinca

Pink and white garden, 2001

Pink and White Garden

Continued from page 13

I can only guess that Thomas Sears heard us talking about completely redesigning the garden. Some instinct, or perhaps Mr. Sears' spirit, told us to have our consulting arborist, David Lusk, look at the magnolias before we redesigned the Pink and White Garden to accommodate the shade. It was determined that the magnolias were senescent, or slowly declining, and should be replaced. Instead of adapting the plan for shade, we could once again plan for full sun and stick more closely to the original plan.

First, we removed the gypsophila, lupines, and any other plants that had not held up in our humid climate. Next, using the footprint of the original plan, we redrew it, selecting perennials from a list of plants that were included in and around the estate in the early 1920s. We were careful to mimic Thomas Sears' unusual style. A signature of his designs was to plant the very same thing in three-quarters of a symmetrical garden and in the fourth quarter, where one expected a mirror image, he would use something entirely different. We ordered all of the new plants last fall and will remove the magnolias this winter. In the spring, we will plant the garden and be able to see the results by early summer. We selected several interesting plants. *Aquilegia flabellata* 'Nana Alba,' a dwarf columbine with creamy white flowers will replace some of the gypsophila. Another choice was *Phlox arendsii* 'Anja', a cultivar of a cross between tall garden phlox and wild sweet William. We chose this phlox because it was one of the few plants of medium height that was listed on original plans for the estate. We will use it in places where the tall garden phlox is just too tall. We also chose a species foxglove, *Digitalis gloxinaeflora*, in place of the hollyhocks. I can't wait to plant these and the others in their new homes and watch them thrive. Hopefully, the only why I ask will be "Why, what a lovely shade of pink?"

But I know better. For three years, the squirrels have been digging up every crocus bulb we plant. If they do happen to leave a few, the rabbits keep them very well pruned. This fall, we tried using Ropel, which is a bitter-tasting animal repellent and Permatill, (the sharp edges are supposed to discourage digging), both to no avail. I am already marveling at the speed with which the squirrels can carry off crocus bulbs and that they come back at all after tasting Ropel. I have to ask myself, why?

A Little *of* Reynolda for your home

Plant Supports

by **John Kiger,** *assistant director*

One of the things I like to do in the landscape, whether it's in the vegetable garden, a border planting, or foundation planting, is to incorporate something unusual. Generally, it consists of something non-plant that adds to the landscape by drawing attention to the surrounding area. Of course, this could range anywhere from a gazing ball to a figurine placed in a strategic location, but I like to escape the "norm" by trying to locate something which is hard to find, something unique, a one-of-a-kind item, to place in the garden. After all, an individual's garden is personal. In this article, I will share with you an idea that I used in the vegetable garden at Reynolda Gardens this year, as well as at my own home.

Long before the 2001 spring planting season was underway, I was out and about looking for something to place in the garden to add height. There are several types of supports built into the gardens here: decorative fences, pergolas, and frames. We regularly use stakes and strings for our peas, beans, and flowering vines, but I knew I wanted a tall trellis of some sort. I visited several garden centers in town looking for that certain one. (Remember, this is personal!) I saw many that ranged from two feet to six feet tall and were constructed from stapled-together lattice strips. The six-foot ones were okay, but the quality of construction did not match the retail price, and I also wanted something that was different. Slowly, the wheels began to turn. I could build my own! The basic design was there before me. All I had to do was improve on it, make it a one-of-a-kind.

Winter, along with boredom, breeds creativity within me. It didn't take long for me to drag out all of the excess lumber we had stored in the garage at Reynolda. Soon, a prototype was complete. It stood approximately seven feet tall and was constructed out of one- by two-inch fir lumber, much heavier construction than I could have purchased. Using the prototype as my pattern, I built one more. To protect them from the weather, I stained them with a maple stain and sprayed both with polyurethane. To prevent them from blowing over during strong summer winds, I drilled a quarter-inch hole in each leg, approximately two inches up from the bottom, on a forty-five degree angle and anchored them in the ground with sixteen-inch metal rods. The two "oil rigs" were placed in the vegetable garden this spring, and we planted four black-eyed-Susan vines, *Thunbergia alata*, around each one. As you have noticed, I affectionately refer to the trellises as oil rigs. The correct term for them is obelisks, which is a "tall, four-sided pillar tapering as it rises." I really had no idea I was creating something that carried an "official" name!

I constructed two more obelisks for personal use at home. I wanted to use them for a wedding at my house in August of 2001; however, I utilized them there in a somewhat different manner. I placed them on my deck, spaced seven feet apart, and connected then by fastening a two-inch by two-inch by eight-foot piece of material directly on top. Underneath each obelisk were large planters in which I planted black-eyed Susan vines. Something was missing. I envisioned a wall of vines and didn't think the way I had it set up was going to achieve that, so I modified what I had. Between the obelisks, I centered a two-foot concrete planter. On the underside of the top connecting rail, I inserted eight evenly spaced, small, screw eyes. I cut a two-inch by two-inch by two-foot piece of wood and inserted another eight evenly spaced, small, screw eyes. I tied individual strands of fishing line to each screw eye in the top rail and connected them to the smaller piece, suspending it approximately four inches over the concrete planter, thus creating a fan-like shape. I planted moon vine, *Impomoea alba*, in the concrete planter. By the time the wedding took place, I had a wonderful mass of moon vine and black-eyed Susan vine. As the reception took place later in the evening, the moon vine was blooming, creating a magnificent backdrop for pictures.

Of course, there are many ways to personalize one's own garden. One of the simplest things I found was to use a tomato cage as a support for my cardinal vine, *I. x multifida*. I needed something to soften the corner of my garage, and it worked perfectly. I am a little embarrassed to admit this, but I had left a shovel leaning against the

Gardener's Journal

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.

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.*

Thank you to Sherold Hollingsworth for providing the Reynolda Chronology.

building next to the cage. As the cardinal vine grew, it twined itself around the shovel as well. Believe it or not, I received many compliments on what was referred to as a picturesque display, and you know I wasn't about to admit it was a mistake!

On a recent trip to Mt. Airy, I visited an antique shop. The proprietor showed me many pieces of metal decorative objects. One caught my eye. It was a wrought iron piece she described as a "lunette." It was an ornate, half-round piece that measured forty inches long and twenty inches tall. She suggested it would be a beautiful piece to hang over a door. I have other ideas. I am in the process of landscaping around my house and am going to install a modest grouping of ornamental grasses. I envision this piece placed among the grasses; however, I will have to construct a frame for it to sit in, as I wish it to be a permanent fixture.

Working at Reynolda Gardens inspires me to be creative and to perfect what I do at work and at home. I am constantly looking for an item that is intriguing. It may be something that I have no idea what it is, but I know it could add a great deal of interest to the garden. It is my wish that all visitors to Reynolda Gardens leave with that same inspiration.

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