

1995 Convention Issue

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Post Office Box 34536
West Bethesda, Maryland
20827-0536

PRESIDENT'S LETTER

Steve Brainerd

Dallas, Texas

Promoting Azaleas

In November you will receive a dues notice. I encourage you to continue to support the Azalea Society of America with a check in the mail to renew your membership. Responding promptly will reduce the work load of the membership committee and save the Society the additional expense of first-class mail and paper for the second notice. The second mailing is a burden which can be lessened with your help.

THE AZALEAN is the major channel of communication to our members-at-large as well as the chronicle which documents our history, research, azalea cultivation knowledge, propagation techniques, hybridization successes, cultivated variety (cultivar) preferences, design recommendations, membership news and more. It is the major expense item in our budget. Born in 1979, **THE AZALEAN** was a black and white publication until color was added to the cover in March 1990. Color images found their way to the inside of the magazine in December 1991. Color is a powerful medium in which to express the beauty of azaleas. Azaleas in full flower color are, for most people, the attraction of azaleas. Color is the way to appeal to that human attraction and promote azaleas. Many of us in the Society want to see more color in **THE AZALEAN** as evidenced at the 1995 national convention where the Brookside Gardens Chapter sponsored an auction, the proceeds of which were to be designated for the additional publication of color photography beyond that already funded. Membership dues and membership size are the keys to better funding of **THE AZALEAN** in order to more effectively communicate with color.

Membership dues and membership size will also determine the Society's ability to fund scholarships or grants for college students to conduct azalea research. What a wonderful way to give to the future, help our youth and advance our knowledge. Grants have not been a part of our budget in the past, but with funding could be a budget item for 1997.

Thank you for your membership in the past. Your dues are the fuel which enables the Society to communicate and grow. We are thankful that some of you have generously contributed more than that required. We are also thankful for the recruiters in our midst who increase our membership numbers through their promotion abilities. We should all continue to cultivate our personal relationships in order to enrich our own experiences and allow our Society's family to grow in numbers and strength. □

On the Cover: Glenn Dale Azalea Hillside 1994
U. S. National Arboretum

Photographer: Barbara Bullock

Azalea Society of America

The Azalea Society of America, organized December 9, 1977 and incorporated in the District of Columbia, is an educational and scientific non-profit association devoted to the culture, propagation and appreciation of azaleas – Subseries Tsutsusi and Pentanthera of the genus *Rhododendron* in the Heath family (Ericaceae).

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1995 Convention and Annual Meeting

Robert W. Hobbs

North Beach, Maryland

The 1995 Convention and Annual Meeting of The Azalea Society of America was hosted by the Brookside Gardens Chapter, May 4-7, 1995. The convention headquarters was in Rockville, Maryland, a suburb to the north of Washington, DC. Nearly perfect weather and azaleas in full bloom provided a treat for the nearly 100 members who attended.

The convention began on Thursday, May 4, with welcoming remarks by convention coordinator Bill Miller. The first formal speaker, Phil Normandy, then provided a prelude to the Friday garden tours in his talk "Glimpses of Brookside Gardens and McCrillis Gardens" (which appears in this convention issue of **THE AZALEAN**). Next a talk "The Native Azaleas of Eastern United States" was presented by plant collector, hybridizer, and nurseryman Jim Plyler. The final event of the evening was a Roundtable Discussion on **THE AZALEAN** moderated by the editor (an article describing this discussion appears in this issue). All of these events of Thursday evening were well attended considering the lateness of the evening.

Friday morning attendees visited two gardens, the private garden of Bill and Janet Miller and the public McCrillis Gardens.

Lunch was served at the Landon School, a private school in Bethesda, MD. The grounds of the Landon School includes the two-and-one-half-acre Perkins Azalea Garden, a Washington, DC, area attraction each spring. After lunch, time was available to visit the azalea garden and to view the Brookside Gardens Chapter Azalea Show which is held annually in conjunction with the Landon School Azalea Festival. It is of interest to note that former editor of **THE AZALEAN**, Dr. Charles Evans, received an award for "Best in Show" and Bill Miller won the "Sweepstakes" for having the most blue ribbons.

A visit to the Brookside Gardens in Wheaton, MD, completed the garden tours on Friday. Following the social hour and opportunities for plant purchases, the Friday evening speakers provided overviews of the Saturday garden tours. First, Barbara Bullock, Curator of Azalea Collections at the U.S. National Arboretum, presented "The National Arboretum Azaleas—A Four Year Retrospective". Next, Dick West presented "The Ten Oaks Azaleas and the Glenn Dale Distribution Project". The last talk of the evening was by Keith Suddreth, one of the recipients of the Ten Oaks cuttings, "Broyhill Walking Park—A New Home for the Glenn Dales". All three Friday evening talks appear in this issue of **THE AZALEAN**. Following the talks, a plant auction was held. Brookside Gardens Chapter President Carol Allen announced that the proceeds of the auction would be made available to **THE AZALEAN** to provide supplemental funds for publishing more color photographs.

Saturday garden tours were to the U.S. National Arboretum in Washington, DC, and to the Ten Oaks Nursery in Clarksville, MD.

The Saturday evening banquet was held at the convention headquarters, The Woodfin Suites. Following the banquet dinner,

Mike Raupp, Chairman of the Department of Entomology at the University of Maryland and an advocate of integrated pest management, spoke on "Why Are Azaleas So Pest Prone and What Can Be Done About It?". An article based on this talk appears in this issue of **THE AZALEAN**.

The last event of the day was the Annual Meeting, led by President Malcolm Clark. Complete minutes of the Annual Meeting are on page 71 of this issue. Highlights of the Annual Meeting included the presentation of a Distinguished Service Award to William C. Miller III, the award of the Prize for Best Article in **THE AZALEAN** for 1994 to Steve Brainerd and the announcement of the results of the election of officers:

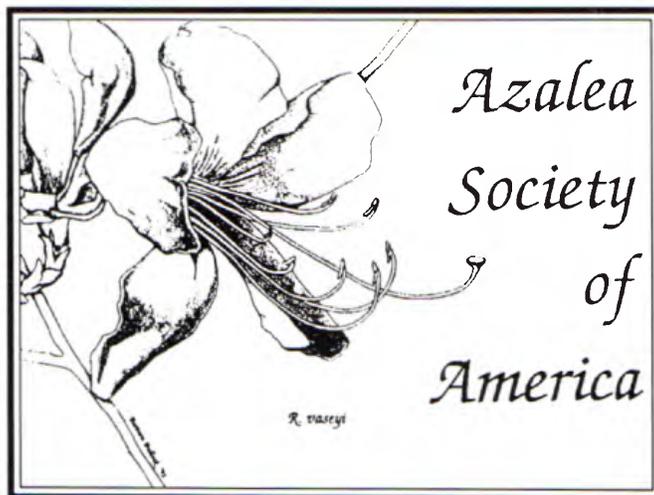
Steve Brainerd, President
Jim Thornton, Vice President

Rosalie Nachman, Director
Fred Minch, Director
Art Vance, Director

It was announced that the Convention for 1996 will be hosted by the Dallas Chapter. □

**THANKS TO THE
BROOKSIDE CHAPTER FOR
HOSTING THE MEETING**

Brookside Garden Chapter convention logo and tote bag decoration by Barbara Bullock



The Ten Oaks Azaleas and the Glenn Dale Distribution Project

Richard T. West

Columbia, Maryland

William C. Miller III

Bethesda, Maryland

[This article is adapted from a paper presented by Dick West at the 1995 Annual Meeting of the Azalea Society of America. Its purpose was to provide an overview of the Ten Oaks Nursery and its azalea plantings, and to detail the Ten Oaks Glenn Dale Project to re-establish Glenn Dale azalea collections by distributing cuttings from plants received from B. Y. Morrison some 50 years ago. It was presented as a companion to a report by Keith Suddreth on his activities as a Cooperator in the Ten Oaks Glenn Dale Project. The presentation served as an introduction to a tour of Ten Oaks scheduled for the next day; it was the first time Ten Oaks had been open to the ASA Annual Meeting attendees.]

Three years ago at the 1992 annual meeting of the Azalea Society of America, a preliminary report was made on azalea survey work that had begun at the Ten Oaks Nursery in Clarksville, Maryland (1). The survey work has continued and has led to the creation of the Ten Oaks Glenn Dale Project to re-establish the Glenn Dale azaleas throughout the United States. This report gives an overview of Ten Oaks and its azaleas, discusses the Ten Oaks Glenn Dale Project and provides lists of Cooperators in the Project and the names of Glenn Dale hybrids that have been distributed.

Background on the Ten Oaks Azaleas

The Ten Oaks Nursery was founded in 1925 by Andrew Adams, Sr., in Clarksville, Howard County, Maryland, a community about 20 miles northeast of Washington in the direction of Baltimore. Azaleas were part of the Ten Oaks Nursery stock from the beginning. After World War II, Ten Oaks became one of the receivers in the U.S.D.A.'s Glenn Dale azalea distribution program under the direction of Ben Morrison, and Ten Oaks obtained almost all of the Glenn Dale hybrids. Morrison wanted two things from the receivers. First, the azaleas were to be put immediately into approximately wholesale production; that is, propagated and sold quickly, perhaps in order to meet the growing demand for the popular new plants. Second, there was the condition that recipients should provide annual reports to the U.S.D.A. on the status of each cultivar and the propagation experience. To do this, Morrison suggested that one specimen of each Glenn Dale be set aside and allowed to grow to full maturity (2).

The Adamses responded to this latter requirement by creating an azalea arboretum to serve as a test garden where natural growth could occur and be monitored. They planted the original Glenn Dales they received and, in addition, azaleas of every kind they could get. The arboretum, constructed and planted in 1950 and 1951 in an isolated area of the Ten Oaks property (now

around the home of Ruth and Andy Adams, Jr.), has never been open to the public, and the azaleas have been left undisturbed to grow on their own.

The azalea arboretum is constructed in a "U" shape that measures roughly 300-feet long by 144-feet wide, with the beds being about 50-feet deep. There are large, old oak trees in and around the arboretum, and the soil is light mica loam. It originally contained about 1,000 azaleas representing some 600 or more different cultivars. The beds are arranged in 18 designated hybrid sections: six for the Glenn Dale hybrids organized by year of distribution; two for Gable hybrids; one section each for Kurume, Chisolm-Merritt, Beltsville, so-called Japanese selections (including Satsuki), Arnold, and old azaleas such as 'Indica Magnifica'; three miscellaneous beds; and one area with the new Princess azaleas.

Ten Oaks usually received three plants of each hybrid in the Glenn Dale distribution, six to eight inches in height. They planted these three clones in a triangle spaced about two and one-half feet apart, and the triangles of plants were spaced about three- to four-feet apart (all of the other azaleas are planted singly and are spaced about three feet apart). In the middle of the triangle of azaleas was placed a zinc tag affixed to a metal rose stake driven into the ground. As a result, one always knows where to look for the tag, and that has been a real benefit. The tag used, called a G & C Dream Label, was written upon with a hydrochloric acid pen that caused a permanent chemical change in the metal. The Adamses packed as much information as possible on the tag: name, PI number, color, bloom time, and date of distribution. Consequently, even

when only parts of the information are still readable, it is almost always enough to identify the cultivar. Unfortunately, some tags have been lost over the years.

For their azalea business, the Adams also designed a display garden near the main nursery buildings where their customers could see and inspect larger-sized versions of the azaleas offered for sale. Also planted in 1950-51, the garden, located about one-third of a mile from the azalea arboretum, contained selected Glenn Dales and other azaleas that showed high quality and were popular with customers. By intent, some of the contents changed during the years after 1950, and the azaleas have been pruned, watered and given other attention. These azaleas were also tagged.

Between the late 1940's and the early 1960's, Ten Oaks was a major supplier of Glenn Dale and other azaleas. Their 1952 catalog, for example, listed 343 Glenn Dales and 33 other azaleas varieties for sale. In that year, they took 37,000 cuttings of which 25,000 were of Glenn Dales. In the ten or so year span of selling Glenn Dales, they sold some 200,000 plants in the Washington-Baltimore area, and by mail all over the United States. Ten Oaks Nursery no longer sells at retail, and the azalea plantings are now on private, residential property.

The Ten Oaks Glenn Dale Project

What makes the Ten Oaks azaleas special is they are plants directly from the hybridizer and they were all tagged for identification. (Such azaleas obtained directly from the hybridizer, whether located at Ten Oaks, the National Arboretum, or wherever, we designate as "original" plants.) Even before our work began

at Ten Oaks more than eight years ago, we had agreed to the need of having complete, correct collections of Glenn Dale hybrids available in the U.S. We both had numerous experiences with incorrectly identified cultivars, and many cultivars could not be found anywhere. Both of us had become quite cynical about the correctness of azalea identification in general and had developed the attitude of not trusting anything in the marketplace. Besides just seeing and inspecting plants, we were interested in making comparisons between cultivars, but it was impossible to find enough correct Glenn Dale hybrids in one place to do so.

We realized what might be possible from the Ten Oaks azaleas, given the original Glenn Dales and the success of the survey work, and that Andy Adams was supportive of using his plants to re-establish complete Glenn Dale collections. In 1992 we started to consider how such collections might be developed. We were familiar with the debate about private versus public collections as the best way to preserve azalea material, and recognized the value of having both kinds of plantings: Ten Oaks was the perfect example of the importance of the restricted private collection, but one of our goals was to make public reference collections available. We knew that a best bet would be to have a combination of private and public collections around the U.S. We also wanted to see correct Glenn Dales more available to retailers if for no other reason than to respond to recently increasing interest in the hybrid group.

Dick had already begun raising some Glenn Dales from Ten Oaks stock for the U.S. National Arboretum collection, and the first question was if that work could be

increased for a larger distribution. As amateur growers, we knew our backyard efforts couldn't be expanded beyond what was being done to provide small plants for the U.S. National Arboretum. Even Andy Adams' offer of the use of a greenhouse wasn't going to solve our labor problem. Of importance and some concern, Bill and I realized that whatever we did had to respect the privacy of Andy and Ruth Adams, and to make the distribution work well, it had to be done in an organized fashion. We concluded that it would be best if we did much of the Ten Oaks site work ourselves, but the question was how to do the important other work of propagation and collection development.

After rejecting any kind of plans for raising and distributing small plants, Bill came up with the idea of distributing cuttings to a group of capable growers who would root them and would make arrangements with a local, reputable garden or arboretum to receive one plant for establishing a Glenn Dale collection, but who could also have plants for themselves for their own collections as well as for retail sales. We placed a short article in the March 1993 issue of **THE AZALEAN** asking for individuals to be Cooperators with us in a Ten Oaks Glenn Dale Project to re-establish the hybrid group (3). We announced that the goal of the project was to create complete collections of correct Glenn Dale azaleas for all 454 cultivars named in Monograph 20, Morrison's official U.S.D.A. record of the Glenn Dale Program and azaleas (4).

From the responses received we selected ten individuals to be Cooperators. Two additional individuals who were local and had contacted Andy Adams separately about cuttings were designated as Local

Receivers in the Project efforts. The first cuttings were shipped in the summer of 1993. In 1994, we lost one Cooperator, but accepted another, and in the past month one of the Local Receivers has become a Cooperator by making arrangements with a regional park to develop the required public garden. The current list of eleven Ten Oaks Glenn Dale Project Cooperators is shown in Table 1, along with the name of their associated arboretum. We will not be adding anyone new to the Project as we have almost too much to handle now.

What do we do to make the shipments to the Cooperators? We spend time in the course of the year looking for tags and then at bloom time, verifying the tag and re-tagging the plant in preparation for taking cuttings in July. At cutting time, we are joined by Local Receiver Wanda Hanners of Azalea Trace in Calvert County, MD, Cooperators Court Lee and David Radcliffe of Boxlee Nursery in Prince George's County, MD and Barbara Bullock of the U.S. National Arboretum. We set up a production line where some take cuttings and others sort, tag and box the cuttings for overnight delivery to the Cooperators. It works out quite well, and we had all the work done in two days last year. We try to take a minimum of eight cuttings for each cultivar for each Cooperator, but what we can cut is sometimes fewer. A problem with letting azaleas grow naturally is that you don't always get the best cuttings. At the end, Bill and I take the boxes off to a Federal Express office, and away they go.

In 1993 and 1994 we have shipped about 7,500 cuttings for 115 different Glenn Dale hybrids. The cultivars distributed are listed alphabetically in Table 2. We hope to ship cuttings for another 40 or so this summer. We would like to find 200,

maybe more, of the Glenn Dales at Ten Oaks. Frankly, it is going to take a fair amount of work and research as we continue our identification efforts at Ten Oaks. We will cut nothing unless we are very sure about its identity, so we'll have to wait and see how much can be done. As you can imagine, it has been very frustrating to find some metal stakes with no tags and see wonderful Glenn Dales in bloom and not to know what they are.

We have provided Glenn Dale cuttings, and we have also provided information on Glenn Dale hybrids because the Cooperators want to be knowledgeable about the hybrids. We have made and given them photocopies of Morrison's Monograph 20, copies of the Glenn Dale azalea database that has been published in *The Bell Book*, corrections information when it is discovered, and other informational items we think might be useful, such as how to convert the old Ridgway color designations (5).

If we had any doubts about the quality and value of the Glenn Dales and the efforts to re-establish them, they have been completely removed by seeing so many of the hybrids at Ten Oaks. The Glenn Dales really are a great group and many of the cultivars are absolutely unique and super. It is a shame that so many of the plants have been unavailable for so many years. In addition, being able to see and inspect original plants of Glenn Dale hybrids has led to some corrections of errors in official descriptions and documentation, and a much better understanding of the culture of the hybrid group.

Knowing that we won't find everything at Ten Oaks, we have started looking for original Glenn Dales in other places. Barbara Bullock is finding some cultivars at the U.S. National Arboretum, and we

have already found some at the old U.S.D.A. Glenn Dale Station where Morrison's hybridizing program took place. We would like very much to hear from anyone who has knowledge of unquestionably correct clones whose history is known.

In conclusion, we wish to thank Andy and Ruth Adams for their continued encouragement and support. We wish to publicly recognize the important and valuable participation of the Ten oaks Glenn Dale Project Cooperators and their associated arboreta.

References

1. West, R. T. "The Azaleas at Ten Oaks Nursery: A Preliminary Report". *THE AZALEAN*, 14(3), September 1992, 65-69.
2. For a detailed discussion of Ten Oaks participation in the distribution, see: West, R. T. "Distribution of the Glenn Dale Azaleas and the Ten Oaks Nursery". *THE AZALEAN*, 11(4), December 1989, 69-73.
3. West, R. T. and W. C. Miller III. "Ten Oaks Glenn Dale Project". *THE AZALEAN*, 15(1), March 1993, 16.
4. Morrison, B. Y. *The Glenn Dale Azaleas*. U.S. Department of Agriculture Monograph 20, Washington, D.C., October 1953.
5. Miller III, W. C. and R. T. West. *The Bell Book: A Companion to Monograph 20*. Bethesda, MD: The Azalea Works, 1993.

Richard T. West is a long-time member of the Azalea Society of America and frequently writes articles for THE AZALEAN. He is especially interested in the Glenn Dale azaleas.

William C. Miller III, co-Chair of the Azalea Society of America's Membership Committee and Chair of the Public Information Committee, is a recipient of the Society's Distinguished Service Award. He is a former Vice President of the Society and a long-time ASA member. He is a member of the Brookside Gardens Chapter and has served as Chair of Horticulture for the Chapter's annual flower show for many years. He is frequent contributor to THE AZALEAN. □

**Table 1
Ten Oaks Glenn Dale
Project Cooperators**

Jan Bowman
Orinda, CA 94563
Oakland, California
Horticultural Gardens

Hugh A. Caldwell
Middleburg, FL 32068
Bellingrath Gardens

Perry L. Corkern
A & P Nursery
Franklinton, LA 70438
New Orleans Botanical Garden

Freida Hill
Hill's Nursery and Greenhouse
Pavo, GA 31778
Thomasville Garden Center

L. Courtland Lee
Boxlee
Glenn Dale, MD 20769
Watkins Regional Park

(Mrs.) Jay W. Murray
Princeton Chapter ARS
Colts Neck, NJ 07722-1021
Jenkins Arboretum

Ronnie D. Palmer
Azalea Hill Gardens and Nursery
Pine Bluff, AR 71602
Missouri Botanical Gardens

Frank Pelurie
The Nursery at Dutch Ridge
Clendenin, WV 25045
West Virginia Botanical
Garden at Coonskin Park

Ben C. Reid
Reid's Azalea Farm
Stockbridge, GA 30281
Vines Botanical Garden

Pete Sheuchenko
Lazy S's Farm
Barboursville, VA 22923
Montpellier Estate Gardens

J. Keith Suddreth
Lenoir, NC 28645
Broyhill Walking Park

**Table 2
Ten Oaks Glenn Dale Project Cultivars
Distributed 1993 and 1994**

Aladdin	Lyric
Ambrosia	Madrigal
Angela Place	Martha Hitchcock
Anthem	Marvel
Antique	Mayflower
Aphrodite	Melanie
Arcadia	Minuet
Bacchante	Moonbeam
Beacon	Niphetos
Bishop	Nocturne
Blushing Maid	Novelty
Bountiful	Oriflamme
Bravura	Paladin
Caprice	Paprika
Caraval	Pastel
Carnival	Picotee
Chanticleer	Pinto
Chloe	Pixie
Cinnabar	Prelate
Commodore	Red Bird
Consolation	Refrain
Coquette	Rogue
Coral Sea	Sagittarius
Cordial	Sambo
Corsair	Samite
Damozel	Scout
Darkness	Seafoam
Dauntless	Seashell
Dayspring	Sebastian
Delight	Sentinel
Dimity	Shimmer
Dowager	Simplicity
Duenna	Snowclad
Egoist	Sorcerer
Ember	Stardust
Emblem	Sterling
Everest	Surprise
Faith	Susannah
Fandango	Swansong
Favorite	Temptation
Frivolity	Tokay
Furbelow	Tomboy
Gaiety	Treasure
Galathea	Trinket
Ganymede	Troubador
Glacier	Trouper
Glamour	Vespers
Grandam	Vestal
Helen Close	Violetta
Hopeful	Vision
Illusion	Welcome
Jubilee	Winner
Katinka	Wisdom
Killarney	Yeoman
Litany	Youth
Lullaby	Zingari
Luna	Zulu
Lustre	

GLIMPSES OF MCCRILLIS GARDENS AND BROOKSIDE GARDENS

Philip M. Normandy
Kensington, Maryland

This evening I am pleased to have the opportunity to give you a preview of the two gardens you will be visiting tomorrow. Both of these are public parks operated by the Maryland-National Capital Park and Planning Commission (M-NCPPC) in Montgomery County, MD, and both contain significant collections of azaleas, rhododendrons, and companion plants.

McCRILLIS GARDENS

You will first be visiting this 5-acre property in Bethesda, presented to M-NCPPC by its owners, William and Virginia McCrillis. Mr. McCrillis was Assistant to the Secretary of the Interior under Presidents Roosevelt, Truman, and Eisenhower, and he had a particular interest in azaleas and rhododendrons. Beginning in 1941, he amassed on this wooded site an impressive array gleaned from nurseries all across the country. He later expanded his collection to include other rare and unusual plants such as fragrant snowball, Japanese umbrella-pine, several stewartia species and a pair of dawn-redwoods thought to be among the first in private hands.

By the late 1970s Mr. and Mrs. McCrillis began to ponder the future of their garden as their energies diminished. Having no direct descendants, and having seen many examples of larger properties in this wealthy neighborhood being subdivided, they sought a way to preserve their creation while making it available for all to enjoy. Fortunately for local residents and azalea enthusiasts everywhere, they chose to give it as a public park, to be maintained and developed by the staff of Brookside Gardens (itself widely known for its azalea garden).

In the fall of 1978, shortly before Mr. McCrillis died, Brookside gardeners under the leadership of Emile Deckert (who had laid out much of the Brookside azalea garden) began the task of converting a densely planted private garden into one more suited to public visitation. Large masses of old azaleas near the house were thinned, with those removed being transplanted to the undeveloped lower reaches of the property. Paths were widened enough to accommodate large groups of visitors and maintenance equipment, vistas opened, and the tree canopy thinned to admit more light to both old and new plantings. Mr. Deckert devised a traffic pattern to maximize viewing of the large beds, and he designed pleasing color and textural combinations to avoid the visual monotony of solid azalea plantings. A service entrance was opened, and a site was selected for a future maintenance building. New azalea cultivars were added from Brookside, some of which had not yet been named. Evergreens were placed for screening, and more unusual woody plants such as witchhazels and snakebark maples were included.

In the 1980s major physical development of McCrillis Gardens was completed, creating the basic layout you will see on the tour. In 1981 an extensive test planting of over 300 named cultivars of Satsuki azaleas imported from Japan, some for the first time, was installed in a glade-like area near the house. These

were to be observed for hardiness and bloom characteristics with suitable cultivars being distributed to the nursery trade.¹ In 1985, Brian Barr was hired as the first full-time gardener. Maintenance was stabilized, a turf program begun, and more emphasis was placed on refinement of plantings. Several beds were renovated or totally redesigned, and for the first time significant bulb and perennial plantings were added. A large display bed inside the circular driveway was laid out for tulips, to be followed by summer annuals. Extensive plantings of daffodils arranged by classification and flower type (such as miniatures) brought much-needed early spring color and opportunities for interpretation. Perennials such as hostas and astilbes joined the spring wildflowers planted by the McCrillises in adding color and texture when azaleas were out of bloom. Educational programs and guided tours were offered. The lower floor of the house was opened as an art gallery showcasing the works of local artists, and each spring an outdoor sculpture show and open house were held, greatly increasing visitation.

Development and refinement have continued apace in the 1990s. In 1990 Pete Kapust, longtime azalea gardener at Brookside Gardens, came to McCrillis as sole gardener. He immediately began more intensive turf management and bed renovation. Satsukis from the test planting were planted among earlier azaleas to extend the bloom season, the front tulip/annual bed was converted to perennials, and large old azaleas were cut down to rejuvenate them. For the first time structures were added: a gazebo in 1990 and a small wedding/concert pavilion in 1995. These have provided opportunities for visitors to pause and contemplate the gardens more comfortably, with shelter, while adding visual focal points. A gate with a rhododendron motif, custom-designed by local blacksmith/artist Dana Dameron, now welcomes visitors at the front entrance.

Large specimen plants to note during your visit:

Rhododendron reticulatum (rose azalea): Uncommon in Washington-area gardens

Stewartia malacodendron (Virginia stewartia)

Stewartia pseudocamellia (Japanese stewartia)

Rhododendron fortunei (Fortune's rhododendron): Very large masses, demonstrating the heat-tolerance of this seldom-planted species

Rhododendron calendulaceum, *periclymenoides*, *cumberlandense*, (*bakeri*), and *prunifolium*, et al.

Magnolia macrophylla (bigleaf magnolia)

Sciadopitys verticillata (Japanese umbrella-pine)

Metasequoia glyptostroboides (dawn-redwood): Thought to have been planted in 1952. (Sadly, its twin Champion Montgomery County tree at 98 feet; was destroyed by lightning in 1993; the tall stump has been left as a testimonial and can be seen near the gazebo.)

BROOKSIDE GARDENS

After lunch your buses will be whisking you to Wheaton to visit this 35-acre display garden. Opening in 1969, and built on the site of a former nursery, Brookside has as its primary goal the amassing of colorful and instructional displays of plants both in gardens and indoors in two conservatories. Visitor services such as adult and children's programs, guided tours, bus trips, horticultural information, a library, and plant labels are strongly emphasized as part of Brookside's educational mission.

Once you arrive, first stroll through the conservatories. Permanent tropical plantings are combined with ever-changing

seasonal displays in the first conservatory. Favorites with visitors are the cascade chrysanthemum show in November and the Christmas show featuring large poinsettia "trees". The second (smaller) conservatory has no permanent plant collections, allowing greater flexibility in seasonal displays. The early spring show is usually the highlight here; you might even find numerous large azaleas forced into bloom!

As you leave the conservatories, keep in mind that there are three major types of outdoor areas you will see during your visit—formal gardens, informal gardens, and a Japanese-style landscape. Several different gardens can be found in the formal areas. The four large beds of the Trial Garden are filled with masses of tulips or other bulbs in spring. In summer these contain educational displays, the themes of which vary from year to year (for example, plants which attract beneficial insects), and new cultivars of annuals.

Adjacent to the Trial Garden is the Rose Garden. Over 200 cultivars of roses, both modern and old, can be found here. Perennials, ornamental grasses, and evergreens have been extensively interplanted to provide interest when roses are out of bloom. A wisteria-covered arbor drips with long clusters of fragrant lavender flowers in early May and provides welcome shade in summer.

Upon leaving the Rose Garden, you will intersect a long axis comprised of a series of garden "rooms". Closest to the end of the Conservatory is the Perennial Garden, which has a rectangular fountain in the center and is enclosed by a purple granite wall.

This garden was designed in the English "cottage style" by Edith Eddleman of North Carolina in 1989 and features roses, ornamental grasses, and newer cultivars and species of perennials. Its long season of bloom extends from June to frost.

The next "room" is enclosed by a yew hedge and features a display of gray- and silver-foliaged plants accented in summer with white flowers. This was designed for Brookside's 25th (Silver) Anniversary in 1994 and will be continuing as a semi-permanent feature. Height is provided in early summer by the bold silver "branches" of scotch thistle; in fall mums are interspersed where annuals have finished, to be replaced with pockets of bulbs for spring.

As you pass through the yew hedge and ascend a short flight of steps you will find yourself in a semicircular courtyard surrounded by purple plum trees. Under these in spring are thousands of small species bulbs whose bloom cycle has been carefully choreographed to provide waves of color coinciding with the pale pink blooms of the plums. Blue plumbago groundcover emerges later to cover the ripening bulb foliage and provides a show of cobalt-blue flowers in late summer. A raised square fountain adorns the center of this "room," and benches await those seeking the shade of the plums.

Ascend another three steps and you will be facing the Wedding Gazebo. An increasingly popular site for outdoor ceremonies, this structure forms the focal point of the formal garden axis.

Backtrack a bit to the plums and turn right and you will enter the new Fragrance Garden. Dedicated in the fall of 1994, this area contains permanent and seasonal collections of plants with fragrance of flower or foliage. Atop the retaining wall are beds devoted to herbs; as no pesticides are used in this garden visitors are encouraged to touch, taste, and smell. Beneath arbors planted with permanent and summer vines, memorial benches provide welcome relief, as do those in the central gazebo. The sound of twin splashing fountains also soothes during warm months. The central beds contain bulbs in spring and fragrant annuals in

summer augmented with mums in fall. Between the lawn and the arbors is a wide border of mixed plantings of fragrant annuals, perennials and shrubs; sweet scents are particularly noticeable on warm summer evenings.

Up ahead, the rolling hills, sculptured ponds, and Teahouse of the Japanese-style landscape of the Gude Garden beckons you to leave behind the color, complexity, and excitement of the formal gardens. Created in 1973 as a memorial to a prominent local nurseryman, this completely man-made creation was designed by Brookside Gardens' landscape architect Hans Hanses. The ponds contain both Japanese koi and native fish and are fed by groundwater. The Teahouse sits on a man-made island and provides vistas in all directions over expanses of lawn and water. The island is clothed in a tapestry of groundcovers, grasses, and evergreens and features several cultivars of Satsuki azaleas. Strategically placed specimen trees, many of them donated by the Gude family, grace the lawns.

Having reached one of the farthest extremes of Brookside Gardens, take the long trek back to the informal gardens and the treasure that awaits you there: AZALEAS! The Azalea Gardens comprise approximately 5 acres and are a major component of Brookside's permanent collections. Over 20 species and 400 cultivars of azaleas can be found here, including approximately 30 kinds of deciduous hybrid cultivars. Groups represented are the Glenn Dales, Gables, Back Acres, Kurumes, Satsukis, and a sprinkling of Pericats and Mucronatums. Designed and planted by Emile Deckert, this area is criss-crossed with meandering, mulched paths, and overtopped with a canopy of pre-existing Virginia pines and tulip trees and younger, planted ornamentals. Emphasis has been placed on incorporating both woody and herbaceous companion plants with the azaleas, and good collections of witchhazels, winterhazels,

rhododendrons, hostas, and lenten-roses add color when azaleas are out of bloom. Clipped hemlocks and other evergreens provide texture and height throughout the year. It should be noted that, unlike McCrillis Gardens, masses of cultivars feature more prominently in the design of this garden rather than individual specimens.

After looking at every label on every azalea cultivar, cast your eyes downhill toward Glenallan Avenue and the Aquatic Gardens. Constructed in 1974, the two ponds are ringed with cattails, water irises, arrowhead and pickerel-weed. Water-lilies bloom in summer in the shallow areas, and an abundance of wildlife can be found here throughout the year. On a colorfully-planted island in the upper pond, a gazebo affords you a better view and a shady place to pause.

As you stroll along the banks of the ponds on your way back to the main building and your buses, notice how the azaleas on the hillside reflect in the water. I hope *you* will be able to reflect with pleasure on your visits to Brookside and McCrillis Gardens for years to come and that you will come back often!

¹ Sole credit is due to the Brookside Gardens Chapter of the Azalea Society of America under the leadership of Bob Barry for initiating and accomplishing this distribution program.

Philip M. Normandy is the Plant Collections Manager, McCrillis Gardens and Brookside Gardens, with the Department of Parks, Montgomery County. □

Photographs courtesy Brookside Gardens



Azalea Gardens Scene, Brookside Gardens



Entrance gate at McCrillis Gardens. Note hand-made rhododendron leaves.

Why Are Azaleas So Pest Prone And What Can We Do About It?

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These questions were posed to us as the topic for a presentation to the Azalea Society of America at the 1995 national meeting in Washington, D.C. In an attempt to address this question we have prepared the following article which focuses on the insect and mite pests of azaleas. We do not have the space or expertise to address problems related to diseases or cultural problems.

To answer these questions required knowing how common and pest-prone azaleas are in home landscapes. Our studies of more than 300 landscapes in the Washington metropolitan area revealed that azaleas are by far the most common woody landscape plant. Of more than 100 species or cultivars of landscape plants, the genus *Rhododendron* (mostly azaleas) comprised almost 20% of the total number of plants found. We might then ask, relative to other plants, how pest-prone are azaleas? The answer to this question is somewhat surprising. With respect to woody landscape plants, the most pest-prone are those in the family Rosaceae. We found apples, roses, firethorns, and cherries to have the greatest frequency of insect and disease problems. Dogwoods also are quite pest prone in this region, as are plants in the genus *Euonymus*. Azaleas as a group are not the most pest-prone plants in our landscapes. However, because so many azaleas are planted relative to other species, the pests of azaleas are the major source of woody plant problems for landscapers in this area (1,2).

What then are the major insect problems of azaleas in this area? Again, based on our information from home landscapes in the Washington metropolitan area, we found the most common insect pests of azaleas to be the azalea lace bug and weevils. We call these common, perennial pests "key pests" and will discuss the biology and management of these two pests in greater detail below. In addition, we found several other pests such as mites, whiteflies, caterpillars, bark scale, borers, and leaf miner. Secondary pests such as these are found less frequently and hence require less management than key pests. After examining the table that accompanies this article, you should have a better understanding of the biology and management of the key and secondary insect and mite pests of azaleas.

The approach we use for managing insect and disease pests of azaleas is called integrated pest management (IPM). IPM is a decision-making process that considers the ecological and social aspects of pest control as well as economic ones. This concept is especially relevant now that concerns of groundwater and environmental contamination and pesticide misuse are the focus of public attention. Moreover, the IPM approach is a sound alternative to control programs that rely very heavily on the use of pesticides. Unwise pesticide use can foster the development of resistance by pests. Pesticides may have unwanted and unnecessary effects on beneficial organisms such as predators and parasites that help reduce pest populations. Programs developed at the University of Maryland during the past decade have taken the IPM approach from the domain of the farmer and demonstrated its effectiveness in

several ornamental plant systems including home grounds, parks, corporate landscapes, and commercial nurseries.

Azalea growers require a sound game plan if an IPM program is to be effective in their landscape. First, they must have a thorough knowledge of the pests of azaleas. The table below describes the identification, biology, detection, damage, and management of several common insect and mite pests of azaleas.

You should also realize that different cultivars of azaleas differ widely in their susceptibility to several insect pests. For example, the following azalea cultivars differ in their relative resistance to attack by the azalea lace bug (Smith-Fiola 1995): cultivars of evergreen azaleas resistant to lace bug feeding and oviposition include 'Cavalier', 'Dawn', 'Dream', 'Elsie Lee', 'Eureka', 'Macrantha', 'Marilee', 'Pink Fancy', 'Pink Star', 'Red Wing', 'Salmon Pink', and 'Seigai'; cultivars moderately resistant to oviposition include 'Coral Bells', 'Jan Cochran', 'Karen', 'Kathy', 'Mary Lynn', 'Nancy', and 'Rachel'; very susceptible cultivars include 'Blaauw's Pink', 'Gigi', 'Girard's Rose', 'Gloria', 'Hershey's Pink', 'Hershey's Red', 'H. H. Hume', 'Mother's Day', 'Mrs. L.C. Fisher', 'Rosebud', and 'Sweetheart Supreme'; deciduous azaleas least preferred (resistant) by lace bugs include *Rhododendron canescens* and *R. prunifolium* and those most preferred (susceptible) include *R. alabamense* and *R. calendulaceum*. In a similar way we know that cultivars of azaleas such as Snow Azaleas ('Mucronatum' = 'Ledifolia Alba') whose bud scales are sticky and leaves are hairy are the most susceptible to attack by the azalea whitefly. Azalea growers can reduce problems and hence the need for pesticide use if they avoid planting more susceptible cultivars. Where these susceptible cultivars are desired or if they are irreplaceable elements of a landscape, then growers

must focus their monitoring and management activities on these pest-prone plants.

Landscape design will have a major effect on the frequency and severity with which azaleas are attacked. It has often been noted that azaleas grown in full sun are much more prone to infestation by the azalea lace bug than those grown in the shade. The traditional explanation for this phenomenon was that shade loving azaleas placed in full sun were under physiological stress and predisposed them to lace bug attack. Clever studies conducted here at the University of Maryland demonstrated that shade grown plants were actually a better food source for lace bugs than those grown in sun (3). To resolve this apparent conundrum we investigated several factors that might affect pest abundance in sunny and shady landscapes. We found that sunny landscapes tended to be architecturally simple, that is they lacked significant numbers of shrubs and overstory trees. In these landscapes populations of the azalea lace bug were often very high and damaging. In contrast, architecturally complex landscapes had almost no problems with lace bugs. We found that natural enemies, particularly generalist predators like spiders and crickets, were far more abundant in complex landscapes. Lace bugs placed on azaleas in complex landscapes were far less likely to survive than those found in simple ones. We believe that azalea growers significantly reduce problems caused by the azalea lace bug if they create and maintain diversity in their landscapes. A diverse landscape enhances the persistence of many kinds of beneficial organisms by providing alternate food sources and refuges from their own natural enemies. It also reduces their exposure to unfavorable climatic conditions.

An important step in all IPM programs is to have a plan for collecting biological information on pest

activity. We call this plan monitoring. Monitoring is the regular inspection of the managed landscape to detect the presence of damaging insects, weeds, diseases, nematodes or other environmental conditions. Monitoring provides the information to pinpoint the location of pests and apply controls in the most efficacious and timely way. It also provides information on the presence and activity of beneficial organisms that may eliminate the need for other controls. Monitoring also allows you to judge how effective previous controls have been. Monitoring is accomplished by visually inspecting plants, using trapping devices such as pheromone traps, and may be facilitated by recording environmental data such as temperature, rainfall, and humidity.

If you detect a problem, you must go through a decision-making process that involves a minimum of the following considerations. First, is the problem severe enough now or does it have the potential later to cause true damage? Is control most efficacious at this time or would another time be better? What is the best combination of control tactics that will provide results which are economically and environmentally sound? Guidelines to assist in answering these questions are provided in Table 1.

Once the decision has been made to control a problem the pest manager combines one or more control tactics. These include the use of resistant plant materials, employing cultural or mechanical controls such as raking up infested leaves or pruning out pests, applying chemical controls such as insecticides, or utilizing biological control agents.

Biological control is one of the most exciting and fascinating approaches to managing insect pests of azaleas. It has enormous potential for providing long term solutions to pest problems that are environmentally and economically sound. Biological control is the use of predators,

parasites (often called parasitoids), and pathogens to reduce pest populations below damaging levels. The goal of biological control is to lower pest densities to innocuous levels. This contrasts with the notion of eradication which implies the complete elimination of all pests at a site. Eradication is rarely achieved by any method of pest control including the use of pesticides. Furthermore, pest control through eradication is unstable even when it can be achieved because the landscape is often rapidly recolonized by pests from other locations which, in the absence of natural enemies, quickly increase and reach damaging levels.

Biological control may be achieved in four general ways. First, natural enemies already found in the landscape may be conserved through management practices that favor their survival and reproduction. In many cases this can be accomplished by minimizing adverse effects associated with pesticide use. The adverse impact of pesticides on natural enemies can be reduced by the following methods:

1. Check to see if natural enemies are present and active before considering any type of pesticide application. Look for the presence of natural enemies themselves or signs of their activities. For example, tiny wasps that attack azalea bark scales leave exit holes as they emerge from the scale. Look for these before you treat.
2. Consider alternatives to pesticides whenever they are feasible. If other, non-chemical approaches are available and effective, use them whenever possible. For example, leaves infested with active or overwintering stages of the azalea leaf miner can be pruned or hand removed from azaleas and disposed of instead of sprayed. Azalea caterpillars can similarly be removed by hand.
3. When pesticides are necessary use the smallest number of applications

possible. Apply pesticides only when there is clear need to do so. Make sure that the pest population is at a level great enough to harm or potentially reduce the vigor or aesthetic value of the plant. Also make sure that the pest population is in a developmental stage vulnerable to the pesticide. In general pupae, eggs, and adult insects are less susceptible to pesticides than larvae or nymphs. Smaller and younger larvae are usually easier to kill than older and larger ones.

4. When applying pesticides, choose ones with short residuals, if possible. Whenever possible, substitute oils, soap applications, or microbial products, such as those that contain *Bacillus thuringiensis*, for synthetic pesticides. For example, studies at the University of Maryland demonstrated the efficacy of insecticidal soap and that of Orthene were comparable in reducing azalea lace bug populations. *B. thuringiensis* can be used to reduce azalea caterpillar populations. Pesticides with long residuals applied to foliage are usually more harmful to beneficial insect populations than short lived materials like oils and soaps. These do not last long in the environment and can affect natural enemies present only at the time of application. Natural enemies that move into the area later from other locations, or parasites that emerge from previously parasitized hosts in the area, are less likely to be affected by these materials than by insecticides with long periods of residual activity.

5. Use granular formulations applied to the soil in place of foliar applications if possible when natural enemies are present. Adult parasites and all stages of predators are likely to be killed outright by foliar applications of most insecticides. In contrast, a systemic insecticide is less likely to kill

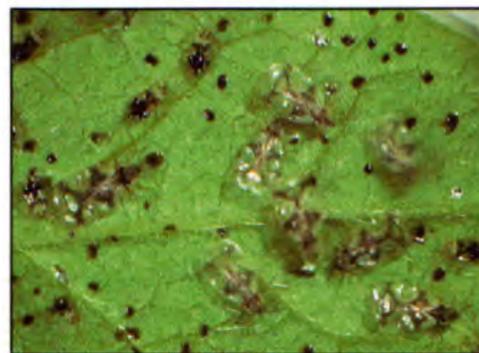
natural enemies directly because residues will be in the plant, which is not eaten by natural enemies.

6. Apply pesticides in parts of the season when natural enemies are not active such as the dormant season. This requires monitoring of natural enemy abundance in the landscape.
7. Use reduced rates of pesticides when possible. Be careful with this approach because many jurisdictions mandate that pesticides be applied only as directed by the label, which means at a full rate.
8. Apply pesticides only to infested plants and not to entire plantings or landscapes. This method is called a spot treatment. Spot treatments will help to maintain natural enemy refuges.

Besides pesticides, other factors may interfere with natural enemies and their activities. These include excessive dust, overfertilization, and the presence of honeydew-collecting ants. Excessive dust on foliage in dry regions is often associated with outbreaks of scales, aphids, mites, and whiteflies because these pests are usually controlled by parasites or predators. Excessive fertilization is sometimes associated with outbreaks of pests such as mites and scales. Fertilization raises the amount of nitrogen in the foliage and thereby raises the reproductive rate of the pest population. This may act to help the pest population outpace its parasites or predators.

Certain species of ants collect the honeydew produced by pests such as azalea whitefly and bark scale and actively defend the colonies of honeydew-producing insects from attack by parasites and predators. Ant baits or trunk sprays to control ants are effective ways to restore the ability of natural enemies to suppress pest populations.

Methods to positively enhance natural enemies include the provision of alternative foods to maintain natural enemies when pests are scarce and creation and maintenance of in-field shelters or overwintering refuges. Several predators can utilize alternative food sources such as pollen to sustain them when prey are rare. Some predators such as adult flower flies and many families of parasites require alternative food sources such as nectar from flowers. Plants that provide nectar and pollen are very important in conserving natural enemies in landscapes. The diversification of landscape plantings through the use of flowering annuals and perennials may facilitate biological control through conservation of natural enemies. Natural enemies often overwinter in leaf litter in sheltered sites near pest infested plants. If the litter under plants is raked up and removed, natural enemies may be removed or experience higher death rates in winter.



Azalea Lace Bug – adults, nymphs and fecal droplets



Adult predator of Azalea Lace Bug – Japanese Plant Bug (Stethoconus japonicus)

Photographs courtesy Paula M. Leddy

Table 1 AZALEA INSECT AND MITE PESTS

Pest Name	I.D. and Biology	Damage Symptoms	Monitoring Techniques	Management Strategies
Azalea lace bug <i>Stephanitis pyrioides</i> 	Adults are 1/8" long, wings are lacy with 2 grayish-brown cross bands. Nymphs are mostly black with spines. Eggs are inserted into the underside of the leaf and covered with black fecal droplets. There are 4 generations per year in MD and they overwinter as eggs in the leaves.	Nymphs and adults suck chlorophyll from underside of leaves causing a course, white stippling on the top of leaves. Both stages deposit black fecal droplets that stick to the underside of the leaves. In heavy infestations plants may be killed, especially those in full sun.	Check foliage for damage (stippling and black fecal spots) and lace bugs on plants in full sun beginning in late April and continuing throughout the summer. Check foliage for predator stages (Japanese plant bug and generalist predators).	Plant azaleas in partial shade. Use resistant varieties. Insecticidal soap (short residual, contact insecticide) will give adequate control if sprayed on the underside of leaves for active stages. Systemic insecticide gives excellent control and can be sprayed on top of the foliage. Spot treat infested azaleas only.
Azalea leafminer <i>Caloptilia azaleella</i> 	Adult moths are 3/8" long, yellowish-brown, and stand at a 60° angle at rest on foliage. Larvae are 1/2" long and yellowish-brown. There are 2 generations a year which begin in May and July. Pupae overwinter in leaf mines.	Young larvae form blotch mines, usually near the midrib of the leaf. Mature larvae curl the tips of leaves over with silk and feed inside the curled leaf. Large populations can cause leaf browning and premature leaf drop.	Look for blotch mines of first generation in May. Curled leaf tips in June indicate the completion of the first generation. Look for second generation blotch mines in July. Shake plants in late June and August to make adults fly, and to estimate their numbers.	Rake and destroy leaves from infested plants, especially in the fall (pupae overwinter in leaf mines). Hand remove mined or curled leaves. If numerous developing blotch mines are observed use a systemic insecticide in May. Evaluate the second generation and treat if necessary.
Azalea whitefly <i>Pealius azaleae</i> 	Adults are 1/16" long with broad, white wings. Nymphs are flat, yellowish-green, non-mobile, and resemble scale insects. All stages are on the underside of the leaf.	Leaves become covered with sticky honeydew followed by black sooty mold. Terminal leaves cup first and leaves turn yellowish and appear wilted in heavy whitefly infestations.	Before flowering, shake terminals of azaleas to disrupt whiteflies. If adults are seen, examine the underside of several leaves to observe nymphs and estimate the size of the population. Look for beneficial insects or signs of parasite emergence.	If infestations and damage are moderate and beneficials are present, spray the underside of leaves with horticultural oil or soap. If heavy infestations and damage are seen, spray infested azaleas with a residual insecticide.
Azalea bark scale <i>Eriococcus azaleae</i> 	Adult females are 1/8" long and begin secreting a white, felt-like egg sac in May. Nymphs are 1/16" long and are usually found in twig forks. There are 2 generations a year in MD and they overwinter as nymphs on bark.	Azaleas will tolerate low levels of this scale without showing symptoms other than honeydew and sooty mold. Large populations may result in leaf yellowing and branch dieback. Continuous heavy infestations may kill plants in a few years.	Look for white egg sacs in twig forks in May-June and honeydew and black sooty mold on leaves. Reddish crawlers settle on twigs in June-July. Look for holes in egg sacs indicating attack by predators and parasites, and for the beneficial insects themselves.	If populations are low, damage is not severe, or beneficials are present, do not spray. Beneficials usually control this insect. If populations are severe, use a summer oil spray in July to kill second generation crawlers and/or a late dormant oil spray to kill overwintering nymphs.
Black vine weevil <i>Otiorynchus sulcatus</i> 	Adults are 3/8" long, black with faint yellowish flecks on wings and flightless. Larvae are 1/2" long, "C" shaped, and legless, with brown heads. There is 1 generation a year and larvae overwinter in soil.	Adults chew leaf margins causing a notched appearance. Heavy infestations may defoliate small shrubs. Adults feed at night. Larvae feed on roots and may girdle at the crown of the plant resulting in plant death.	Look for notched leaves beginning in June. Interior leaves usually show the most damage. Pit fall traps, placed in the soil under damaged plants, will catch night feeding weevils. Look for larvae on roots of wilting plants with notched leaves.	Use a foliar insecticide in mid-June when adult damage is objectionable. Soil drenches for larvae with a labeled insecticide are effective for potted plants but not for landscape plants. Insect killing nematodes are available. Studies show they have been effective for potted plants.
Twobanded Japanese weevil <i>Callirhopalus bifasciatus</i> 	Adults are 3/16" long, brownish with two dark colored bands across wing covers. Larvae are 1/4" long, "C" shaped, and legless, with brown heads. There is 1 generation a year and all stages may overwinter in soil. They attack several host plants.	Adults chew notches in leaf margins. Heavy infestations may defoliate small shrubs. Adults feed during the day. Larvae feed on roots and may cause stunting, wilting, and even kill small shrubs.	Look for notching on lower leaves beginning in June. Adults drop to the ground when the plant is disturbed making them difficult to find. Place a tray under damaged shrubs to find cryptic adults that dropped.	Adults feed 2-3 weeks before laying eggs. Spray foliage with a labeled insecticide when damage begins in mid-June. Repeat in 3 weeks if fresh damage is found. Soil drenches for larvae are effective for potted plants.
Rhododendron borer <i>Synanthedon rhododendri</i> 	Adult moths are 1/4" long. The wings are mostly clear and the body black with three gold abdominal bands. Fully grown larvae are about 1/2" long and white with a brown head and 5 pairs of short ventral prolegs. There is one generation a year and larvae overwinter in branches.	The boring activities of larvae in branches may cause the bark to crack and reveal tunnels and frass. Heavy infestations girdle and cause wilting and eventual branch dieback.	Look for wilting leaves and dieback. Prune off suspect branches and dissect them longitudinally to see if larvae are present. Pheromone traps may be used to determine the flight and egg laying period.	Prune out and destroy wilting branches in late summer or early spring. Hang a pheromone trap in mid-May, and spray a recommended insecticide on branches when first males are trapped, usually about mid-June.
Southern red mite <i>Oligonychus ilicis</i> 	Adults are tiny, reddish in color with 8 legs. They overwinter as eggs on the underside of leaves. Several generations occur a year with most activity occurring in the spring and fall. They prefer broad-leaved evergreens in the Ericaceae and Aquifoliaceae families.	White stippling of the upper surface of the foliage. Lower leaf surface appears dusty due to the numerous egg shells and shed skins.	From April-June and September-November look for stippling and mite stages on the lower surface of the leaves. If stippling is noticed tap branch over a white piece of paper and count mites and beneficials. From November-April look for red overwintering eggs on the lower leaf surface.	When an average of 10 or more mites can be tapped from sampled terminals, or if 10% or more of the foliage is stippled and mites are present, spray underside of foliage with horticultural oil or insecticidal soap. If overwintering eggs are numerous use a dormant oil spray on the lower surface of leaves.
Azalea caterpillar <i>Datana major</i> 	Adult are 1" long brown moths. Mature larvae are 2.5" long with reddish brown legs, head, and "neck". The body is black with rows of white spots. Larvae feed from late summer through early fall and there is 1 generation per year.	Caterpillars feed together when young and tend to disperse as they mature. Defoliation of entire branches, and even plants, may occur in large populations.	Look for black caterpillars with white spots whenever azalea are defoliated from late summer through fall.	Hand pick caterpillars when populations are low. Spray with Bt (<i>Bacillus thuringiensis</i>) if caterpillars are numerous and less than 3/4" long. Spray residual insecticide if caterpillars are larger.

If existing natural enemies are too scarce or appear too late to prevent damage, extra parasites or predators can be released at the site to augment existing natural enemies. Some types of parasites and predators are commercially reared or collected in large numbers and can be purchased and released at sites where pest control is needed. This approach may be used to increase natural enemy numbers when pests are present or to inoculate a system with natural enemies earlier than would otherwise occur. Lady beetles have been used to reduce aphid populations on landscape plants. However, nothing is known about the efficacy of augmentative releases for control of azalea pests. Azalea enthusiasts should use this approach with caution until a great deal more is known about the environmental and biological factors that make this approach predictable and reliable.

Applications of formulated pathogens or nematodes may be made against some pests instead of synthetic pesticides. Microbes such as bacteria and nematodes are packaged commercially and applied in a manner similar to that used for conventional pesticides. One of the most exciting new groups of microbial insecticides available for use in the landscape is the entomopathogenic nematodes. Nematodes are microscopic roundworms that occur in a wide variety of habitats including the soil. Several species attack a wide variety of insect larvae and are thereby beneficial. Once mixed with water the nematodes can be applied to the bark of trees or to soil as drenches or through conventional sprayers. For the past several years, we have evaluated nematodes as biological control agents for a variety of boring and foliar feeding caterpillars. To date our results are very encouraging. We have used nematodes applied to the bark of trees to control dogwood borers on flowering dogwood, peach tree borers in cherry laurel, and banded ash borer on green ash. Although we have not evaluated this technique for managing rhododendron borer, this may be a promising approach for this pest. We

have had limited success using nematodes to control black vine weevil in landscape settings. However, nematodes provide good control of this pest in containerized azaleas. We believe nematodes will be important tools in managing a variety of pests in landscape settings and nurseries.

If the pest is a species introduced from a foreign land, such as azalea lace bug, and lacks effective natural enemies, new biological control agents may be introduced from other locations. This approach is called importation or classical biological control.

An example of importation occurred when a biological control agent of the azalea lace bug was accidentally introduced with azaleas from Asia. This agent, called the Japanese plant bug (*Stethoconus japonicus*), attacks azalea lace bug nymphs and adults. It is most common on azaleas with high populations of lace bugs. However, its ability to reduce lace bug populations in landscape settings is unknown. Clearly, biological control is one of the most promising new areas of pest management for azalea growers practicing IPM. While much research remains to be done before these approaches are predictable and reliable, we are convinced that biological control will continue to increase in importance.

The final component of IPM is an evaluation plan. Among other things, this plan allows you to determine the biological outcome of controls, the effectiveness of activities such as monitoring and control tactics and the overall value of your management activities.

In summary, the belief that azaleas are very pest prone is not entirely accurate. Azaleas are moderately pest prone in this area. Because they are so widely planted they represent a disproportionate amount of the pest problems encountered in the landscape. By planting azaleas in complex, shaded sites in soils well suited for ericaceous

plants, many problems including those caused by lace bugs will be reduced. Developing an IPM plan based on a knowledge of pest biology, monitoring, decision-making, and alternative control tactics will enable azalea enthusiasts to grow and maintain beautiful, healthy plants,

Greater detail on ideas summarized here has been published in a variety of sources. A few of these resources are listed below.

Resistant Plant Materials

Pest Resistant Ornamental Plants by Deborah Smith-Fiola, Rutgers Cooperative Extension, 1623 Whitesville Road, Toms River, NJ 08755.

Biological Control

Biological Control of Insect and Mite Pests of Woody Landscape Plants by Michael J. Raupp, Roy G. Van Driesche, and John A. Davidson, Agricultural Duplicating Service, 6200 Sheridan Street, Riverdale, MD 20737.

Landscape IPM

Landscape IPM: Guidelines for IPM of Insect and Mite Pests on Landscape Trees and Shrubs by John A. Davidson and Michael J. Raupp, Agricultural Duplicating Service, 6200 Sheridan Street, Riverdale, MD 20737.

Literature Cited

- (1) Raupp, M. J. and R. M. Noland. "Implementing landscape plant management programs in institutional and residential settings". *J. Arboric.* (10) 1984, pp 161-169.
- (2) Raupp, M. J., J. A. Davidson, J. J. Holmes, and J. L. Hellman. "The concept of key plants in integrated pest management for landscapes". *J. Arboric.* (11) 1985, pp 317-322.
- (3) Trumbule, R. B., R. F. Denno, and M. J. Raupp. "Management considerations for the azalea lace bug in landscape habitats". *J. Arboric.* (21) 1995, pp 63-68. □

The National Arboretum Azaleas—A Four-Year Retrospective

Barbara Bullock

U.S. National Arboretum, Washington, District of Columbia

“The Glenn Dale Azalea Hillside planting, without question, is one of the major visitor attractions at the U. S. National Arboretum. During peak flowering--the last week in April through the first week in May--up to 40,000 visitors a day have visited the grounds on weekends.”

These words began the article I wrote for the Friends of the National Arboretum (FONA) newsletter in May, 1991. Being new at the Arboretum, I felt overwhelmingly proud to be associated with this famous display. However, my next sentence went on to say:

“Many of our visitors eventually ask themselves, ‘What has happened to this azalea collection?’ Upon closer observation, the collection seems to be getting swallowed by invasive woody vines. The azaleas were being buried alive!”

After my first year at the U.S. National Arboretum, I came to realize why the Hillside plantings of azaleas on Mt. Hamilton had not been maintained. It had a great deal to do with how little was then known about its origins. Very few people remained who had any knowledge of its background. All of the National Arboretum plant collections need justification for their development and existence. Policies governing these collections focus on research or educating the visitor or both. The Hillside planting--the result of research done a half-century earlier with no known map identifying the plants--did not have the documentation needed to justify an intense investment of labor.

Since labor was short, I focused my attention on obtaining and maintaining collections of important groups of hybrid azaleas known for their hardiness, good growth, and excellent flowering characteristics in the Washington, DC, area. The very extensive azalea collections (approximately 30 acres) of the U.S. National Arboretum consist of the Morrison Garden, the Frederic P. Lee Garden, the Azalea Loop between the Morrison and Lee Gardens, and the planting of the side on Mt. Hamilton (elevation 240 ft). Many of the hybrids are located between the B. Y. Morrison and F.P. Lee Gardens, in the area known as the Azalea Loop. Of course, completing the collection of the Glenn Dale hybrid azaleas, developed and named by the Arboretum’s first Director, Benjamin Yoe Morrison (B. Y. Morrison), remained my most important objective.

At the same time, I began piecing together bits of information relating to the history of the planting from a few individuals, a few old photographs, and whatever old files remained. Most of what we now know could not have been obtained if not for the diligent research of Azalea Society of America members Richard (Dick) West and William (Bill) Miller.

As more and more information became available on the plants that Morrison had placed on Mt. Hamilton, the need for restoration of the area became increasingly apparent. The Glenn Dale plantings on the Hillside of Mt. Hamilton are a far more valuable resource at the National Arboretum than had been realized for several decades past. We now know that the Hillside planting includes many (maybe all) of the named Glenn Dale azaleas planted among the

unnamed plants Morrison had selected for further study. This is important, because these are *original* plants. Thus, in addition to the ongoing effort to establish new plantings of major hybrid groups, and to restore the formal Morrison and Lee Gardens, recovery of the Glenn Dale Hillside plantings was undertaken.

The Morrison Garden

First, I will describe our work on the Morrison Garden. The Morrison Garden, dedicated May 4, 1954, was designed specifically for the display of the named Glenn Dale hybrid azaleas. Beginning in January, 1991, I started cleaning up and restoring the Morrison Garden. I initiated during my first winter what turned out to be a four-year project to reduce the height of some 2,000 English boxwood (*Buxus sempervirens* ‘Suffruticosa’) in hedges lining the 12 azalea beds within its walls. The slow-growing English boxwoods had grown to over three feet in height, dwarfing the Glenn Dale azaleas that were on display. Today the hedges are 18 inches high and are sheared every February.

Original Glenn Dale azalea cuttings were obtained through the Ten Oaks - Glenn Dale distribution program organized by Dick West and Bill Miller. The first 42 cultivars were planted inside the Morrison Garden in April, 1995. During the summer of 1991, a volunteer cleaned up the western wall of the garden which was thick with overgrowth. This volunteer, Steve Kish, is responsible for trimming up all the dawn redwoods and hemlocks, pulling out the vines, and reducing the American boxwoods (*Buxus* ‘Arborescens’) by cutting them back halfway in order to open up the view into the woods above. Since this proved to be such an improvement, we next fixed the steps leading up the Hillside. This gave us the first glimpse we had into the tremendous massed azalea planting to the south-west for which we had little or no information at the time.

By the spring of 1994, the Morrison Garden again attained an air of formality intended by the people who created and dedicated this garden to B. Y. Morrison.



Morrison Garden in 1994

The Glenn Dale Azalea Hillside

Restoration of the azaleas above the Morrison Garden began during the fall of 1992 through the willingness, dedication, and persistence of additional volunteers. Once the azaleas above the Morrison Garden's western wall were cleaned up and mapped, the five core volunteers (known affectionately as the "Azalea Corps") continued their pattern of restoration onto the Azalea Hillside proper (the famous massed planting). These people (Jean Cox, Frank Daspit, Rita Pasztor, Ted Munter, and Jim Schmitt) began what seemed to be the impossible task of restoring the



Volunteer Crew in April 1994

magnificent hillside of azaleas. Joined in 1994 by Gordon Hagen, they spent one day a week the year round digging vines, cutting deadwood, nursing bee stings, scratching poison ivy rashes, trimming trees, and hauling out pile after pile of debris. By the spring of 1995, three and one-half years later, we could actually say that goal of initial vine removal from the seven-acre hillside had been achieved, and that all of the surviving azaleas on the Hillside were on their way to recovery for the first time in over two decades. During this effort, I was the only staff member involved, and we worked only one day per week. My two paid staff were focused on improving and maintaining the Azalea Loop area, the Lee Garden and the Morrison Garden. Today, restoration continues on the Hillside on Tuesdays throughout the year.

When I started working with volunteers in the Azalea Collections, I had no idea that the vines entangling these azaleas could be removed in three and one-half years (originally I thought it would take longer). The five volunteers who began the clean up of the Mt. Hamilton azaleas in the fall of 1992 have stayed with the restoration project the entire time.

Much remains to be said about the Glenn Dale azaleas and the future of the Hillside, now correctly known as the Glenn Dale Azalea Hillside. During the three and one-half year restoration of the Hillside, numerous original labels were unearthed among the azaleas. These labels are the direct

link needed for tracing this famous display planting to B. Y. Morrison's federally sanctioned hybridizing project that lasted over 22 years at Glenn Dale, Maryland. These labels carry "Bell numbers", which were used exclusively at the Glenn Dale Research Station to track the plant materials in research projects there.

It is now known with certainty that the Hillside azaleas represent approximately 1,200 of B. Y. Morrison's best selections at the time of World War II. Around 1942 Morrison's propagator, Albert Close, arranged to have these 1,200 selections reproduced in groups of 12 (some as many as 60) and during the spring of 1946, Morrison and several others planted the southern slope of Mt. Hamilton at the National Arboretum with over 15,000 azaleas in very distinct rows, covering about seven acres. With the passage of time, the plants grew and their branches intermingled. Vines such as honeysuckle, grape and poison ivy intruded, and the form of the planting was obscured. And, of course, labels were lost.

In early 1991 I met both Dick West and Bill Miller. Their unique interest in the Glenn Dale azaleas brought them to the U. S. National Arboretum and the three of us pieced together the fascinating history of the Hillside azalea planting. Details of the origin of the Glenn Dale azaleas is given in the March, 1992 issue of **THE AZALEAN: The Massed Glenn Dale Azaleas on Mt. Hamilton: A Valuable Collection at The National Arboretum**, West, Miller, and Bullock.

This year, the Friends of the National Arboretum provided funding for an intern to work on mapping the Azalea Hillside and tagging the labeled plants. Funding for internships is provided through private donations, fund raisers (such as the Rare Plant Auction and the Clambake) and by membership dues for the Friends of the National Arboretum.

In the spring of 1993, we installed the first signs to inform the public of the importance of the Glenn Dale Azalea Hillside. The next spring we installed a box on the top of Mt. Hamilton to hold an Azalea Walk brochure. By the winter of 1994-95, over 30 labels bearing Bell numbers had been found buried on or near the azaleas. These labels, which originated in Glenn Dale, Maryland, hold the key to positively identifying the azalea groups on Mt. Hamilton. For example, the label "B-32453", as shown by the research of Dick West and Bill Miller, has been positively identified as *Rhododendron simsii* 'Yeung Shaan hung', one of the pollen parents of the Glenn Dale azaleas. George Waters, the intern this year, has tagged several Bell-numbered selections along with two later Glenn Dale selections, 'Cantabile' and 'Fanfare'. His work would not have been possible without the progress of clean-up made by the volunteers. I might not have been able to sustain the volunteers' interest in this project if it had not been for the information on the origin and horticultural value of this planting passed back and forth among Dick West, Bill Miller, and myself.

Many unique flower types have been seen in the massed planting. Hopefully, we will soon know most of their origins and be able to make this information available to the public.

The Frederic P. Lee Garden

Present at the Morrison Garden dedication in 1954 was Frederic P. Lee, author of *The Azalea Book* (printed in 1958 by D. Van Nostrand Company, Inc., Princeton, N.J., for the American Horticultural Society). *The Azalea Book* was well received by the public, then hungering for any information on the fantastic new ornamental garden shrubs.

Lee, a prominent Bethesda lawyer and an avid horticulturist, served as chairman of the National Arboretum's Advisory Council for

over 20 years. The Council made annual reports to Congress in support of the mission of the National Arboretum. As a lawyer, Lee knew how to speak to Congress. The combination of his interests and profession served the National Arboretum well. The Lee Azalea Garden was dedicated to F. P. Lee in April, 1971. This garden contains mainly Satsuki and late-blooming azaleas. The garden has a free-form shaped pond, which I later learned, was nothing like F. P. Lee's own rectangular pond. In 1991, I met Jack Cardon, a former law partner of F.P. Lee, who told me much about this man. Jack had volunteered in the azalea gardens in the past; he now is a volunteer in the Arboretum's Bonsai Collections.

The Lee Garden pond in 1992 was little more than a sink hole collecting run-off and sediment. Water was seeping into the planting bed below through its porous liner. This made the planting bed below inhospitable for the growth of azaleas.

In late September, 1993, we began to rebuild the Lee Garden pond. Leadership for the project was provided by borrowed Friendship Garden gardener, Doug Rowley. My two part-time assistants, Alan Peck and Emma Gordon, Doug, myself and machine back-up by Facilities Unit workhorse Pete Fisher, did all the work. It took us over eight months—32 cubic yards of top soil, about 27 cubic yards of sand, over 20 tons of stone donated by the Asian Valley staff, and an \$800.00 donation to purchase a 40-mil liner needed to complete the project.

By April, 1994, the Lee Garden looked like a disaster area. It had to be closed to visitors for the entire spring due to excessive mud, tractor tracks, and boulders strewn about. That summer we set the final stones, rototilled and finally reseeded the turf by August 1994. The seepage problem below the pond was now corrected and the Lower Lee bed could

be planted. In April, 1995, Phil Normandy, horticulturist for Brookside and McCrillis Gardens donated 40 Satsuki hybrid azaleas which had been growing for over ten years. They are now nestled happily in an informal rock-garden style bed below the Lee Garden Pond.

Among the unusual companion plants to be seen in the Azalea Collections are Chinese Lacebark Pine (*Pinus bungeana*), a multitude of native dogwoods, including an unusual double-flowering dogwood, (*Cornus* 'Pluribracteata') and the oldest grove of dawn redwoods (*Metasequoia glyptostroboides*) on the Arboretum grounds.

Inspiration for the improvements to the Azalea Collections began with my February 1992 visits to the Morris Arboretum, the Scott Arboretum, and Winterthur. The National Arboretum has several areas where azaleas are overgrown and are planted on fairly steep slopes on Mt. Hamilton. These Pennsylvania gardens dealt with steep slopes by using retaining walls (Scott), brick or stone drainage ditches (Winterthur and the Morris), the restoration of old azalea gardens (Winterthur, Morris and Scott).

In the summer of 1992, we installed our first two-hundred-foot drainage swale using bricks stored at the old brickyard site. Then in the fall of 1992, we rebuilt the retaining wall on the north end of the Morrison Garden. We installed steps leading from Eagle's Nest Road to the north entrance of the Morrison Garden in August 1993.

In the fall of 1992, we rerouted the first of two steep trails. The present alignment of this trail, known as the "The Upper Switchback", now reduces the amount of run-off reaching the trails below. This was the first in a series of projects to slow the run-off of storm water, a perennial problem in the Azalea Loop area.

In January, 1993, we had a donation from the Men's Garden Club of Montgomery County to install a stone retaining wall. Located just above the Lee Garden, this attractive wall now supports the lower edge of a road which was badly eroding away.

In February, 1993, we began the "Lower Switchback" or the "Capitol Columns" entrance to the Loop Area Collections. This project took over one year to complete while working on other related projects. We built retaining walls along both sides of this trail using nine truck loads of stones excavated by hand from the edge of an old field at the Beltsville Agricultural Research Center. We now have a beautiful, gently graded entrance trail into the center of the Azalea Loop area, halfway between the Lee and the Morrison Gardens. You are invited to stop by for a visit. You will be pleased at the results. The number of volunteer gardeners has increased. A revised check list of some of our azalea hybrid collections will be forthcoming. Others companion plants are being added to enhance seasons other than spring. New directional signs to guide visitors through the various trails are planned for installation in the future.

Photographs by the author

Barbara L. Bullock has a Bachelor of Science Degree in Horticulture with a specialization in Landscape Design as well as a Bachelor of Fine Arts Degree from the University of Maryland. Ms. Bullock came to her current position as Curator of the Azalea Collections at the U.S. National Arboretum with over ten years of experience in the nursery and garden center industry (with specific training in nursery crop production) and love of the outdoors and working with people. Barbara has held this position since July 1990, and has been a member of the Brookside Gardens Chapter of the Azalea Society of America since May 1991. Inquiries and comments concerning this article or other pertinent questions can be made by calling Barbara at (202)245-4511. □

Azalea Calendar 1995

- September 16** Ben Morrison Chapter Meeting at 2:00PM
- September 26** Dallas Chapter Meeting at 7:00PM at DABS
- October 2** Brookside Gardens Chapter Meeting at Davis Library
- October 15** Deadline for receiving material (articles, advertisements, and chapter news) for the December issue of **THE AZALEAN**
- October 24** Dallas Chapter Meeting at 7:00PM at DABS
- October 28** Washington, DC area chapters invited to joint Northern Virginia ASA Chapter-Potomac Valley Chapter ARS meeting with focus on Asian influence on gardens to be held at Far East Restaurant in Bethesda, MD. For reservations call (703) 830-2656
- October 29** Richmond, Virginia Chapter Plant Auction
- December 4** Brookside Gardens Chapter Meeting at Davis Library
- 1996
- January 15** Deadline for receiving material (articles, advertisements and chapter news) for the March issue of **THE AZALEAN**
- March 28-30** ASA Annual Meeting and Convention, Dallas, Texas

Letter to the Editor

I am very interested in propagating the 'Sports' that occur frequently on many of our Satsuki related hybrids. Not wishing to misname or rename any of them, I have a need to know the registered varietal names, if they exist, of any or all of the listed varietal sports/selves. In addition, if documentation exists specifically oriented to defining registered names of 'SPORTS', I'd like to know the source. Thank you. Here's my list:

Parent Plant	Color & Sport Description
'NIJI'	Orange Sport w/frequent Darker Stripes
'AIKOKU'	Shirofukurin
'ISSHO-NO-HARU'	Shirofukurin
'CONVERSATION PIECE'	Shirofukurin
'MEICHO'	Orange Red Sport
'GYOKUSHIN'	Light Purple Pink Sport
'JOGA'	Light Purple Pink Sport

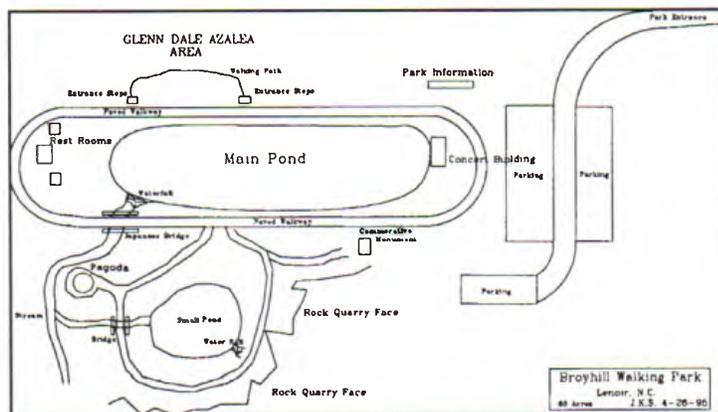
Sincerely,
 AZALEA SUNSET
 Bill McDavit
 674 Sunset Lakes Blvd., SW
 Sunset Beach, NC 28468

"BROYHILL WALKING PARK"—A NEW HOME FOR THE GLENN DALES

Keith and Wanda Suddreth
Patterson, North Carolina

The Glenn Dale Azalea collection is an exciting addition to western North Carolina, and the city of Lenoir. We became involved in the project after approximately five years of collecting and propagating azaleas and rhododendrons for our home garden. In order to afford the plants for such a large project, consisting of approximately three acres, we installed a greenhouse, watering system, and cold frames, and began to propagate plants by cuttings, seed and layering.

With our home garden project well underway, we read with interest the article "Ten Oaks Glenn Dale Project" in *THE AZALEAN*, March 1993. The article, by Richard T. West and William C. Miller III, outlined the distribution plan and cooperator requirements. After submitting a resume of our capabilities and a letter confirming the partnership with the Broyhill Walking Park, we received notification confirming we were included in the group of ten cooperators selected for the distribution. We think we were the only amateur gardeners included in the selection.



The Broyhill Walking Park, located in Lenoir, North Carolina, is a lovely old municipal park. The land was given to the City of Lenoir more than 50 years ago by Mr. T. H. Broyhill, brother of furniture magnate, Mr. Ed Broyhill. The late Mr. Ed Broyhill, along with his son Paul, built Broyhill Furniture Industries into the largest privately owned furniture manufacturing company in America. Another son, Mr. James E. Broyhill, served North Carolina in the United States House of Representatives and the United States Senate for more than 26 years.

A complete renovation of the park was completed last year, including the addition of new restroom facilities, a concert building with observation decks over the lake, all new shrubbery, new landscaping with spring planting of hundreds of annual flowers, paved walkways, new parking facilities, lighting and security personnel. All renovations were paid for by the Lenoir Parks and Recreation Commission with matching funds from the Broyhill Family Foundation at a cost of more than two million dollars.

Hundreds of people visit the park each day, from early morning to late evening. With the paved walkways, lighting, and security, young and old alike find an ideal environment for exercise, fellowship and general relaxation. The park has been used for dozens of wedding ceremonies since the renovation, the ceremonies usually taking place at the Japanese Pagoda overlooking the quarry pond.

The Park is currently managed by a committee headed by Mr. Paul Broyhill. Paul, as most people call him, although not now connected with the furniture business, continues to manage the Broyhill Family Foundation and provides both financial support and leadership to a wide range of community and regional needs, the most recent being the development of the new J. E. Broyhill Civic Center in Lenoir.

Recently, an area of the Walking Park set aside for the Glenn Dale Azalea Collection was established (see map). The entrance to the Glenn Dale Azalea Garden has wide native stone steps leading up from the main park walkway. The azalea area overlooks the waterfall, Japanese bridge and pagoda, just across the pond.

The first plants of the Glenn Dale distribution project, now two years old, should be ready to transplant in the Walking Park by the fall planting season. Work to be done prior to planting include developing the design of the azalea garden which includes walking paths, planting beds, rest areas, grass and companion plants. We will solicit participation from local garden clubs and other azalea enthusiasts in developing the design, companion plant selection, and the planting of the garden.

Mr. Paul Broyhill in commenting about the project said, "The Glenn Dale Azalea Collection will contribute to our objective to make the Broyhill Walking Park as beautiful as any park in the world." □

Roundtable Discussion on THE AZALEAN

Robert W. Hobbs

North Beach, Maryland

In order to maintain and improve the ability of the Azalea Society of America to achieve its goals of promoting interest and exchange of knowledge of the azalea, and to study the principles of hybridization, propagation, culture and care of azaleas, the editor of **THE AZALEAN** led a panel discussion as part of the 1995 convention and annual meeting. Since the Society's quarterly journal, **THE AZALEAN**, is the main means of communication within the society, it is essential that material published in **THE AZALEAN** supports these goals. The discussion focussed on general content, subjects for articles, the need for regular columns, format, and how to inspire contributors to the Journal.

The panel discussion was held on Thursday evening, May 4, 1995, the first night of the convention, with the editor acting as moderator. The three panelists were:

Nick Milfeld, nurseryman, Riverside, CA

Murray Sheffield, azalea hobbyist, Wetumpka, AL

Gene Westlake, professional horticulturist, Dallas, TX

These panelists represented a wide range of interest and growing conditions.

Each of the three panelists made brief presentations to answers three questions posed by the moderator:

- (1) What is good about **THE AZALEAN**?
- (2) What changes would improve **THE AZALEAN**?
- (3) What should be specifically addressed in articles in **THE AZALEAN**?

The presentations were followed by comments from the audience. Most of those attending the Convention remained in the room and many became participants in the discussion through their thoughtful and helpful comments.

A summary of the discussions is as follows: In general, the participants (panel and audience) seemed satisfied with **THE AZALEAN** and its contents. A desire for the use of more color photographs was expressed. Several subjects for future directions include:

- Articles on commercial growing
- Articles on species groups in other subgenera of Rhododendrons including *R. vireya*
- Articles on recently developed hybrid groups--Holly Springs, Carla, Huang and new varieties in older hybrid groups

- Articles on regional cultural problems and solutions
- Republication of articles of importance from previous issues of **THE AZALEAN** and short items of special interest from other periodicals and books
- Regional "bulletin boards" section
- A "Question and Answer" column
- Articles on cultural basics, such as when to fertilize, etc.
- New product reviews
- Articles on "azalea personalities"
- Articles on hybridizing
- Procedures on preparing azaleas for flower shows
- Questions without immediate answers, i.e., who knows where to get _____ or how to solve the problem of _____?
- Characteristics of azaleas not commonly discussed, i.e., does a particular form of flower last longer than others?

In other words--lots of good ideas! A few even volunteered to *write* articles. Members, get out your pen and paper, or fire-up your computer! Send your questions, requests, observations to the Editor, 737 Walnut Avenue, North Beach, MD 20714-9644. As you can tell from the list, members would like to know your personal experiences in all aspects of azalea culture. A complete article is best, of course, but just your questions and observations are of interest to readers of **THE AZALEAN**. □

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MINUTES OF THE ASA ANNUAL MEMBERSHIP MEETING

May 6, 1995

William B. McIntosh, *Secretary*

The meeting was called to order by President Malcolm Clark at 11:16pm following the guest lecture by Dr. Michael J. Raupp.

Malcolm thanked the Brookside Gardens Chapter for hosting the convention and announced that the next convention would be sponsored by the Dallas Chapter on April 4-6, 1996.

He reiterated the common recent theme of our declining membership, which currently [May 6, 1995, ed.] is 740. This contrasts with last year's 830 and 897 the year before that. The Society is still financially sound, with current assets of roughly \$40 thousand plus some funds for the Harding Memorial Garden. Our assets grew approximately 6% during the year. However, Malcolm cautioned that the ASA must soon either: (1) stimulate membership growth, (2) reduce the number of **THE AZALEAN** pages, or (3) increase dues. Malcolm calculates the break-even membership at 820, or 80 more members than we currently have. The obvious choice is to recruit more members.

Bob Hobbs thanked Brookside Gardens Chapter President Carol Allen for dedicating proceeds from the silent and live auctions to financing more color in **THE AZALEAN**. He also thanked the Chapter for scheduling a new Convention feature, the Roundtable Discussion on **THE AZALEAN**.

The prize for the best article in **THE AZALEAN** was won by Steve Brainerd, for the article "Designing with Azaleas". Steve donated the money to the color fund. Bob Hobbs announced that certificate for all past

winners of the Best Article award will be available in the near future.

Bob Stelloh thanked the membership for financial and labor support given the George Harding Memorial Garden project. He announced that an Azalea Day is being considered at River Farm for this time next year. Consideration is being given to establishing a trust fund for supplies and maintenance. George Harding's sister recently visited the garden.

Next Malcolm presented the Distinguished Service Award to William C. Miller III. Malcolm announced that, due to the loss of his calligrapher, the award certificate will not be available until a later time.

Bob Stelloh announced the results of the recent election:

President - Steve Brainerd
Vice President - Jim Thornton
Directors At Large:
Fred Minch
Rosalie Nachman
Art Vance

President Brainerd spoke briefly, his major points being that he expects to lead by example and that he will demand performance by the elected Officers and Directors.

Bill Miller closed the meeting by announcing that Roger Brown, who furnished the 1988 convention attendees with specimens of 'Pocono Pink', has done it again. This time the selection was 'Seattle White', described by Bill as a plant with single, semi- and fully-double flowers. Jane Newman was awarded a large specimen.

The meeting was adjourned at 11:40pm.

BEN MORRISON CHAPTER

Niki Baker, *President*

The Chapter's annual cutting picnic was held on July 16, hosted by Sue and George Switzer. Thirty-one persons attended.

Officers were elected for 1995-1996:

Niki Baker, President
Alan Jones, Vice President
Dale Flowers, Secretary
Carol Flowers, Treasurer

During the brief business meeting, the possibility of holding an Azalea Show in 1996 was discussed. Several members donated cuttings for other members to choose from, and the Switzers' made their extensive collection available to members for obtaining cuttings. The Chapter members wish to thank Sue and George for hosting this annual event once again this year.

BROOKSIDE GARDENS CHAPTER

Carol Allen, *President*

Rod Simmon's presentation at the April meeting on the Winkler Botanical Preserve was a fascinating look at a local nature preserve. The staff of the preserve has done an amazing job of dealing with the maintenance of a natural area in an urban setting. The T-shirts and bags for the convention were previewed. Barbara Bullock's design looked great! Several 'T's' were purchased by members (all the well-dressed ones). The aforementioned hot fashion statements were available for purchase at the June meeting. Thank you Roberta Hagen for the execution of the above items.

1995 Convention

The convention was all anyone could have wished for! We were blessed with perfect weather, good food, exciting speakers, wonderful plants to buy, good company, and lots

of "azalea talk". Thanks to all who made it work! Bill Miller, Bill Johnson, Jean Cox, Dottie Murphree, Mary Rutley, Tina Kelley, Barbara Bullock, Roberta and Gordon Hagen, Bill McIntosh, Lou Aronica, Ted Munter, Dick West, Andy, Ruth and Roberta Adams, Phil Normandy and the Brookside Gardens staff, Debbie and Mike White, Carolyn Beck, Bobbi McCeney, Lee Payne, Mary Ann Jarvis and a cast of thousands!

Good things happen at conventions. Steve Brainerd won the 'Best Article' award for his piece on design. Our own Bill Miller received the 'Distinguished Service' award for his years of service. The auction Friday night netted over \$600.00 for the new color picture fund for **THE AZALEAN**.

Landon School Festival and Azalea Show

An unprecedented number of entries (310 entries--the most ever and 19 exhibitors) was the high point of the show this year. Perfect weather preceded the event so most sprays were in excellent condition. The judges had some tough choices to make. The Best in Show was awarded to Charlie Evans for his entry of 'Osaraku'. The Sweepstakes Award for the highest number of points was won by Bill Miller. All of our overworked volunteers (Tina Kelley, Janet Miller, Bill Miller, Bobbi McCeney, Buck Clagget, Frank Sharpnack, Gi Adams, Dorothy Nowers, Connie Simmons, Bill Johnson and Hillwood Museum, Bob and Denise Stelloh, Bill McIntosh, Mike White, Emile Deckert, Bob Stewart, and Bob Hobbs) receive a heartfelt thank you! Next year wouldn't you like to see your name listed here?

Cultural Calendar

Well the push is over. The majority of the azaleas have bloomed and now the roses, peonies, and iris

take the stage. Satsuki azaleas are continuing to bloom, and I'm looking forward to my later blooming natives. If you heard Jim Plyler's talk at the convention you'll know to what I'm referring. Monitor your garden plants for insect pests. Make sure you ask questions first, before reaching for that insecticide. The Extension Service is a good place to take an individual insect for proper identification. Watch those weeds, the late spring rains we are having can really make them grow. It is not too late to mulch those bare areas and even embellish empty spots with some annual or even perennial plants. The local nurseries are bursting with containerized plants just now. Make sure all newly installed plants get extra special watering attention throughout their first year.

OCONEE CHAPTER

Ruth Bryan, *Secretary*

The Oconee Chapter met at the First Baptist Church in Conyers, GA, March 12, 1995. President David Butler called the meeting to order by welcoming members and asking the guests to introduce themselves. David then turned the program over to Ralph Bullard, our Vice-President. Ralph introduced Ray Goza who showed slides of Roan Mountain, TN where *R. calendulaceum* and Catawba rhododendrons are abundant.

After a break for the refreshments that Ann and Ray Goza provided, Ralph announced dates of upcoming events: April 22, 2:00 to 5:00PM the gardens of Charles and Virginia Owens and April 29, the Atlanta Botanical Gardens Azalea Show.

Ralph then introduced Joe Schild from Hinson, TN, who showed slides of native azaleas and mountain laurel at Wayah Bald, Cumberland Mountain and Cumber Gorge near Signal Mountain, TN.

Both speakers drew OOH's and AAH's for their breathtaking slides and had all in attendance vowing to

take trips to see these areas (ed. Note: Plan to go around the middle of June).

Mr. Fred Sorg donated several azaleas for sale to benefit the Oconee Chapter. Thank you, Fred.

The next meeting of the Oconee Chapter is set for June 10, 1995. The meeting will be hosted by Allison Fuqua at his home. We'll begin the meeting at 11:30, but please be there by 9:30AM for a clipping party and demonstration by Allison. Remember to bring a folding chair, plastic baggies, and a lunch.

NORTHERN VIRGINIA CHAPTER
John Zottoli, *President*

March 5 Meeting

The speaker for our March fifth meeting was Charles Hanners, who, with his wife, Wanda, own and operate a nursery called Azalea Trace in Calvert County, Maryland. The Hanners started this as a hobby, obtaining plants and other equipment from an old nursery that had gone out of business and was neglected. For \$250.00, Charlie bought all the stock and started their hobby which has now led to their business. The stock included many azaleas and rhododendrons without names attached.

Their seven-acre lot is heavily wooded, and they have many azaleas planted in beds with paths leading through the area. He cited problems that many of us have experienced, like ordering from nurseries and getting plants with incorrect identification. When he notified one grower that his plant was in error, the reply was that some customers were used to the wrong plant and continued to request it by the wrong name. He described his observation in taking cuttings, that it seemed timing was critical to success in rooting. He does not have any guidance, they just

experiment with different times each year. Beyond this, he gave a detailed description of the procedures they go through every year, taking cuttings, gathering seeds, and growing the plants.

Since this meeting, the Hanners have received local recognition in a weekly newspaper, the New Bay Times, published in Deale, Maryland. A reporter visited Azalea Trace and wrote a full page article on how the Hanners began a hobby that "...sort of got out of hand". The article recommended that readers visit the site and see the thousands of azaleas, and purchase nice plants at a good price. A picture of the Hanners was included in the publication.

May 21 Meeting

Our May 21 chapter meeting was quite special. For a very long time, I will fondly remember our "pot luck" lunch at the Haymarket home of Frances and Phil Louer.

We scheduled the meeting to catch the Louers' late blooming azaleas still in flower. We were delighted to see how beautiful and natural the mature plants looked--nestled under huge trees and set off by pools, grassy patches and woodland paths. As we toured the property, Frances and Phil helped us to identify plants, and they shared their experiences in growing them.

Though the plants and food were spectacular, I will most fondly remember the companionship from that afternoon at the Louers. At our regular meetings, we squeeze in a bit of time for socializing; but there is always so much else to do. At the Louers' we had the luxury of the whole afternoon for each other's company. We talked plants. We talked about the Society. We got to know each other.

Thanks Frances and Phil--for the chance to see your garden, for the wonderful setting for our lunch; but most of all thanks for the chance to spend that beautiful afternoon with each other.

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