Atlantic Coast Camellias

JOURNAL OF THE ATLANTIC COAST CAMELLIA SOCIETY

Helen Bower

Bloom grown by
Parker Connor

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ATLANTIC COAST CAMELLIA SOCIETY

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COVER GRAPHIC

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Our cover Camellia is *Helen Bower,* and was grown by Parker Connor at Edisto Island, S.C. *Helen Bower* was derived from a sport on a *Dr. Knapp* scion that was grafted onto an understock of *Mathotiana Var.* It was introduced in 1964 by T. O. Bower in Mobile, Alabama. *Helen Bower* is one of Parker's top prize winners. The bloom is a large rose form double, which is a rich rose red color with purple shading. The blooming season is mid to late. Photo by Jim Darden.

IN THIS ISSUE

A MESSAGE FROM OUR PRESIDENT

BUDDY CAWTHON

ATLANTA, GEORGIA

Dear Readers,

To say I'm excited about the Atlantic Coast Camellia Society and the coming year is putting it mildly! I want my excitement to rub off on each of you. We are looking toward our 10th convention in October of 1989, again at Myrtle Beach, S. C., and here's hoping you will start planning now to be a part of the celebration.

If you missed the '88 Convention, you missed great fellowship and some beautiful beach weather. Dick Waltz and his pretty wife, Jan, with the help of The McClintocks and lots of others, put on a weekend to remember. Two beautiful paintings and lots of 'growing plants' generated lots of dollars for our coffers. Bill Robertson and Buck Mizell are topnotch auctioneers that don't tolerate 'sitting on your billfolds.' When you next graft or air-layer, do an extra one or two for the ACCS plant auction, which is an exciting event.

Latimer McClintock, our very able secretary-treasurer, has sent reminder notices for membership renewals to those who missed the convention. Get those back to him with your checks so you won't miss a single issue of our well-edited Journal. I'll bet each of you know a couple of folks who would enjoy Atlantic Coast Camellias. Jim Darden is editing a journal worth more than the cost of dues. Think that over - then send me or Latimer the names of these folks and we'll send them a journal with an invitation to join us - ten dollars a year is a bargain.

I have large shoes to walk in for the next two years. Son Hackney, Hulyn Smith, Annabelle Fetterman, Elliott Brogden and Dick Waltz have all done super jobs, and I'm going to try to do one, too. Do you think you can help me - to help us all - and to have 300 members in attendance at our convention in -89? Jim Darden tells us we can have more color covers on this magazine if we increase our membership sufficiently.

Grow and show in good health and let me know if I can help you help the ACCS grow.

My best to you all,

Buddy

Buddy Cawthon

POPULARITY OF CAMELLIAS ON THE UPSWING

By Dewayne Ingram and Robert Black
Department of Ornamental Horticulture & Rural Development
University of Florida
Gainesville, Florida

Natives of the Orient and first introduced to the U. S. near Charleston, S. C. in 1786, camellias have been a part of the southern landscape for almost 200 years. The common name (camellia) refers to varieties and hybrids of *Camellia japonica* and to the lesser known varieties of *C. sasanqua* and *C. reticulata.*

The climatic conditions of the southern states are well suited for many camellia varieties. The shrubs are grown less extensively, however, in central Florida and even less in south Florida. Special care in regard to exposure, soil modification and watering is necessary to successfully grow and flower camellias in these subtropical regions.

In the landscape—for foundation, screen, and accent plantings as well as background groupings and hedges—camellias are dependable and versatile. Maximum benefit can be achieved by mass plantings or groupings, single plants scattered throughout the landscape creating too much of a busy or cluttered feeling.

Camellias flower in the fall and winter, times when their display of colorful blooms can be most appreciated. During the remainder of the year, though, their evergreen foliage, interesting shapes, textures, and relatively slow growth merit their recommendation by nurserymen and environmental designers as excellent landscape plants.

Selection of Varieties

Thousands of camellia varieties are offered by commercial nurseries and many are introduced each year from seedlings and mutations. Varieties with single, tiered, or double flowers are available with colors from pure white to brilliant crimson and combinations of colors in numerous patterns. Types and forms of camellia flowers are illustrated in Figure 1.

Equally varied are camellia plant forms and sizes ranging from small and irregular to large and upright. Texture and foilage color, too, may vary considerably among different varieties.

Midseason flowering varieties that bloom from November through January are best suited for the deep South. Warm fall temperatures may prevent early bloomers from flowering properly. Late blooming selections may reinitiate vegetative growth before the end of the flowering period, a tendency which results in "bullnoses." Bullnosing is characterized by poor quality flowers which do not open fully and may even drop while still tightly budded.

A comprehensive list of available varieties may be obtained from the book, CAMELLIA NOMENCLATURE published by the Southern California Camellia Society, and other printings by the American Camellia Society and its various state chapters.

General Culture

Camellias perform best in partially shaded locations which are enhanced by good water drainage and air movement. Such places that meet the basic cultural requirements will enable plants to better withstand adverse conditions.

Fertile soils high in organic matter are preferred, especially when camellias are container-grown for the nursery trade. In general landscaping, however, soil amendments and proper fertilization can modify many soils for growing the plants successfully. Camellias prefer slightly acid soils, ideally with a pH range from 5.0 to 5.5. The pH need not be adjusted, though, if it is between 5.0 and 6.5.

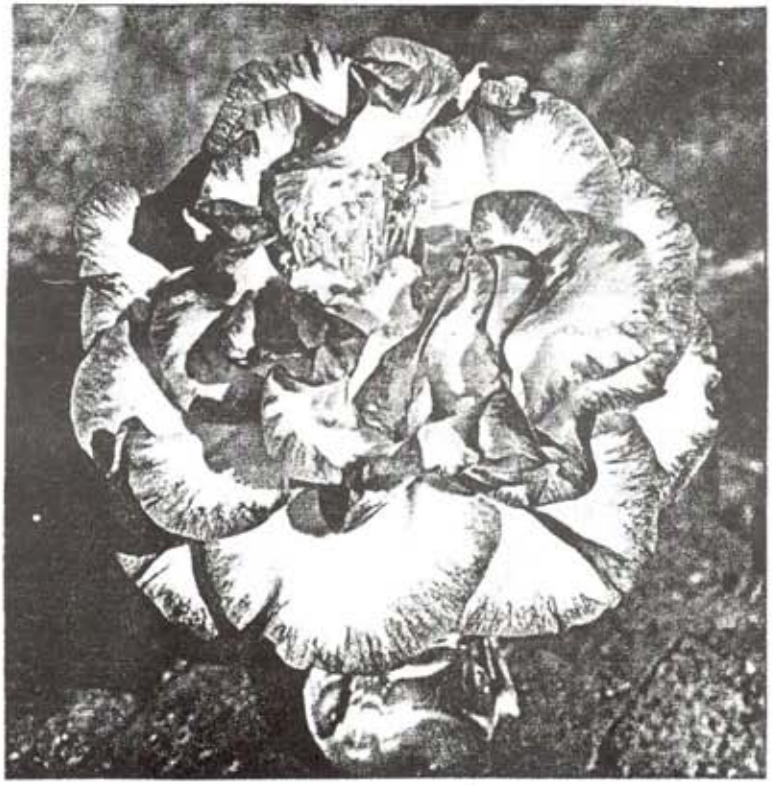
Since the plants dislike wet areas immensely, landscapers and nurserymen should avoid recommending or planting camellias in areas having a high water table and/or hardpan. Planting in such locations will usually result in weak shallow root systems, more susceptible to disease and injury during dry periods. Areas with a hardpan can be planted if a lateral tile drain is provided or if the hardpan layer is broken.

Camellias should be located in areas where cold air can move from the planting site, but the area should be protected from cold winds. Plantings under pine trees or on the north or west side of buildings are usually injured less by cold temperatures.

Dense shade may result in sparse foliage and poor flowering, while plants exposed to full sun may appear yellow-green but yield more flowers than heavily shaded plants.

Transplanting is best accomplished from November to February, a time when roots can become established before the summer heat. Late spring or summer planting is possible with container-grown specimens and other camellias as well if extra care is provided.

Plants should be spaced according to their mature size and rate of growth, usually at least five feet apart.



'Betty Sheffield Supreme'

Camellias should be set into the soil at the same depth as they were in the field or container. A two to three-inch mulch will minimize temperature fluctuation, reduce weed competition, and conserve water at the root zone.

Generally, an acid-forming complete fertilizer (6-6-6 or 8-8-8) should be added regularly to the camellia planting bed. Due to heavy leaching of nutrients from sandy soils, frequent and light applications are recommended. For example, 1 to 1½ pounds of 6-6-6 of 8-8-8 or ½ pound 12-4-8 or 16-4-8 should be applied per 100 square feet of planting area four times a year.

Applications are recommended (1) before spring growth begins, (2) after the first growth flush, (3) midsummer and (4) early winter after the danger of late growth has passed. Late summer fertilization may cause tender growth which could be injured by early cold snaps. Water the plants before and after any fertilizer applications.

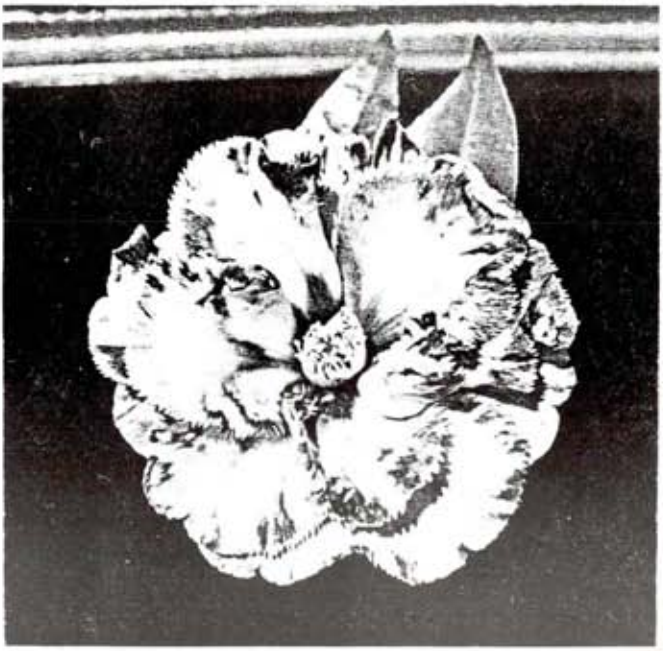
Chlorotic plants are common in soils with high pH. This occurs because many of the micronutrients (like iron, manganese and zinc) are tied up in alkaline soils. Nutrient sprays applied to the foliage, or a micro-nutrient mixture applied to the soil, may correct the problem temporarily. Long-lasting correction, however, will involve lowering the soil pH.

Irrigation may be necessary for optimum plant growth during extended dry periods. Enough water should be applied every 10 days to two weeks during dry periods to wet the soil to a depth of 14 to 18 inches. This watering schedule encourages a deeper root system than does frequent, shallow watering.

Camellias should require little pruning if they are properly positioned in the landscape. Necessary pruning should be done in late winter or very early spring. Prune by removing undesirable branches to retain a natural shape and branching habit. Shearing should be avoided because it will result in a dense layer of foliage that blocks light from the interior branches. Shearing also destroys the natural plant form.

'Adolphe Audusson Var.'

Seedage, cuttings, and grafting are common methods of propagating camellias. Seed propagation results in tremendous seedling variation with a high percentage of undesirable offspring. Seed should be collected as soon as it ripens (July to September) and placed in flats or pots.



'Ville de Nantes'

Germination can be expected in two to four months if the seed coat is scarified before sown.

Cuttings are the most popular means of propagating camellias, since it insures plants that are true to the characteristics of the parent plant. Cuttings are usually taken in May or June from hardened spring growth.

Grafting is used to propagate varieties that have a weak root system. This method also permits the combination of plants with compatible and complimenting characteristics.

Pests

Scale, spider mites, aphids, thrips and cutworms are among the most significant pests of camellias. Scale generally feed on the underside of leaves and may not be noticed until large populations have developed. The three common scale insects are tea scale, Florida red scale and camellia scale.

Mature scale in large numbers are difficult to control, but frequent inspections will prevent population build-up and allow more effective early control of the young scale with a properly labeled insecticide like dimethoate.

Spider mites are tiny pests generally found on the undersides of leaves. The tops of infested leaves soon display a rusty or reddish specking of the green surface. Mite infestations usually appear during hot, dry conditions and in areas of the landscape or nursery with poor air circulation and little exposure to rainfall. Kelthane is considered a good control for spider mites on camellias.

Aphids live in colonies and injure camellias by sucking juices from young leaves. Injured leaves curl and become distorted. A secondary problem from aphid infestations is generated by this insect's secretion of a sticky substance called honeydew. This is, unfortunately, an excellent medium for sooty mold, an unsightly

black fungus. Early detection is important, and control can be achieved with Orthene.

Cutworms live in the mulch and soil beneath camellias during the day and attack the new plant growth at night. The application of a bait such as Dylox in late afternoon will provide control. Thrips are very small, slender insects that feed on camellia flowers. Close examination is necessary to find them, and Malathion should effectively control the pests.

Diseases common to camellias in Florida and similar climatic areas include dieback, leaf and bud gall, root rot and leaf spots. Dieback is most common during the spring months, although it does occur during other periods. It is characterized by wilt and sudden death of new twigs. Older plant parts can also be infested but usually die more slowly. The leaves characteristically remain on the branches for considerable lengths of time after they die.

The best control of dieback is sanitation, for the fungus causing this problem is inside the stem and is not satisfactorily controlled by fungicides. Diseased branches should be removed about six inches below the lowest visible symptoms of disease. Pruning tools must be sterilized after each cut with an antiseptic like a 10 percent chlorox solution. Removed branches should be destroyed.

Leaf and bud galls appear as thickened and enlarged leaves or buds during the cool spring months. One or several leaves on a single shoot may be affected. Control can be accomplished in smaller plantings by simply pinching off and destroying infested leaves. Disease activity usually stops with the advent of warm weather.

Camellias are occasionally attacked by root rot, a disease which caused the entire plant or a section of the plant to gradually become weak and die. There is no control of this disease once the plant has been infected. Infested plants should be removed and destroyed. Because the disease is soil borne, soil treatments are necessary before replanting.

Leaf spots are quite common on camellias, and vary in size and shape depending upon the species of the fungi causing the problem. Spots do little damage and usually attack only leaves injured by another means. Attention should be given to improve general cultural practices when leaf spots appear.

Thanks for a job well done. Outgoing A.C.C.S. President, Richard Waltz and wife, Jeanette enjoy a Camellia meeting. Richard has been an outstanding President for the past two years. Our society extends its sincere thanks to both.
(Photo by Shepherd)

SANTEE STEW

By Donna Shepherd

On Saturday, May 13th, there was a tropical storm playing along the Atlantic Coast which gave us big, puffy, dark gray clouds. The air was heavy with moisture, and there were sudden squalls. The weather, however, didn't dampen the spirits of camellia people heading for Mizzells' lakefront home at Santee, S. C. It was hard to stay within the new speed limit as we happily anticipated greeting camellia friends. As guests arrived there was much excitement as they greeted each other with hugs and laughter. We were a happy, noisy group as sixty or more people caught up with news of summer activities. Even those who had seen each other the previous weekend at the Gulf Coast meeting in Mobile greeted each other like long lost friends. A feeling of gladness was everywhere.

Tyler and Buck welcomed their guests as they arrived and made each one feel special. They're wonderful hosts. They have a knack for it. Later we could smell the Beaufort Stew cooking, and after a few whiffs of it we suddenly realized

These ACCS Ladies are enjoying the food and fellowship at the Mizzell's home on Lake Marion. They are: LENA WATSON (seated), HELEN BUSH, BONNIE SERPAS, DONNA SHEPHERD, and NELL HERIOT.
(Photo by Shepherd.)

that talking was not the most important event of the day - eating was! The Mizzells had prepared a long wooden trough into which the Beaufort Stew was poured. The trough was appropriate as we all made pigs of ourselves. Whether we call it Beaufort Stew, Frogmore Goulash or Low Country Boil, the intermingled flavors of smoked sausage, corn-on-the-cob, and shrimp steamed together result in an indescribable taste treat. We feasted on the stew and other taste teasers. Bonnie Serpas had even made a watermelon wishing well, complete to the tiny watermelon bucket, which was filled with fruit salad. It was a "show stopper."

After eating, we lazily sat about the lawn looking at the lake, enjoying its breeze and talking. Too soon it was time to head for home - as far away for some as Fort Valley, Georgia, and Smithfield, N. C. We reluctantly headed for home, but not before Buck presented his homeward bound guests with one of his big, famous watermelons. Ah, but it was a day to remember!

A "Watermelon Peacock" made by Bonnie Serpas for the Santee Outing. (Photo by Shepherd)

GETTING READY FOR WINTER

By Dr. Ted Bilderback
North Carolina State University
North Carolina Agricultural Extension Service

As the day light hours become shorter and temperatures (or at least night temperatures) become cooler, plants begin several physiological changes which progress toward winter cold hardiness. Nurserymen often take several cultural steps which help container crops begin and develop winter hardiness. Generally these steps include reducing fertility and irrigation.

I would like to spend a couple of paragraphs to offer my opinion concerning fall fertility and irrigation practices. There are certainly many conflicting reports about fall fertility programs if you read about the subject. It would seem that everyone agrees that it is best not to send container crops into winter nutritionally deficient. If you have been monitoring soluble salt levels this season, they should begin tapering off to low salt levels approximately one month before expected frost. If you test salts using the VTEM (pour-through procedure) salt levels of 0.50-0.75 mmhos (millimhos) would be appropriate. If you have a meter that reads in mhos pour-through readings would be 50.0-75.0 mhos. If you test salts using the 2:1 method as is used by the Plant Disease and Insect Clinic or Soil Testing Lab, fall salt levels should be approximately 10-15 mhos.

These levels indicate that at least some nutrients are present. In pine bark container media, several essential elements leach throughout the season. Nitrogen, and phosphorus leach rapidly in organic media. During summer high temperatures, slow release fertilizers may release faster than expected and run out early. Also with frequent summer irrigation, magnesium and then calcium particularly in second year containers, can be washed out. Magnesium deficiencies characteristically exhibiting yellowing or mottled middle foliage in plants often begin showing up late in the season. To determine if essential elements are in balance and available, a soil test of the container medium can be very reassuring. Also, spending $3.00 for foliar analyses is a bargain and very helpful in fall to determine the nutrient status of container crops.

Less frequent irrigation coincides with lower transpiration and evaporative losses. In short, less water needs to be replaced in containers as day length, light intensity and temperatures decrease. Generally the best approach is less frequent irrigation rather than less water applied during irrigation. I would like to emphasize that when irrigating, enough water should be applied to produce some leaching from containers, every irrigation, or at least twice a week. This practice leaches excess salts and reduces the probability of soluble salt damage and is important during fall acclimation of nursery stock.

I'll close with a comment about winter protection systems. Pre-emergent herbicides should be applied at least 2 weeks, and in warm fall weather, a month before being closed up in houses.

Row cover fabrics appear to have a great deal of promise in nursery winter protection practices. Dick Bir and Stuart Warren, in a study completed

last winter, have temperature and plant response information which look very promising for protection of many nursery crops at much lower costs than winter protection structures.

Reprinted courtesy of the N. C. Nurserymen's Association Journal, "Nursery Notes."

Sadie Aycock, left, ACCS member from Smithfield, N. C., proudly awards her pastel camellia painting to Mr. and Mrs. V. T. Craddock at the annual meeting in Myrtle Beach in October. The Craddocks hail from Pikeville, N. C. Ticket sales for the drawing earned several hundred dollars for the ACCS. Sadie and the Craddocks are members of the Fayetteville Camellia Club. (Photo by Jim Darden)

MID-CAROLINA CAMELLIA SOCIETY FALL SHOW
SOUTH CAROLINA STATE FAIR

Columbia, South Carolina **October 22, 1988**

Japonicas—Outside:

Best Large to Very Large	*Rosea Superba Var.*	Donna & Bill Shepherd Charleston, S. C.
Runner up	*Tom Cat*	Lib Scott
Best Small to Medium	*Anemonaeflora Alba*	Betty Brown Hilton Head Island, S. C.
Runner up	*Funny Face*	Lib Scott
Best White Bloom	*Chow's Han Ling*	Parker Connor Edisto Island, S. C.
Gold Sweepstakes		Parker Connor Edisto Island, S. C.
Silver Sweepstakes		Betty Brown Hilton Head Island, S. C.

Japonicas—Protected:

Best Large to Very Large	*Seafoam*	G. M. Serpas Summerville, S. C.
Runner up	*Helen Bower*	Mack McKinnon Lugoff, S. C.
Best Small to Medium	*Mabel Blackwell*	Jim Pinkerton Lugoff, S. C.
Runner up	*Dawn's Early Light*	Bill Robertson Aiken, S. C.
Best White Bloom	*Lucy Stewart*	Gist Duncan, Jr. Columbia, S. C.
Gold Sweepstakes		Jim Pinkerton Lugoff, S. C.
Silver Sweepstakes		Mr. & Mrs. Ken Blanchard Wallace, N. C.

Best Hybrid Bloom	*Lila Naff*	Mack & Ann McKinnon Lugoff, S. C.
Runner up	*Dr. Clifford Parks*	Joe Austin Four Oaks, N. C.
Best Non-retic Hybrid	*Dream Boat*	Elliott Brogden Columbia, S. C.
Runner up	*Mona Jury*	Joe Austin Four Oaks, N. C.
Best Miniature	*Fircone, Var.*	Parker Connor Edisto Island, S. C.
Runner up	*Little Slam Var.*	Marvin & Ruth Jernigan Warner Robbins, Ga.
Best Seedling	*20BR619*	Betty Brown Hilton Head Island, S. C.
Best Novice Bloom	*Tic Toc*	Tom Deloach
Best Species Bloom	*Yuletide*	Elliott Brogden Columbia, S. C.

Court of Honor:

Tick Tock Speckled	Bill & Donna Shepherd	Charleston, S. C.
Spring Sonnett	Bill & Donna Shepherd	Charleston, S. C.
Charlie Bettes	Elizabeth Brown	
Debutante	Elizabeth Brown	
Nuccio's Jewel	Parker Connor	Edisto Island, S. C.
Linda Abbott	Jim Pinkerton	Lugoff, S. C.
Miss Charleston Var.	Mrs. J. C. Bickley	
Guest of Honor	Jim Pinkerton	Lugoff, S. C.
Doris Ellis	Annabelle Fetterman	Clinton, N. C.
Harriett Bisbee	Oliver Mizzell	Elloree, S. C.
Col. R. S. Hicks	Jim Pinkerton	Lugoff, S. C.
Dr. Clifford Parks	Oliver Mizzell	Elloree, S. C.
Tinsey	Albert Ewan	Charleston, S. C.

Editor's Column

By Jim Darden

We are well into our 1988-1989 Camellia season now, and finally have some time to reflect upon our society's activities since the end of last season. In early May your Board of Directors met in Columbia with that club for their spring picnic. It was a nice affair with sumptous barbecue and good fellowship. Later in May the Fayetteville Camellia Club met in Clinton, N. C. at Annabelle Fetterman's home for another spring get-together. Nearly 50 members gathered for a nice evening of fun, food, and fellowship. Boy, did we eat well in May.

Then came the long hot summer. The Camellias grew especially well here in Clinton. Many parts of the country experienced severe drought conditions, and we heard horror stories from nurserymen in Virginia, Atlanta, and other parts of the country about water shortages and restrictions. Some nurserymen and landscapers were fined severely for watering their plants. We were in the land of plenty in eastern North Carolina, thank goodness.

We were all glad to see cooler weather arrive this fall. Not only was it more comfortable, it also meant that the Camellia buds were bulging. I don't think I have ever seen them this large so early. Joe Austin had buds at Labor Day that seemed to be ready to open. I hope this is a good indicator for things to come.

The fall also brought a return to Camellia activities with our annual meeting in Myrtle Beach. While the crowd was a bit smaller than last year, numbering just under 100, spirits were high and everyone was anxious to get the season started. Dr. Luther Baxter brought us the latest on Camellia pathogens. Then Marion Edwards showed us the newest Camellia varieties. He is the best Camellia photographer I know, and does a great job. You will be reading more about Marion in an upcoming journal.

Several good ideas were given to me at the Myrtle Beach meeting for improving this journal. (I need for all of you to help with ideas, articles, photographs, and anything else you can send me.) One member suggested that we have at least one article in each addition that is basic information for the beginner. We need for this medium to be educational for our beginning Camellia enthusiasts.

Another good suggestion was that we should republish one of the oldie-goldie articles in each journal from 20-30 years ago that is applicable today. Some are humorous, some are informational, and some offer tips for growing Camellias that we might have forgotten. I will be looking through my set of old North Carolina, South Carolina, and Atlantic Coast Camellia journals, along with old A.C.S. yearbooks and journals, for good articles that are worthy of being repeated.

If you see good information in your area on Camellias or Camellia people, please send a copy to me. It can be from your extension service, local newspaper, or any other source. We always need photos, graphics, sketches, and text that our members would enjoy. Please help us to improve your journal. I'm looking forward to a good season, and hope to see you at a Camellia show. Good luck.

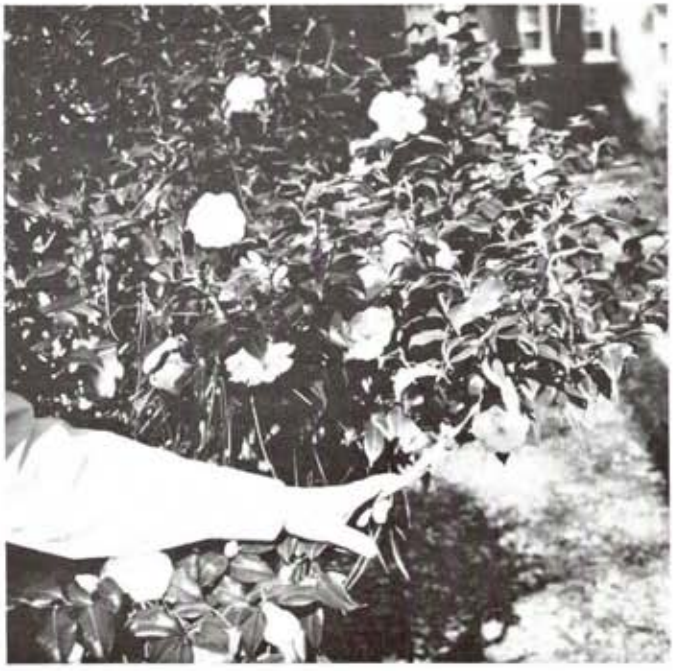
CARL ALLEN ON AIR LAYERING

By Jim Darden

Carl Allen loves his Camellias. Carl loves a wide variety of plants, but especially his Camellias. This is evident when one tours the grounds of his lovely home in a longleaf pine and live oak covered area of Wilmington, N. C. A fine collection of azaleas, camellias, rhododendrons, and many other ornamental plants is to be found here, most prominently Camellias.

Carl is an active member of A.C.S., A.C.C.S. and his local Tidewater Camellia Club. He was show chairman of the Wilmington Camellia Show in 1988. Carl has a 6' x 16' cold frame which is filled to the gills with robust Camellias and Azaleas. He has two greenhouses, one 12' x 16' and another 10' x 16', which are devoted almost entirely to Camellias. His greenhouses were teeming with blooms on the day of the Wilmington show, making me wonder why he did not enter more than he did.

I was lucky enough this day to get a lesson in air layering Camellias from Carl. He uses several methods of propagation for his Camellias, and contends that each has its advantages and disadvantages. Cuttings are the best way to propagate large numbers of plants inexpensively. This method provides a good balance between roots and shoots, since one cannot develop without the other. It does, however, require 3-5 years to produce



Carl's first step in air-layering camellias — select a strong, well branched shoot and strip away all bark, including the cambium, down to the wood, over 1" of the main stem.

Step 2 — Carl applies a rooting hormone to the de-barked area. Here he uses c-mone, a liquid form of indole butyric acid.

a mature blooming Camellia from a cutting. Grafting is a good method of propagation to use, and it reduces the time needed to produce a blooming plant to 1-3 years. But, it is rather slow and tedious, and grafting requires lots of practice and expertise to perform.

This brings us to air layering. Carl air layers Camellias each year, contending that he can produce a flowering plant in just one year. Indeed, he brought two plants to the Wilson show in February that were air layered less than one year ago. They were in one gallon nursery pots and each had produced a very large "show" bloom. I was interested in learning his technique, so Carl outlined the entire procedure for me.

First, timing is important. Carl tries to do his air layering during mid-March, prior to the development of new growth. Before this year he could remove healthy rooted plants from the mother plant by Labor Day. Now, using the new stronger rooting hormones, he can produce well rooted plants by July 4th.

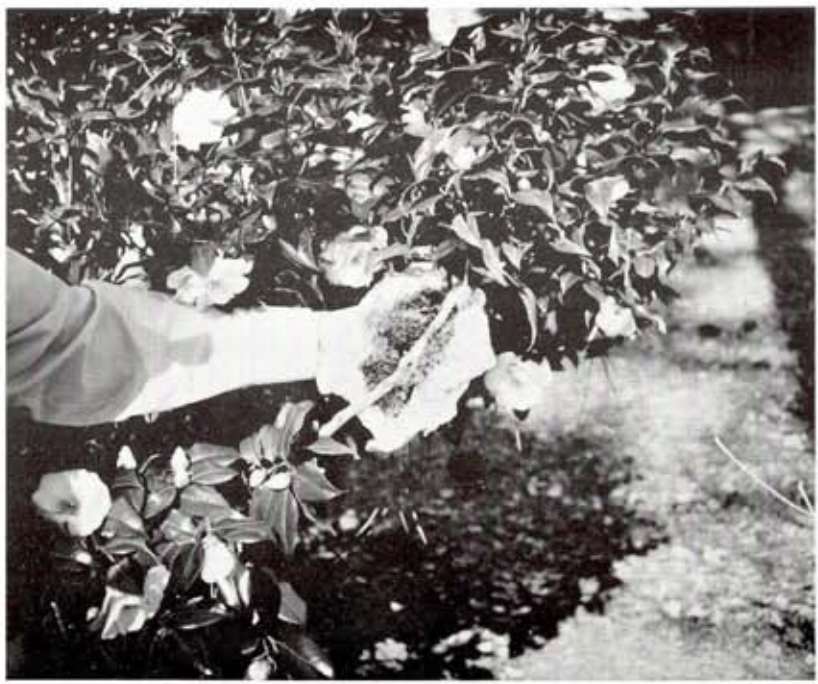
Carl finds a nice well-branched section of stem and comes down from the tip about twelve inches to the second year growth. He cleans an area on the stem about six inches long, using stem that is about as wide as your little finger, not to exceed ½" caliper. With a sharp knife he cuts a ring all the way around the stem, completely girdling the bark and vascular tissue by cutting down into the wood. He does the same thing again about one inch farther down. Then the bark and cambium between the rings is completely removed.

The procedure looks rather radical at this point, since there is no way that this girdled branch can live without lots of help. Carl scrapes over all of the exposed wood to be certain that he has not left any of the vascular tissue intact that would nourish the leaves and buds on the stem tips.

Next Carl takes a small paint brush and liberally applies a liquid rooting hormone which contains 10,000 ppm of IBA (Indole Butyric Acid) to the wound. This is sold under the name C-Mone, and is used at full strength. This is allowed to dry a few minutes so that the alcohol in the mix can evaporate. Carl next wraps the entire wound with a large handfull of sheet sphagnum moss that has been well moistened with water. He says that any of several organic materials can be used for the wrapping, including regular peat moss or even pine needles. Years of experience have proven the sheet sphagnum to be the best.

While still holding the moist peat on the wound with one hand, Carl takes a square piece of aluminum foil with the other hand and wraps it carefully around the peat, being sure to seal all of the material inside the covering. He twists this tightly in place above and below the wound, leaving a bulge of peat over the area where the bark has been removed. No string or other material is used to tie off the ends.

Soon the Camellia branch will begin to send roots into the moist peat, and at the same time the shoots will begin



Step 3 — After stripping away the bark and applying the rooting hormone, Carl wraps the wound with moist peat moss and aluminum foil.

The task is complete. One branch on this camellia now has no access to water and nutrients from its own root system, and must make a new rootball in the moist peat moss.

to grow. By the time July rolls around and it is time to remove the new plant, it will have grown from 12" to a total length of about 20". If more than 12" of stem was used to begin with you will run the risk of having the upper part of the new plant out of balance with the new root system. Carl gently squeezes the bulging aluminum foil to see if he can detect roots in the peat. He never removes the new plant from the mother plant unless the new roots are copious enough to have the feel of a tennis ball. Nor does he ever add water to the peat during the rooting process. Once the air layer is in place nothing else needs to be done before the plant is cut off. Carl warns that it is best not to even peek.

By mid-summer the aluminum foil will be filled with a handful of strong white viable roots, and it is time to remove the new Camellia. Clip the stem below the rootball and plant the Camellia into a nursery container in good soil. While it will look healthy, the procedure is not quite over. There is more wood above the soil than the new rootball can support, so Carl recommends that you place the plant in a cool, shaded, humid spot for several months and allow the root system to catch up to the upper plant. Even better, place it under a mist system and give it 5 seconds of mist every ten minutes for a few weeks, just as you would if you were rooting plants. This reduces transpiration and helps the plant remain turgid until the new root system becomes strong. By misting the plant you can place it in more sunlight, thus allowing it to grow into balance somewhat faster.

By removing the new plant in early July you will allow the mother plant to branch out and grow enough to conceal the remaining stump, and the air layered plant can grow enough to balance its roots with its upper trunk. Carl uses the same procedure to air

layer other plants, including magnolias and rhododendrons. The offspring seem to grow very well. He has several fifteen year old air-layered plants in his yard that are now larger than the original mother plant.

Carl recommends that you should not use air layers for grafting rootstock for at least 3-5 years. The root system simply takes that long to really catch up with the upper plant. If the root system on your stock plant is small there is least likelihood of a grafted scion "taking" and growing well.

I was with Carl only about a half hour on this early spring Saturday in March. But as I left I began to realize how much information he had given me in this very short span of time. I sensed that Carl Allen really knows his Camellias, and that there is much more that we can learn from him. There are lots of articles left to be written, so Carl, we might be back to see you before long.

Unbelievable Results — Carl proudly displays these fine one-gallon camellias at the Wilson Camellia Show in March, 1988. They are well budded, heavily branched, and already have open blooms. Amazingly, Carl air-layered them barely twelve months before.

WEST CAROLINA CAMELLIA SOCIETY

Greenwood, S. C. **November 5-6, 1988**

Best Over-all Bloom (Josh Sprott Award)	*Francie L Var.*	David Blackwell
Best Bloom - Open	*Elegans Champaign*	Parker Connor, Jr.
Runner up	*Tomorrow Var.*	Parker Connor, Jr.
Sweepstakes - Open		Parker Connor, Jr.
Runner up		Elizabeth L. Brown
Best Bloom - Protected	*Show Time*	Jim Pinkerton
Runner up	*Betty Sheffield Supreme*	Ann and Mack McKinnon
Sweepstakes - Protected		Ann and Mack McKinnon
Runner up		Jack Teague
Best Seedling		Elizabeth L. Brown
Best Retic	*Harold L. Paige*	Ann and Mack McKinnon
Best Non-Retic	*Elsie Jury*	Mr. and Mrs. Oliver
Best Other Species	*Mine-No-Yuki*	Elliott P. Brogden

Court of Honor - Open

Betty Sheffield Supreme	Lib Scott
Mathotiana Sup. Var.	Parker Connor, Jr.
Alta Gavin	Parker Connor, Jr.
Sea Foam	Parker Connor, Jr.

Court of Honor - Protected

Carter's Sunburst	Jack Teague
Dawn's Early Light	William C. Robinson
Rena Swick Var.	William C. Robinson
Helen Bower	Ann and Mack McKinnon

Best Miniature	*Little Red Riding Hood*	Parker Connor, Jr.
Best 3 - Same Variety	*Debutante*	Elizabeth L. Brown
Best 5 - different Varieties	*Carter's Sunburst Var.* *Carter's Sunburst Pink* *Tomorrow's Lisa* *Grand Prix* *Helen Bower*	Ann and Mack McKinnon
Best over-all Novice Bloom	*Dr. Tinsley*	Bill Carson
Runner up	*Pearl Maxwell*	Bill Carson

WAX SCALE (CEROPLASTES CERIFERUS) AND ITS CONTROL

By Dr. Jim Baker
Extension Entomologist
North Carolina State University

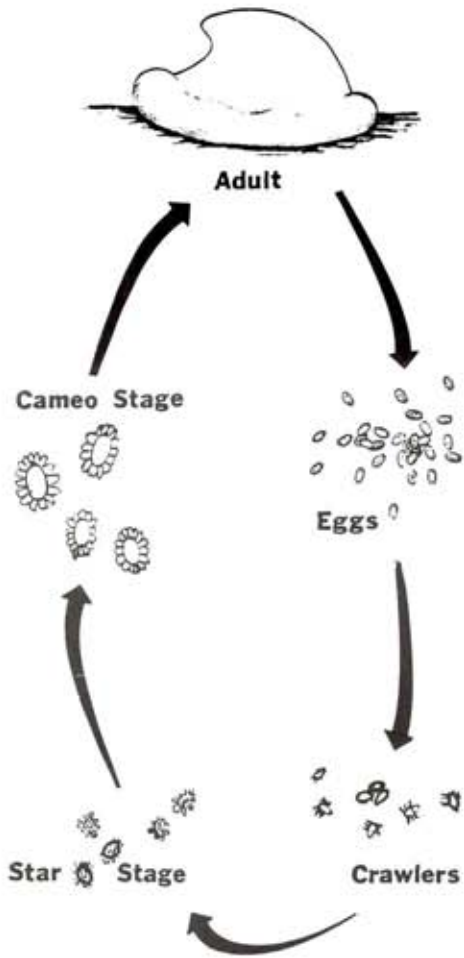
DESCRIPTION

Adult—The brownish-purple female has tiny legs and a thick covering of sticky wax. There are no males.

Egg—Ovoid and pale purple, the egg resembles purple pollen when shaken onto a white surface.

Crawler—Each crawler is flattened and tiny. In a mass, newly hatched crawlers appear rusty red.

Star Stage—After molting, each scale secretes wax in tufts, forming a star.



BIOLOGY

Distribution—The Japenese wax scale is found from Florida to Virginia and Maryland.

Host Plants—Japanese wax scales have been reported on azalea, blueberry, camellia, Chinese elm, citrus, fig, eugenia, gumbo-limbo, Chinese holly, yaupon, jasmine, mulberry, pear, persimmon, plum, quince, sapodilla, turkscap, and other plants.

Damage—A severe infestation of Japanese wax scale detracts from the host plant's appearance because of the many white scales and the copious honeydew that they excrete. A black fungus called sooty mold grows in the honeydew, further disfiguring the host plant.

Life History—Japanese wax scales begin to lay eggs in March, each scale laying from 1,000 to 2,000 eggs. By late May, tiny crawlers hatch and move about, searching for a place to feed. Feeding occurs along the twigs and leaf midribs of numerous woody plants. Once the crawlers insert their sucking mouthparts into the host plant, they are immovable. They then secrete the waxy covering from which they derive their name. The young scales mature throughout the summer, producing more waxy covering and becoming increasingly tolerant to pesticides. They overwinter as adults.

CONTROL

Handpicking in winter (if practical) is an effective control measure. As scales may lay their eggs even though removed from the host plants, they should be destroyed after removal. Because the crawlers emerge from under their mother's protective wax coating for two or three weeks and because our recommended pesticides do not persist in the environment, repeat applications of whichever pesticide is used must be made.

Unless pesticides are applied within a month after the crawlers emerge, control will be incomplete at best. Apply one of the following pesticides two or three times at ten day intervals starting about June 1 in the central Piedmont.

Wax Scale on a Camellia—insects are protected by a thick waxy cover as they feed on a camellia stem during the winter.

Cygon, De-Fend (dimethoate) 26.7% emulsifiable concentrate - 4 teaspoons per gallon of water. May injure some varieties of azelea and Japanese and Chinese holly. Do not use on plants not listed on label.

ethion + oil emulsifiable concentrate - 4 tablespoons per gallon of water.

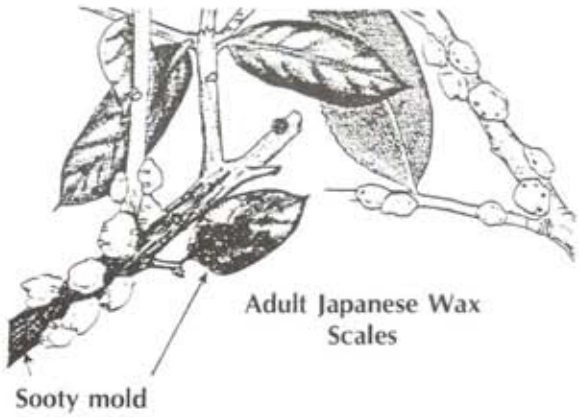
Malathion 50 to 57% emulsifiable concentrate - 1 tablespoon per gallon of water.

Spectracide (diazinon) 25% emulsifiable concentrate - 2 teaspoons per gallon of water.

summer oil + malathion - 5 tablespoons + 2 teaspoons per gallon of water.

Zectran 22.7% emulsifiable concentrate - 3 teaspoons per gallon of water.

THE USE OF TRADE NAMES IN THIS NOTE DOES NOT CONSTITUTE ENDORSEMENT OF ONE PRODUCT TO THE EXCLUSION OF OTHERS.



Undigested sugar, having been sucked from the plant and passed through the scale's body, is excreted on the stems and leaves. This energy-rich material, called Honeydew, is an excellent medium for the growth and support of various fungi. The fungus known as "sooty mold" is growing on the plant above. The plant has lost vigor due to the loss of sugar, and looks unsightly because of the buildup of black mold.

In the following chart, those pesticides marked with an 'R' or 'N' are labeled for use on hollies and will control the pest indicated. Pesticides marked with an 'N' have at least one formulation which is not restricted and therefore is suitable for home use. Pesticides marked with an 'R' are restricted use pesticides and must be used only by qualified applicators. Be sure to follow the precautions for safe use found on the label of whatever pesticide is used.

PESTICIDES	caterpillars	flatid planthopper	Indian wax scale	leaf miners	mealybugs	scales, armored	southern red mites	spittlebugs	whiteflies
acephate (Orthene)						N			
azinphosmethyl (Guthion)							R		
Bacillus thuringiensis (various trade names)	N								
bendiocarb (Dycarb, Ficam, Turcam)	R								
carbaryl (Sevin)	N		N		N	N			
carbophenothion (Trithion)						R			
chlorpyrifos (Dursban)					R		R	R	R
cyhexatin (Plictran)							R		
demeton (Systox)					R		R		R
diazinon (Spectracide)						N			N
dicofol (Kelthane)							N		
dimethoate (Cygon, DeFend, Rebelate)							N		
disulfoton (Di-Syston)							R		R
endosulfan (Thiodan)									
ethion							R		
fenthion (Baytex)									
fenbutatin-oxide (Vendex)							R		
fenvalerate (Pydrin)									
fluvalinate (Mavrik)	R				R	R	R		R
lindane				R				R	
malathion					N	N			N
methomyl (Lannate, Nudrin)									
methoxychlor (Marlate)									
monocrotophos (Azodrin)									
naled (Dibrom)	R			R					
oxamyl (Vydate, Oxamyl 10G)				R	R	R	R		R
oxydemetonmethyl (Metasystox-R)				R			R		
oxythioquinox (Morestan)							R		
phosphamidon									
soap (Insecticidal)									
summer oil						N	N		
tetradifon (Tedion)							R		
trichlorfon (Dylox, Proxol)									

THE USE OF TRADE NAMES IN THIS NOTE DOES NOT CONSTITUTE ENDORSEMENT OF SOME PRODUCTS TO THE EXCLUSION OF OTHER PROPERLY LABELED PRODUCTS.

HOLLY PEST CONTROL CALENDER
(Including Wax Scales)

"When to Treat for Insects and Mites"

PESTS	*	**	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
caterpillars	III	1							S					
flatid planthoppers	III	1					S							
Indian wax scales	II	1						S						
leaf miners	II	1					S							
mealybugs	II	2 or 3						S						
scales, armored	II	2 or 3					S							
southern red mite	I	2					S						S	
spittlebugs	I	2								S				
whiteflies	III	1				S				S				

*Degree of importance of pest:
I = Important pest, high probability of occurrence
II = Treat as needed
III = Occasional pest, treat when detected

**Number of applications needed for effective control. It is usually best to wait 10 to 14 days between applications in cool weather and 7 to 10 days between applications in warm weather.
S = spray application

Atlantic Coast Camellia Clubs, Societies, and Shows

Aiken Camellia Club—President, W. Lee Poe, 807 Rollingwood Road; Secretary, Janet S. Burns, 1006 Alfred St., Aiken S. C. 29801, &803) 648-0652. Meetings: Second Thursday, October through March, 7:30 p. m. at St. Paul's Lutheran Church, 353 Laurens St., N. W., Aiken, S. C. 29801, Show: January 21-22, 1989, USC - Aiken Students Activities Center.

Charlotte Camellia Society—President, Gloria B. McClintock; Secretary, J. Latimer McClintock, Jr., 1325 E. Barden Road, Charlotte, N. C. 28226, (704) 366-0207. Meetings: Last Monday each month except June, July and August, Amity Gardens Cafeteria, 6:30 p. m., Independence Blvd., Charlotte, N. C. Show: February 4-5, 1989, South Park Shopping Center, Fairview and Sharon Roads, Charlotte, N. C. Show Chairpersons: Walter D. Stone, III & Susan Stone, 5117 Amity Place, Charlotte, N. C. 28212, (704) 535-4115.

Chattanooga Camellia Club—Show: February 25-26, 1989, Chattanooga, Tennessee.

Coastal Carolina Camellia Society—President, Charles A. Bianchi; Secretary, Donna W. Shepherd, 4724 Park Place East, North Charleston, S. C. 29406, (803) 744-4841. Meetings: Third Tuesday, 7:00 p. m., August through February, except September and December. Meeting sites will be announced by Newsletter. Shows: November 19-20, 1988, First Federal of Charleston, 34 Broad Street, Charleston, S. C. Show Chairman: Charles H. Heins, 1854 Hutton Court, Charleston, S. C. 29407, (803) 766-8279. Second Show: January 28, 1989, Citadel Mall, Sam Rittenberg Blvd. (Hwy. 7), Charleston, S. C. Show Chairman: Rupert E. Drews, 775 Sparrow Street, Charleston, S. C. 29412, (803) 795-2497.

Fayetteville Camellia Club—President, Jim Darden; Secretary, Nelson Condit, Route 1, Box 530, Aberdeen, N. C. 28315, (919) 944-1991. Meetings: Third Monday, September through May, Western Sizzlin Steak House, Raeford Road, Fayetteville, N. C., 6:00 p. m. Show: March 4-5, 1989, Cross Creek Mall, Fayetteville, N. C. Chairman; Jim Darden, Route 6, Box 504, Clinton, N. C. 28328, (919) 592-1424.

Mid-Carolina Camellia Club—President: Col. Dave Heriot, 7172 Caladonia Lane, Columbia, S. C. 29209, (803) 776-5973; Secretary, Mrs. Dwight S. Hollis, 336 Springwood Road, Columbia, S. C. 29206, (803) 787-1719. Meetings: Third Tuesday, September through April at Quincy's Steak House at the junction of Rosewood Drive Extension and Garner's Ferry Road, Columbia. Fall Show: October 29, 1988 in the Ellisor Building, State Fairgrounds. Chairman: Jack Teague, 7217 Teague Road, Columbia, S. C. 29209, (803) 776-0688. Spring Show: February 11-12 at Columbia Mall.

Middle Tennessee Camellia Society—President, Dr. Elsie Quarterman, 1313 Belmont Park Court, Nashville, Tennessee 37215; Treasurer, Mrs. A. B. Cooper, 4708 Granny White Pike, Nashville, Tennessee 37220, (615) 373-0842. Meetings: Second Tuesday, September through May (except December) at Tennessee Botanical Gardens at Cheekwood. 7:30 p. m. Show: March 4-5, 1989 at Cheekwood. Chairman: Robert Hershey, 862 Bresslyn Road, Nashville, Tennessee 37205, (615) 352-8262.

North Georgia Camellia Society—President, John T. Newsome; Secretary, Pam Slayback, 577 Greenwood Avenue, N. E. Atlanta, Georgia 30306, (404) 892-0695. Meetings: Second Friday, September through March, Atlanta Botanical Gardens, Piedmont Road at the Prado, Atlanta, Georgia, 7:00 p. m. Show: Atlanta Camellia Show, 3rd weekend in February, February 18-19, 1989, Atlanta Botanical Gardens, (404) 876-5858. Show Chairman: John T. Newsome, 2405 Howell Mill Road, Atlanta Georgia 30318, (404) 355-4478.

Camellia Society of North Florida—President, Mrs. Betty Taylor; Secretary, Mrs. Patricia Oglesby, 645 Winfred Drive, Orange Park, Florida, 32073, (904) 264-4388. Meetings: Fourth Sunday, September through March, except December, at Conference Room, Orange Park Library, Plainfield Avenue, 2:30 p.m. Show: December 3-4, 1988, Market Square Mall, 3637 Phillips Highway, Jacksonville, Florida. Show Chairman: Thomas W. Afams, 237 Adams Lane, Orange Park, Florida 32073, (904) 269-0854.

Piedmont Camellia Club—President, Johnny Lewis, P. O. Box 97, Trinity, N. C. 27370, (919) 431-3059; Secretary, Sylvia Watson, 3505 Tanglewood Drive, Greensboro, N. C. 27400, (919) 294-2467; Treasurer, Lester M. Allen, 917 Forest Hill Drive, Greensboro, N. C. 27400, (919) 299-2496; Show Chairman, Richard E. Michael, 707 Nance Drive, Thomasville, N. C. 27360, (919) 472-8733. Meetings: Second Monday, October to May, at St. Andrews Episcopal Church, 2105 West Market Street, Greensboro, N. C. 27400, 7:30 p. m. Show: March 11-12, 1989, Forum VI in Friendly Shopping Center, Greensboro, N. C.

Pioneer Camellia Society—President, Mr. Burnett Pettit, 714 Walker Avenue, Baltimore, Md. 21212, (301) 377-8119; Secretary, Zenobia Kendig, 1014 Chestnut Ridge Drive, Lutherville, Md. 21093. Meetings: First Sundays, September through May excluding January at the Cockeysville Library, Cockeysville, Md. Show date and Chairman to be announced.

Camellia Society of the Potomac Valley—President, William L. Miller, 1111 Archer Court, Alexandria, Virginia, 1-703-354-7184; Recording Secretary, Elizabeth B. Sette, 6017 Madawaska Road, Bethesda, Md. 20816, 1-301-229-1307. Meetings: Second Sunday of October, November, December, February, March, and May, all at 2:30 p. m. except December (2:00 p. m.) at the U. S. National Arboretum, 3501 New York Avenue, N. E., Washington, D. C. 20002. Spring Show: April 8-9, 1989, U. S. National Arboretum. Show Chairman: Arthur A. Maryott, 4404 Maple Avenue, Bethesda, Md. 20814, 1-301-654-5727. (We have informal Mini-Shows in any month that members have blooms to display.)

Tidewater Camellia Club-Show: February 25-26, 1989, Wilmington, N. C.

Valdosta Camellia Society—Show: November 19-20, 1988, Valdosta, Georgia.

Virginia Camellia Society—President, Douglas M. Simon; Secretary, Sally G. Simon, 508 Fairfax Avenue, Norfolk, Virginia 23507, (804) 625-0374. Meetings: Second Tuesday, September through May, except November, January, and February, 8:00 p. m. (except December, Potluck at 7:00 p. m. and May Picnic at 6:30 p. m.) Shows: November 12, 1988, Tower Mall, Portsmouth, Virginia. Show Chairman: Mercer Christian, 318 Orange Plank Road, Hampton, Virginia 23669, (804) 851-3553. Second Show: April 1-2, 1989, Norfolk Botanical Gardens, Norfolk, Virginia 23518. Show Chairman: Ann Schwarz, 1312 Taylor Point Road, Virginia Beach, Virginia 23454, (804) 481-6124.

West Carolina Camellia Society—Show: Greenwood, S. C.

Wilson Camellia Show—Show: February 18-19, 1989, Parkwood Mall, Wilson, N. C., Chairman: Joe Austin, P. O. Box 297, Four Oaks, N. C. 27524, (919) 963-2735.

AN INVITATION TO JOIN

We hope that you will join the Atlantic Coast Camellia Society. Let's enjoy Camellias together.

The Atlantic Coast Camellia Society was organized September 13, 1980 at Myrtle Beach, South Carolina. The purpose of our organization is to extend the appreciation of Camellias and to promote the science of Camellia culture. Through our Camellia shows and programs, and by exchanging knowledge and ideas with the Camellia specialists within our membership, we feel that everyone in the ACCS benefits from being a member of this organization. Whether you are a beginning Camellia fancier or a veteran Camellia competitor, the ACCS is dedicated to providing information, shows, and social events that you will find helpful, entertaining, and enjoyable.

Annual dues for membership in the ACCS are $10.00 for singles or couples. The membership year runs from September to September. A membership entitles you to three issues of Atlantic Coast Camellias, the journal of the Atlantic Coast Camellia Society. These are issued January 1 (spring), May 1 (summer), and September 1 (fall). In addition, your membership provides an invitation to our annual meeting in October in Myrtle Beach, S. C. This event has been especially successful in recent years, with over 100 participants in 1986, and with such keynote speakers as Julius Nuccio and Sergio Bracchi.

A variety of Camellia topics are addressed in articles published in Atlantic Coast Camellias. In addition to regular features concerning Camellia culture in the landscape and in the greenhouse, articles cover such topics as Camellia planting, grafting, rooting, judging, pruning, gibbing, disease control, insect control, new and old varieties, show preparations and results, liming, fertilization, spraying, mulching, disbudding, and nursery production. Numerous photographs and illustrations are provided.

We invite you to join, and welcome you as a member. Please make your check payable to the Atlantic Coast Camellia Society. Fill out the convenient application blank below, and mail it to:

Atlantic Coast Camellia Society
1325 East Barden Road
Charlotte, N. C. 28226

NAME _____

STREET ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE ( ) _____

☐ *Check if you want a membership card.*

1988-1989 ATLANTIC COAST CAMELLIA SHOW SCHEDULE

October 22	Mid-Carolina Camellia Society, Columbia, S. C.
November 5-6	West Carolina Camellia Show, Greenwood, S. C.
November 12	Middle Georgia Camellia Society, Massee Lane, Ga.
November 12	Virginia Camellia Society, Portsmouth, Va.
November 16-17	Waycross Federated Garden Club Show, Waycross, Ga.
November 19-20	Coastal Carolina Camellia Society, Charleston, S. C.
November 19-20	Valdosta Camellia Show, Valdosta, Ga.
December 3-4	Camellia Society of North Florida, Jacksonville, Fla.
December 3-4	Island of Beaches Camellia Society, Jacksonville Beach, Fla.
December 10-11	Men's Camellia Club of Pensacola, Pensacola, Fla.
January 21-22	Aiken Camellia Club, Aiken, S. C.
January 28-29	Coastal Carolina Camellia Society, Charleston, S. C.
January 28-29	Lakeland Camellia Show, Lakeland, Fla.
February 4-5	Charlotte Camellia Society, Charlotte, N. C.
February 11-12	Mid-Carolina Camellia Society, Columbia, S. C.
February 18-19	Wilson Camellia Show, Wilson, N. C.
February 18-19	North Georgia Camellia Society, Atlanta, Ga.
February 25-26	Tidewater Camellia Club, Wilmington, N. C.
February 25-26	Chattanooga Camellia Show, Chattanooga, TN.
March 4-5	Fayetteville Camellia Club, Fayetteville, N. C.
March 4-5	Middle Tennessee Camellia Society, Nashville, TN.
March 11-12	Piedmont Camellia Show, Greensboro, N. C.
Incomplete	Pioneer Camellia Show, Baltimore, MD.
April 1-2	Virginia Camellia Society, Norfolk, Va.
April 8-9	Camellia Society of the Potomac, Washington, D. C.

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Jim Darden, Editor
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