VOLUME 20 NUMBER 2 June 1998

THE Azalean

Journal of the Azalea Society of America

What Is an Azalea? *Page 24*
The Raising of a Rainbird *Page 30*
'Fashion'—an Azalea for All Seasons *Page 33*

Post Office Box 34536
West Bethesda, Maryland
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President's Column

James O. Thornton
Conyers, GA

DO YOU KNOW WHO WE ARE?

When was the last time you sat down and looked through the ASA roster? Well, we're a lot more than the nursery rhyme, "rich men, poor men, etc." If you read the listing beginning below and continued on page 34 you'll see what I mean! Anyway, while negotiating with a possible corporate sponsor, I was asked to provide a profile of our membership. Not just a number of how strong we are but, to be a little more specific, what kind of members we have. So what started out to be a task turned into a treasure hunt. I won't ask you to read the roster and make your own list, I did it for you; all I ask is that you review it, and then I'll ask you a favor.

You'll see that we're more than the nursery rhyme; besides our individual members from all walks of life, we're colleges, universities, arboretums, public gardens and clubs. We're large corporations to small backyard growers who retail a few azaleas on the side and probably end up giving away more plants than they sell! We reach out over the world, Poland, Norway, England, Japan, and Australia. Now for the favor. I ask all on the list to help sponsor the ASA. You joined because you are interested in azaleas and you like our journal, and you agree with the principles of the ASA. Like a lot of horticultural societies nowadays, we need your help! Will you please display our application forms? Will you please display our journal? I'm sure Bill Miller and Bob Hobbs will make you a deal you can't refuse!

In addition, I ask all chapters and all at-large members to reach out to these and other groups to join and to do likewise. Folks, we can do a lot for the ASA with very little effort. We just need to do it! Won't you help? Think of the contacts that you could come up with right now! Make up your own list! You'd be surprised who could be on our next list of "who are we"! Let's do it!

The following list was compiled from the May 1997 roster, and may not reflect the situation in June 1998.

ASA membership profile—other than individual memberships:

SOCIETIES, UNIVERSITIES, LIBRARIES, GARDENS
(no specific order—may not be a complete listing)

Ogrod Botaniczny Pan (Poland)
River Oaks Garden Club (TX)

(continued on page 34)

On the Cover: R. periclymenoides *(Michaux) Shinners*
Photographer: Robert W. Hobbs

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 Subgenera *Tsutsusi* and *Pentanthera* of the genus *Rhododendron* in the Heath family (*Ericaceae*).

Regular membership is open to all interested parties for an annual contribution of $25.00; life membership for an individual is $500.00. Members receive **THE AZALEAN** and are eligible for participation in all activities of the Society including those of the chapter with which the member affiliates. For information and a membership application, write to the Membership Committee, Azalea Society of America, P. O. Box 34536, West Bethesda, MD 20827-0536.

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WHAT IS AN AZALEA?

Donald H. Voss
Vienna, Virginia

At the 1997 Azalea Society of America convention, the editor of **THE AZALEAN** suggested that an answer to the question "What is an azalea?" would interest the membership. Firstly, the reader will not be surprised to see that azaleas are members of the plant kingdom (Plantae). They are seed plants in the division for flowering plants, the seeds of which are usually in closed carpels (Angiospermae, or Magnoliophyta in newer terminology). When azalea seeds germinate, they produce two cotyledons ("seed leaves"), placing them in the familiar "dicot" class (Dicotyledonae, or Magnoliopsida). To approach the genus that includes azaleas (*Rhododendron*), we pass through the subclass Dilleniidae, the order Ericales, and the Heath Family (Ericaceae). [While reading this article the reader may wish to refer to the article on botanical terms by Dr. Alice Le Duc that was published in the March 1998 issue of **THE AZALEAN**, ed.]

But what is an azalea? It can be a shrub or small tree. It may be evergreen or deciduous, and the inflorescences may be single- or multi-flowered. Typically, the evergreen azaleas are much branched shrubs, as broad as high, and clothed with medium- to dark-green, somewhat glossy, entire (not serrate or lobed) leaves. In winter, the foliage of some varieties takes on a bronzy or deep purplish coloration. While form and foliage are attractive year around, popular appreciation focuses on the often spectacular floral display in the spring. In the cultivated azaleas, flower form ranges from single to fully double, and color patterns may be solid, flecked, striped, sectored, or picotee. Colors include white, yellowish pinks, reds, pinks, purples, and purplish pinks. The deciduous azaleas are generally taller, upright plants with less branching than in the evergreen species. And, of course, in winter they present only the pattern of their stems and branches. The leaves are often much larger than those of the evergreen species, and they are usually not glossy. The flowers of most species have relatively long, narrow tubes. Colors include white and a variety of tones, from pale to strong, in the yellows, oranges, yellowish pinks, reds, pinks, purples, and purplish pinks.

That said, we must recognize the diverse morphological characteristics encountered in the various species of azalea. The flowers may be rotate-campanulate, campanulate, funnel-campanulate, funnel-shaped, or tubular-campanulate, and the number of stamens is usually five to ten. In the wild, the heights of familiar species of the evergreen azaleas range from prostrate to 3 m. (10 ft.) in height; their leaf-blade lengths, from 0.3 cm. (1/8 in.) to 8 cm.(3-1/8 in.); and corolla length (receptacle to petal tip), from 0.6 cm. (1/4 in.) to 6 cm. (2-3/8 in.). Flower buds commonly produce one to four flowers, depending on the species.

In the deciduous azaleas, heights range from about 1 m. (3-1/4ft.) to 10 m. (33 ft.); and leaf-blade lengths, from 3.4 cm. (1-3/8 in.) to 12 cm. (4-3/4 in.). A flower bud may produce as few as three or up to 24 flowers, depending on the species. There are, of course, many other differences among the species in both the evergreen and deciduous groups. *Rhododendron prinophyllum*, for example, has a delightful clove scent. In short, there is no simple answer to the original question in terms of descriptive characters. But the pleasure that azaleas give as individual plants or integrated into a landscape is clear to those who know them.

The species and cultivars (cultivated varieties) of azalea, though widely adaptable, do exhibit certain differences in their cultural requirements. Cold hardiness, heat tolerance, the composition and pH of soil or other growing medium must be considered. Galle (1987) states that azaleas do best when the pH of the medium is between 4.5 and 6.0 (acidic) [See the Cultural Note on pH which appears on page 34 in this issue, ed.]. As with other groups of plants, a wide range of growth rates is encountered, partly reflecting the genetic makeup of the plants, and partly depending on climate, soils, availability of water, etc.

How Many Stamens?

In discussing "What is a 'single' flower?" with the author, William C. Miller III raised an interesting issue. If the "normal" azalea flower is said to have five each of sepals, corolla lobes, and stamens, is a flower departing from this model by having additional stamens (e.g., seven) therefore not single? With respect to the evergreen azaleas in *Rhododendron* subgenus *Tsutsusi*, the answer is "No."

In Section *Tsutsusi* of the subgenus, two-thirds of the 65 species (41) have a normal complement of five stamens; 14 usually have 10 stamens. For the remaining species, the normal count varies in ranges such as 4-5, 4-6, 6-10, 7-10, 8-9, 9-10, etc. And these are the species! Mix the genes in a stew-pot of inter-specific hybridity and one should not be surprised by stamen counts other than five. To illustrate the variability,the usual stamen count for several species familiar in horticulture is tabulated below:

indicum	5
nakaharae	10
kaempferi	5(-6)
oldhamii	(8-)10
kiusianum	5
simsii	(8-)10
stenopetalum	5(-7)
yedoense	10
ripense	10

Note: The Rhododendron Handbook 1998 accepts *R. stenopetalum* (Hogg) Mabb. as the name of the species more commonly known as *R. macrosepalum* Maxim. It now treats 'Mucronatum' as the cultivar *R. Ripense* 'Mucronatum'. The bottom line: in distinguishing flowers as "single" or "double," concentrate on the condition of the stamens (normal, with functional anthers; partly petaloid; or fully petaloid), and—especially in hybrids—accept as normal some variability in number of stamens. Similarly, while the normal complement of corolla lobes is five, a plant that produces a corolla with six or even seven lobes may fall in the range of variability encountered in "single" azalea flowers.

Subfamilies of the Ericaceae (Heath Family), with illustrative examples of well-known horticultural plants

Subfamily Rhododendroideae
- *Rhododendron* (over 800 species, including about 120 "azaleas")
- *Epigaea repens* (mayflower, trailing arbutus)
- *Kalmia latifolia* (mountain laurel)
- *Loiseleuria procumbens* (alpine azalea)
- *Phyllodoce breweri* (mountain heather)

Subfamily Ericoideae
- *Calluna vulgaris* (Scotch heather)
- *Erica cinerea* (Scotch heath)

Subfamily Vaccinioideae
- *Andromeda polifolia* (common bog rosemary)
- *Arbutus unedo* (strawberry tree)
- *Arctostaphylos uva-ursi* (bearberry, kinnikinik)
- *Enkianthus campanulatus*
- *Gaultheria procumbens* (wintergreen, checkerbox)
- *Gaylussacia baccata* (black huckleberry)
- *Leucothoe fontanesiana* (dog's hobble)
- *Lyonia lucida* (fetterbush)
- *Oxydendrum arboreum* (sorrel tree)
- *Pieris japonica* (Japanese andromeda)
- *Vaccinium corymbosum* (high-bush blueberry)

A Subset of Genus *Rhododendron*

The following notes indicate how azaleas came to be included in the genus *Rhododendron*, show their relation to other parts of the genus, and delineate certain characteristics of the major groups of azalea species. *Azalea* appeared among the genera embraced by Linnaeus (1753) in the *Species Plantarum* (the starting point for modern botanical nomenclature), and—even after 1834, when English botanist George Don incorporated azaleas in *Rhododendron*—the genus *Azalea* was maintained by a few botanists into the mid-1800s for evergreen azaleas and into the early 1900s for deciduous azaleas. *Rhododendron* is one of 103 genera in the Ericaceae (Heath Family), the general character of which is indicated in the sidebar to the left.

A brief history of *Rhododendron* classification was published by the Philipsons in 1974. The road from *Species Plantarum* to the modern classification of the genus (which includes all of the azaleas) is long and exceedingly tortuous. We will not travel that road but note here several factors to consider when using the modern classification:

> The Linnean system was based primarily on a numerical, "sexual" classification reflecting the number, length, and union (if any) of the stamens and the number of styles in each flower. These criteria made it easy to sort plants into the various "boxes" of the classification system. But when this system is used and the contents of a particular box are examined, the plants are often disparate with respect to characters other than the number and type of the sexual parts.
>
> Linnaeus' contribution of binomial nomenclature (genus name + specific epithet, instead of the unwieldy phrase-names previously used) was widely adopted and is still in use today. Thus the Linnean name *Azalea indica* replaced names for that plant such as Breyne's *"Chamaerhododendron exoticum, amplissimis floribus liliaceis."* Linnaeus' artificial sexual system of classification was, however, soon challenged. Systems based on "natural" relationships reflecting morphological affinities emerged. De Candolle, for example, divided the dicotyledonous plants into those with and without a corolla, and those with a corolla into groups with separate petals and with united petals.
>
> In England, meanwhile, G. Don incorporated consideration of morphological characters into his classifications and moved azaleas into genus *Rhododendron*. He divided the genus into sections, based largely on geographical origin for the azaleas.
>
> After Darwin's concepts of natural selection spread in the latter half of the 19th century, botanists increasingly focused on evolutionary development as a basis for classification. In the same period, large numbers of species new to Western science were being introduced as plant exploration expanded in the Himalayan region, China, Japan, and elsewhere in Asia.
>
> Changes in classification of *Rhododendron* (including the azaleas) have continued to the present. One scheme familiar to rhododendron enthusiasts is the grouping of many species that exhibit certain similarities into "series," a scheme promulgated by Prof. Isaac Bayley Balfour at Edinburgh circa 1920. A treatment integrating the Balfour system and other developments in rhododendron classification appeared in a 1949 article by the German botanist Sleumer. As subsequently modified by Sleumer and others, this treatment remains central to taxonomic work in the genus.
>
> The most comprehensive modern taxonomic and nomenclatural treatment of the rhododendrons and azaleas is the "Edinburgh Revision" (see Reference 4).

In 1753, Linnaeus listed six species in his genus *Azalea*: *indica* (India [Orient]), *pontica* (Ponto, Trapezunte [NE Turkey, NE Asia Minor]), *lutea* (Virginia [east-central North America]), *viscosa* (Virginia), *lapponica* (alpibus Lapponica [Lapland mountains]), and *procumbens* (alpibus Europae [European alps]). These were placed in his category "Pentandria [five stamens] Monogynia [one style]," which includes plants with perfect flowers that have stamens not joined together and not determinately proportioned in length. In contrast, the five Linnean species of *Rhododendron* were placed in "Decandria [ten stamens] Monogynia." The six Linnean species of *Azalea* are now classified as follows:

Linnean Name	Current Name
Azalea indica L.	*Rhododendron indicum* (L.) Sweet
A. pontica L.	*R. luteum* Sweet
A. lutea L.	*R. periclymenoides* (Michaux) Shinners
A. viscosa L.	*R. viscosum* (L.) Torrey
A. lapponica L.	*R. lapponicum* (L.) Wahlenberg
A. procumbens L.	*Loiseleuria procumbens* (L.) Desvaux

The personal name(s) or abbreviated names following botanical names identify the author(s) of those names. For example, *Azalea indica* L. means that Linnaeus (abbreviated "L.") applied that botanical name to the species. When the specific epithet *indica* was transferred to the genus *Rhododendron* by Sweet, "(L.)" was included after the new combination to show that the epithet was originally applied by Linnaeus. The gender of the epithet was changed to match that of the genus, hence *Rhododendron indicum.*

R. indicum is the familiar evergreen azalea; *R. luteum, R.periclymenoides,* and *R. viscosum* are deciduous azaleas. *R. lapponicum* is a lepidote (scaly) rhododendron. Finally, the Linnean *A. procumbens* is now included in genus *Loiseleuria.*

We remind the reader that G. Don transferred azaleas into genus *Rhododendron* in 1834, but we will not trace the many subsequent changes in azalea nomenclature. Among the species in the azalea complex (azaleas in the broad sense), are many that most of us have never heard of nor seen. To a considerable extent, this reflects a large increase in the number of Asian species, particularly Chinese, in recent decades.

Provenance

The geographical origin of the species comprising the azalea complex in the subgenera of *Rhododendron* makes clear the predominance (in terms of number of species) of China (including Taiwan and Hong Kong) for the evergreen species and North America for the deciduous. If we consider only the evergreen species most familiar in horticulture, Japan is the dominant source. The following summary is based on the provenance of these species as shown in the Edinburgh Revision. The geographic-distribution numbers may add to more than the number of species, because a given species may be native in more than one area (for example, *R. simsii* is native to Upper Burma, China, Laos, Thailand, and Japan's Ryukyu Islands) :

Subgenus	No. species	China	Japan	Other Asia	North America	Europe/Near East
Azaleastrum	16	14	2	6	—	—
Mumeazalea	1	—	1	—	—	—
Candidastrum	1	—	—	—	1	
Therorhodion	2	1	1	2	1	—
Tsutsusi	80	53	27	7	—	—
Pentanthera	22	1	5	1	15	1

Because many of the new Chinese species are unfamiliar even to western botanists specializing in the genus, it is possible that some may later be combined when more specimens become available for study. And, of course, additional species may be found.

Vestiture

An interesting scheme for distinguishing groups within genus *Rhododendron* is based on the nature of the plants' vestiture (scales, glands, and/or hairs). With the aid of a hand lens (at least 10x power), one can usually place a plant from the genus into one of three major groups. From detailed study of about one-third of the species in *Rhododendron,* German botanist Almut Seithe, as reported in the proceedings of the 1978 International Rhododendron Conference, identified 43 types of vestiture in the genus. These can be subsumed in four major categories: virgate (straight, wand-like) hairs; flock (branched) hairs; glands; and scales. The hairs in these categories may be identified as unicellular or multicellular, as well as by other variations. The categories of vestiture relate to the major groups in *Rhododendron* proposed by Seithe (at a new rank—"chorus"—between genus and subgenus) in the following manner (see also the figure, reproduced with the kind permission of Dr. Seithe):

Chorus subgenerum *Rhododendron* (scaly rhododendrons) has **scales and virgate hairs**

Chorus subgenerum *Hymenanthes* (non-scaly rhododendrons) has **flock hairs and glands**

Chorus subgenerum *Nomazalea* (the azalea complex) has virgate hairs **and glands**

This does not mean that each member of a chorus subgenerum has both types of vestiture specified. Thus the evergreen azaleas generally have multicellular hairs, often flattened and adpressed; some species (e.g., *R. oldhamii* Maxim. and *R. stenopetalum* (Hogg) Mabb. [syn. *R. macrosepalum* Maxim.) also have stalked glands. In the deciduous azaleas, both unicellular and multicellular hairs are found, the latter often gland-tipped.

Sleumer did not accept the evolutionary implications of the chori subgenerum and noted exceptions to Seithe's categories. Chamberlain (Edinburgh Revision, Ref. 4A) noted that stiff, unbranched multicellular hairs may be found in five of the 24 subsections in Hymenanthes. Nonetheless, Seithe's groups provide a useful, if tentative, guide for many of the species encountered in horticulture. Using this method shows, for example, that *Rhododendron mucronulatum* Turcz. is a lepidote rhododendron, not an azalea.

The detailed nature and location of vestiture may be important in the identification of a species. This is particu-

larly true for the deciduous azaleas, where gland-tipped hairs are often diagnostic. Even if one is not concerned with the details of vestiture as an aid to identification, examination of shoots, buds, leaves, and flowers with a lens reveals an aspect of beauty often not appreciated in these plants.

Current *Rhododendron* Classification

The subgenera and their subordinate sections in genus *Rhododendron* are shown in the accompanying table. For each of these taxa, the "type species" is identified, and the number of included species is listed. In some cases, examples of included species are shown and information is given on the forms of inflorescence encountered.

Type species relate primarily to the technical requirements governing the creation of botanical names. Thus, a type species is associated with the name of each family, genus, or infrageneric taxon. While the type species is part of a subgenus or section, one must understand that it is not necessarily *typical* of those found in the subgenus or section.

In any named taxon (a group of plants such as a species), there will be a range of variation in morphological characters—leaf shape and size, calyx and corolla size and form, color, etc. In some cases, a type species may have characteristics closer to an extreme of the range rather than be representative of the average. That said, many type species provide useful exemplars for visualizing the plants in a subgenus or section with which they are associated.

The taxonomic classification of *Rhododendron* is based on aboveground morphological features. Below ground, members of the genus generally have compact, fibrous root systems—but there are exceptions. Some of the lepidote (scaly) species are epiphytes. In the deciduous azaleas, as Solymosy (1976) pointed out, several (notably including *R. viscosum* (L.) Torr.) have shallow roots with runners sometimes ten m. (more than 30 feet) long! These runners send up shoots that develop into new plants. Galle also discusses the often sparse, widespreading root systems of our native deciduous azaleas and gives valuable cultural advice for their transplantation.

The overlapping ranges of flower forms within the various subgenera and sections means that listing the forms occurring in each would not be useful in visualizing differences between these groups. In general, flower forms in *Rhododendron* range from rotateto campanulate or funnel form, sometimes tubular (or combinations of these forms), and the flowers are usually slightly irregular (zygomorphic, bilaterally symmetrical).

The nature of the inflorescences, in contrast, provides some important clues to taxonomic relationships. Three terms used in describing these inflorescences are raceme, rachis, and umbellate. A raceme is a simple inflorescence of stalked flowers on an axis supporting the flowers. This axis is called a rachis and may be relatively long or short. If the rachis is short, the flower stalks will appear to arise from nearly the same point, producing a compact inflorescence. This appearance is referred to as umbellate (resembling an umbel), because an umbel is an inflorescence in which the flower stalks arise from a common point. (Think of the primary branching of the Queen Anne's Lace flower, a compound umbel.) Terminal buds are located at the end of branchlets; lateral buds are located in the leaf axils below the terminal buds.

At this point, readers who desire specific information about the various species and cultivars of azaleas should refer to Galle's *Azaleas*. In that work, thousands of azaleas are described and many are pictured in color.

An alternative would be to stroll among the azaleas and reflect on the words of Keats:

> A thing of beauty is a joy forever.
>
> Its loveliness increases; it will never
>
> pass into nothingness . . .
>
> *Endymion*

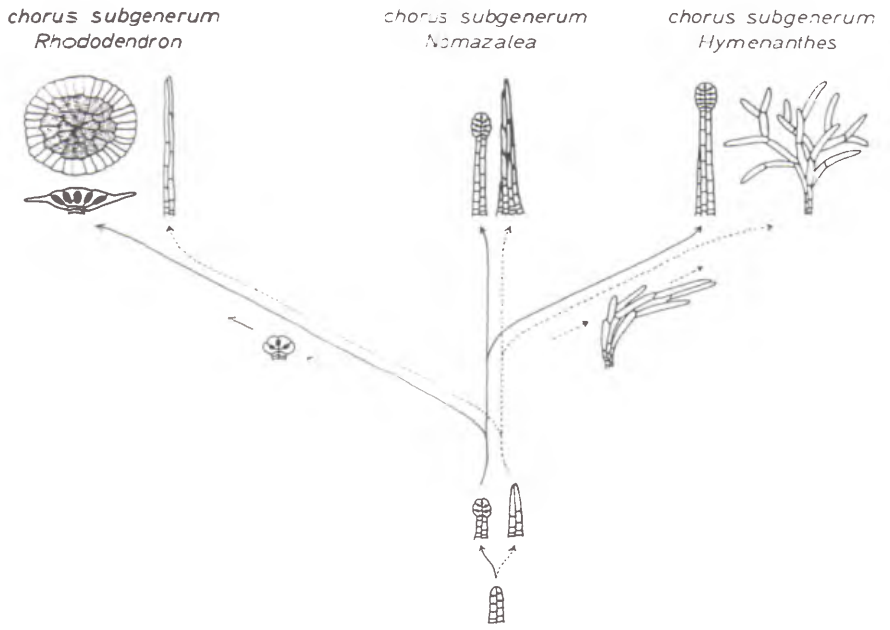

Fig. 13. PHYLOGENETIC TREE OF THE CHORI SUBGENERUM AND THE HAIR CLASS VARIANTS.
chorus subgenerum *Rhododendron* with scales and virgate hairs
chorus subgenerum *Nomazalea* with glands and virgate hairs
chorus subgenerum *Hymenanthes* with glands and flock hairs

Table

The Subgenera of *Rhododendron* L.

Note: The number of species (spp.) noted for each subgenus and section are from "The Current Classification" section of the introduction to Chamberlain, 1996. If validly published hybrid species and certain "accepted names" are included, the count in major categories would be about 50 percent greater.

Plants commonly called "rhododenrons"

[Scaly rhododendrons]

Subgenus *Rhododendron* [Type: *R. ferrugineum* L.]; ca. 360 spp.

- Inflorescence always a raceme, most frequently several-flowered, with very short rachis (umbellate), sometimes reduced to a single flower, or with elongated rachis (nonumbellate)

Section *Rhododendron* [Type: *R. ferrugineum* L.]; 149 spp.
Incl. *R. dauricum, R. ferrugineum* (Alpine Rose), *R. hippophaeoides, R. impeditum, R. keiskei, R. micranthum, R. mucronulatum, R. myrtifolium, R. racemosum*

Section *Pogonanthum* G. Don [Type: *R. anthopogon* D. Don]; 13 spp.

Section *Vireya* (Blume) H.F. Copel. [Type: *R. javanicum* (Blume) Benn.]; ca. 200 spp.

[Non-scaly rhododendrons]

Subgenus *Hymenanthes* (Blume) K. Koch [Type: *R. ponticum* L.]; 224 spp.

- Inflorescence always a terminal raceme, few- to many-flowered, lax or dense; often forming a more or less spherical "truss" of flowers

Section *Ponticum* G. Don [Type: *R. ponticum* L.]; 224 spp. in 24 subsections, incl. Subsection *Pontica*, which contains *R. catawbiense, R. degronianum* (which includes *inter alia* the *R. metternichii* of horticulture), *R. degronianum* ssp. *yakushimanum* var. *yakushimanum, R. hyperythrum, R. maximum.*

Plants called "azaleas," and closely related species

[The azalea complex]

Subgenera often considered "in-between" rhododendrons and azaleas:

Subgenus *Azaleastrum* Planch. [Type: *R. ovatum* (Lindl.) Maxim.]; 16 spp.

- Inflorescence lateral below terminal or pseudoterminal vegetative buds, with 1 to several flowers

Section *Azaleastrum* (Planch.) Maxim. [Type: *R. ovatum* (Lindl.) Maxim.]; 5 spp.

Section *Choniastrum* Franch. [Type: *R. stamineum* Franch.]; 11 spp.

Subgenus *Mumeazalea* (Sleumer) M. N. Philipson & Philipson [Type: *R. semibarbatum* Maxim.]; 1 sp.

- Inflorescence lateral, below vegetative buds, with one flower

Subgenus *Candidastrum*; (Sleumer) M. N. Philipson & Philipson [Type: *R. albiflorum* Hook.]; 1 sp.

- Inflorescence lateral, below vegetative buds, with 1 to 2 flowers

Subgenus *Therorhodion* (Maxim.) A. Gray [Type: *R. camtschaticum* Pall.]; 2 spp.

- Inflorescence buds terminal, flower stalks bearing leaf-like bracts, with one to three flowers.

Table (continued)

The Subgenera of *Rhododendron* L.

Subgenera commonly recognized as azaleas:

Subgenus *Tsutsusi* (Sweet) Pojark. [Type: *R. indicum* (L.) Sweet]; 80 spp.

- Inflorescence and vegetative buds enclosed in same terminal bud scales

Section *Tsutsusi* [Type: *R. indicum* (L.) Sweet]; 65 spp.

Incl. *R. eriocarpum, R. indicum, R. kaempferi, R. kiusianum, R. nakaharae, R. oldhamii, R. ripense* 'Mucronatum', *R. simsii, R. stenopetalum* (syn. *R. macrosepalum*), *R. tashiroi, R. yedoense*

- Flowers solitary or in subumbellate racemes with up to 15 flowers, flowering time varies

Section *Brachycalyx* Sweet [Type: *R. farrerae* Tate]; 15 spp.

Incl. *R. amagianum, R. dilatatum*

- Flowers solitary or in subumbellate racemes with up to 4 flowers, flowering before or with leaf expansion

Subgenus *Pentanthera* (G. Don) Pojark. [Type: *R. luteum* Sweet]; 22 spp.

- Flowers terminal on previous-year branchlets; flowers before, with, or after expansion of leaves; vegetative shoots below terminal buds, or in some cases from lowest scaly leaves of terminal bud ["scaly" here does not mean lepidote]

Section *Pentanthera* G. Don [Type: *R. luteum* Sweet]; 15 spp.

- Inflorescence a shortened terminal raceme, flowers before, with, or after leaf expansion

Subsection *Sinensia* (Nakai) K. Kron [Type: *R. molle* (Blume) G.Don]; 1 sp. Incl. subsp. *molle* and subsp. *japonicum* (A. Gray) K. Kron

Subsection *Pentanthera* G. Don [Type: *R. luteum* Sweet]; 14 spp.

Incl. *R. luteum* from the Caucasus, Turkey, and Eastern Europe and the North American *R. atlanticum, R. calendulaceum, R. periclymenoides, R. viscosum,* etc.

Section *Sciadorhodion* Rehder & E.H. Wilson [Lectotype: *R. quinquefolium* Bisset & S. Moore]; 4 spp. Incl. *R. schlippenbachii*

- Inflorescence an umbellate terminal raceme of 1 to 6 flowers, flowers before or with leaf expansion

Section *Viscidula* Matsum. & Nakai [Type: *R. nipponicum* Matsum.]; 1 sp.

- Inflorescence an umbellate terminal raceme of 6 to 15 flowers, flowers with or after leaves expand

Section *Rhodora* (L.) G. Don [Type: *R. canadense* (L.) Torr.]; 2 spp.

Incl. *R. vaseyi*

- Inflorescence an umbellate terminal raceme of 3 to 15 flowers, flowers before leaves expand.

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***Don Voss** is an economist by training, and an active gardener with a scholarly interest in azaleas and rhododendrons. He is an expert on the azaleas of Robert Gartrell (Robin Hill hybrids), and is a former chairman of the Society's Board of Directors and former keeper of the Society's database. Don currently volunteers at the herbarium of the U.S. National Arboretum.* ❑

THE RAISING OF A RAINBIRD

Bill McDavit
Sunset Beach, North Carolina

Mary and I retired to a fully wooded 0.71 acre lot in the low country of the Carolinas in 1988. We had no professional background in horticulture, but to keep us busy we decided to start an in-ground azalea, rhododendron and camellia evaluation project. Soon afterward, the need for irrigation was realized, and a ground level pop-up sprinkler system was installed. Rainbird Models 2045A, 15103-07 and 1800 pop-up heads were used to obtain full coverage. After a few years and many plant varieties later, it became evident that the height of the plants was blocking much of the spray and diminishing the overall coverage. Additionally, those plants immediately adjacent to the pop-ups were getting pummeled and damaged by the direct spray. We wanted a cheap and quick solution, but one that would be aesthetically acceptable and basically inconspicuous.

We ordered catalogs and studied them. We investigated specialty stores. Nothing appealed to our critical eyes. The only viable alternatives we found were fixed or portable stanchions, designed primarily for commercial nursery use. Most of them were expensive, and none of them were inconspicuous, to say the least. By chance only, I attempted to fit one of the Model 2045A housings into a piece of 4" PVC pipe. With a little filing off of some support struts (later eliminated by the manufacturer as unnecessary), the housing fit very snugly. (Aha, you're thinking, how can an ugly 4" wide piece of bright white PVC sticking up in the sunlight be considered aesthetically acceptable? I'll get to that point later, and explain how we made it so.) Similarly, I found that the 1.5" Schedule 40 (thick wall) PVC would accept the smaller Model 1800 shrub pop-up housings.

Some major considerations were:

(1) What would be the average cost to move each head?
(2) Were there connectors and flexible pipe readily available?
(3) How deep should the PVC stanchion be buried for stability?
(4) What would be the height limit for raising a head?

Our solutions were:

(1) Although cost of materials may be different in your area, following is a breakdown of our costs for parts per sprinkler:

(a) 4" inside diameter (ID) PVC per foot = $1.35
(b) 1/2" ID black "funny" (flexible) pipe per foot = $0.35
(c) PVC-to-funny pipe reducer connector, 1 ea. = $0.95
(d) Threaded funny pipe connector, IBM 199-623, 2 ea. = $ 0.99
(e) PVC glue, 1 can = $1.49
(f) Paint spray can, each = $3.49

Accepting the fact that my labor was free, the approximate average cost per unit = $12.00. Cost per unit for raising Model 1800 shrub heads is slightly lower, since 1.5" PVC is considerably cheaper per foot than 4". Exact figures are difficult to quote due to two variables involved, i.e., PVC height and amount of paint used. For us, this cost was a cheap trade-off. The cost of one commercial portable stanchion we found to be anywhere from $40 to $120.

(2) To stabilize a piece of PVC, with a sprinkler head attached, and buried in our sandy soil, I found that a simple formula to determine the buried length would apply in all cases here, i.e., 1/3 the total length of the PVC should be buried in the ground. (If your soil is more dense, like clay, my formula may be too stringent). To figure the total length easily, just multiply the above ground height by 1.5 (see sketch). (I don't believe that the formula would apply when sinking telephone poles!!)

(3) Black flexible pipe, 1/2" ID thick walled, called "Funny Pipe" is used to make the connection from the main water supply line to the sprinkler head, using the appropriate adapter connectors.

(4) For ease of connecting, the PVC housing should be offset from the pipe line by at least one foot (see sketch).

(5) Due to the difference in buried depths of the existing water line and the PVC, a slot must be cut on the bottom end of the PVC to accommodate the introduction of the funny pipe without it being pinched by the bottom edge of the PVC housing itself (see sketch).

(6) Based on the size of the threaded fitting in the existing water line, the connector may have to be cut off and a connector with the correct threads glued on using PVC glue.

(7) Attaching the funny pipe to the adapter connector takes a wee bit of push, but with determination, the funny pipe will eventually bottom-out. The adapter will easily connect to the existing water line by the use of a screw fitting (see sketch).

(8) When using the 1.5" PVC with the Model 1800 shrub head, a slot must be cut 1.25" wide x 4.25" long on the top end of the PVC to accommodate the drain plug on the side. It is because of the necessity for the slot that the heavy walled (Schedule 40) PVC should be used. This will ensure that the structural integrity of the PVC material remains constant, and won't allow the pop-up to move. The drain plugs will remain accessible for obvious purposes in the future.

(9) For applications in gardens in northern climes where the freezing of pipes, etc. is a threat, another consideration should be addressed. The drain plugs for all of the Model 15103 and 2045A heads will be hidden and inaccessible inside the pieces of 4" PVC. Therefore, a drain plug should be added to the lowest end of each sprinkler zone pipe to overcome this shortcoming.

PREPARATION & APPLICATION:

(1) Using a narrow-bladed shovel, carefully dig around any Rainbird sprinkler head of the types previously mentioned until the plastic water supply pipe is exposed. Determine the direction the line has taken, and uncover enough of the pipe to be able to cut it at a point about a foot to 18" from the sprinkler head. (Protect the exposed cut end from getting contaminated with soil).

(2) Deburr the cut end of the pipe with a knife or file. Have an associate turn on the water in that zone for an instant while you hold the open end of the pipe. This step will clear the water line of shavings. (WARNING: Do not get in front of the open pipe while this task is being performed.) Wipe and dry the end of the pipe. Attach a funny pipe adapter connector to the pipe using PVC glue, as per the instructions given on the glue can label. (Continue to protect the newly installed connector from getting contaminated with soil. Personally, I wrap the end with a clean rag).

(3) Remove the original PVC pipe and connector from the detached Rainbird head and housing. Thread a funny pipe adapter connector into the base of the housing and carefully tighten with a wrench. (WARNING: The material is only plastic, so excessive tightening can break the fitting.) Attach a piece of funny pipe, of a predetermined length to the new housing connector.

(4) Having previously determined the above-ground height you want to raise a sprinkler head, multiply the height by 1.5 and cut a piece of 4" PVC to that length. Using a circular power saw, cut a slot of 1.25" x 6" up one side on the bottom end of the 4" PVC. Break and remove the 1.25" tab with a pair of pliers. The finished product is shown in the sketch.

(5) Insert the reworked Rainbird housing and funny pipe into the 4" ID PVC from the top end (end without the newly cut slot). (NOTE: If there are struts just below the top edge all around the housing, care must be taken to grind or file them off. The housing will not seat properly in the PVC until that task is accomplished.) String the funny pipe out through the bottom slot, and cut it to length using a knife. Insert that end of the funny pipe on the supply pipe connector using brute force until it is seated. Install this finished assembly in the predetermined

location in the hole, with the sprinkler end up. (Similar to laying sod, "green side up"!).

(6) Carefully cover the entirety of the excavation with dirt and tamp with the end of a sledge hammer until the area around the PVC housing is firm. Note the slope of the land at that point. The PVC housing should be positioned perpendicular to the slope of the land for best 360-degree sprinkler coverage.

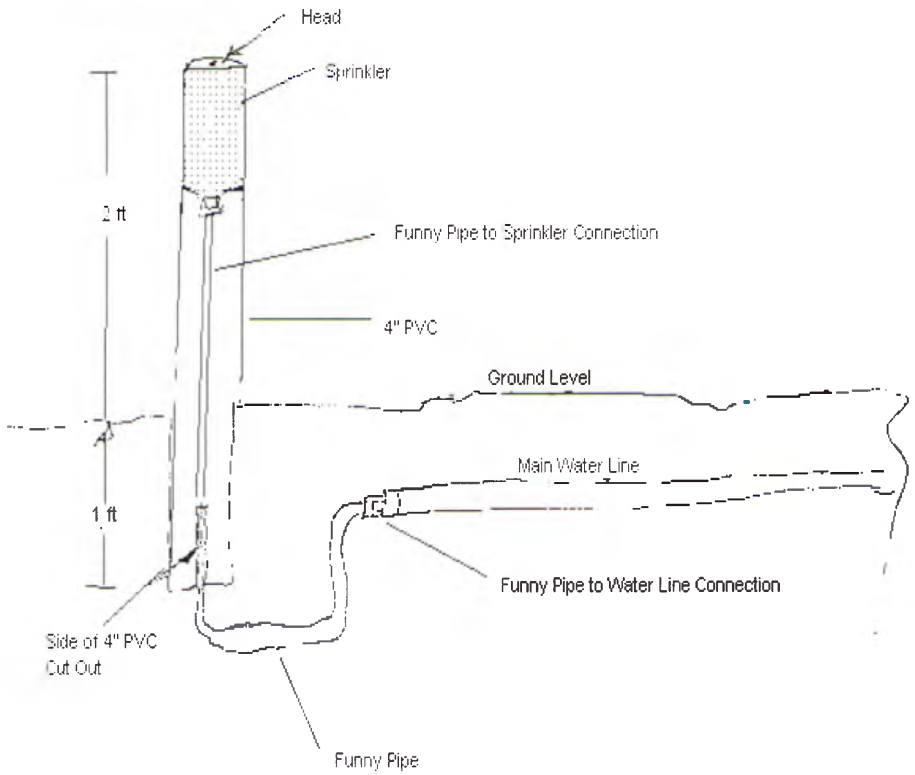
(7) Here is where the aesthetics come into play. Carefully note the three/four main background colors in your garden. (Ours happens to be mostly greens, because of the evergreen shrubbery, and browns because of the pine straw mulch we use. Here and there is a hint of black also, because of some tree bark coloring.) At your local hardware store, select spray cans of flat or enamel paint (does not matter which) with colors that fit your locale. After that, it is only a matter of becoming a artist and painting the PVC extensions in a camouflage manner of your own liking. The finished touch can be changed continually, until the right combination is reached.

(8) As pertains to the Model 1800 shrubbery housings, nothing is different, except for the size of the PVC, and the additional slot requirement for the protruding drain plug.

(9) Virtually, there are no practical limits to how high a sprinkler head can be raised above ground using this method. The lack of adequate water pressure could be a constraint, possibly. To expedite the ease of lawn mowing, I found space in our gardening areas in which to move those sprinkler heads that had been at ground level in the lawn areas, previously. I did not care to have to mow or weed-whack around them in the future.

A final note: Early on in this project, I miscalculated the required raised heights a few times. Consequently, very soon I will have to return to two or three heads and raise them even higher than they are now. This ordeal will be an ongoing necessity in the future, when the more upright plants get out of hand again.

Bill McDavit *is retired from the Naval Research Laboratory in Washington, DC, where he was an Electronic Design Engineer specializing in radio direction finding and Navy space projects. He is a US Naval veteran of the Korean War. Bill is an active member of the VFW Post 7288 in Calabash, NC, is a golf enthusiast, and works as a starter ranger two days a week at the Riverhills G & CC in Little River, SC. Bill and Mary have been married for 46 years. Before moving to Sunset Beach, NC, where they discovered azaleas, Bill and Mary lived 36 years in Oxon Hill, MD.* ❑



'FASHION'—AN AZALEA FOR ALL SEASONS

Steve Brainerd
Rowlett, Texas

'Fashion' is an evergreen azalea which provides the gardener with four seasons of interest and utility—spring, summer, fall and winter. Unlike the early-blooming azaleas which burst forth in color while vulnerable to a late freeze, 'Fashion' generally waits until the chance of a freeze has passed to completely cloak its foliage in deep yellowish pink flowers. The flowers yield to a deep green foliage in spring and summer which serves well as a background planting to highlight color.

During the fall when deciduous plants' leaves change in color, 'Fashion' provides a rich reddish bronze foliage when planted in direct sunlight. The winter foliage is muted when compared to the fall but attractive when contrasted with other evergreens in the garden. 'Fashion' provides continually changing displays in rhythm with the seasons.

Although azaleas are best known for their spring show, an unheralded benefit to azalea plantings is the richness of their fall and winter foliage. 'Fashion' is one of the best fall performing azaleas, often lightly blooming with flowers after the arrival of the first cool days of fall and displaying foliage which turns a rich reddish bronze if given sufficient sunlight. The bronzing of the leaves in sunlight is a trait of red and pink flowered azaleas which can be enjoyed for six months of the year. 'Fashion' provides some of the richest leaf bronzing of any widely available azalea in the market today.

Many retail nurseries will not stock azaleas in the fall because their sales volume occurs with flowering in the spring. Retail nurseries which also sell wholesale to landscape contractors are a good source for azaleas throughout the year. When observing variations in leaf color, make sure that the azaleas are getting direct sunlight during a portion of the day. A very effective method in designing azalea plantings is to begin with fall leaf color and refine the design by secondarily selecting the spring flower color. 'Fashion' can be planted next to white flowered azaleas to highlight the contrasts of the leaves. White-flowered evergreen azalea foliage retains its green color throughout the fall and winter. By mixing different textures (different leaf sizes) such as 'Fashion' and 'Mrs. G. G. Gerbing', plantings have enhanced interest combining color and textural contrasts. Azalea leaves are produced in the spring and the summer. The spring leaf is more delicate and a lighter green when compared to the summer leaf. Because the spring leaf is produced first, it is somewhat hidden on the plant by the summer leaf which is produced last.

All evergreen azaleas lose a percentage of their leaves in the fall, some a greater percentage than others. With the onset of fall, the spring leaf dramatically changes in color to the yellows of the white-flowered azaleas to the oranges, reds and bronzes of the pink and red flowered azaleas. Many gardeners assume that there is stress on the plants as the leaves turn color and droop, when in fact it is a very natural process, providing a beautiful palette of color for the fall garden designer. The summer leaf provides the evergreen quality of the winter azalea. During late fall and winter, 'Fashion' when planted in sunlight, assumes its deep bronze leaf coloration. The bronze color is particularly striking when planted next to light green leaves. In the spring the bronze color may appear to be almost black in some light conditions when displayed next to an earlier flowering white azalea in full bloom. The color variation of a well designed, diverse planting of azaleas will provide months of cool season enjoyment for the discriminating gardener, particularly a planting that contrasts the dark foliage and fine texture of 'Fashion' with the light foliage, light flowers, and bold texture of its companion plants.

Stephen S. Brainerd *graduated from Oklahoma State University with a B.A. in Chemistry. He is a 20-year veteran of the U.S. Naval Fighter Aviation. He has worked with an extensive azalea collection in Dallas as a landscaping contractor and currently works for the City of Highland Park. An avid azalea gardener, Steve has served as president for the Dallas Chapter and as President of the Society.* ❑

Back Issues of THE AZALEAN

The Board of Directors has decided back issues of **THE AZALEAN** are to be available as *complete sets* at **bargain prices.** Details will be announced in the September issue. This is an opportunity for members, new and old to obtain their own copies of the journal of the Society back to its beginning in 1979 These issues are a great source of information for growers, landscapers, and nurserymen to say nothing about their importance to those of us who love azaleas.

Chapter Membership—Danger Ahead?

Reprinted from ***THE AZALEA CLIPPER****, the Newsletter of the Northern Virginia Chapter*

Just a few years ago, our Northern Virginia Chapter had 110 members. This number has decreased each year and it is now down to about 65 members. We have added new members over this period, but not enough to make up for the loss. Most of the loss has been due to non-renewal of membership by many former members.

(continued on page 35)

(continued from page 22)

SOCIETIES, UNIVERSITIES, LIBRARIES, GARDENS (Cont.)
(no specific order/may not be a complete listing)

Helen Fowler Library (CO)
Lawrence Pierce Library (WA)
Longwood Gardens (PA)
Louisiana Growers (LA)
Missouri Botanical Gardens (MO)
Muskogee Parks and Recreation (OK)
Norwegian Arboretum (Norway)
Horticulture (MA) (magazine)
Royal Horticulture Society's Garden (England)
Mass. Horticultural Society (MA)
Norfolk Botanical Garden (VA)
Delaware Valley College of Science and Agriculture (PA)
Scott Arboretum/Swarthmore College (PA)
Bok Tower Gardens (FL)
Southern Living (AL) (magazine)
Hillwood Museum (DC)
Holden Arboretum (OH)
University of California (CA)
Worcester County Horticulture Society (MA)
Tower Hill Botanic Garden (MA)
American Horticultural Society (VA)
American Rhododendron Society (WA)
Andersen Horticultural Library (MN)
Arnold Arboretum Horticultural Library (MA)
Auburn University (AL)
Australian Rhododendron Society (Australia)
Bellingrath Gardens (AL)
Brooklyn Botanic Gardens (NY)
Brookside Gardens Library (MD)
U.S. National Arboretum (DC)
Burning Tree Garden Club (MD)
Covington Library (LA)
Dallas Arboretum (TX)
Ft.Worth Botanic Gardens (TX)
Glenwood Garden Club (MD)
Helen Crocker Russell Library Strybing Arboretum Society (CA)
Garden Know How (GA) (magazine)

WHOLESALE, RETAIL GROWERS, AND SUPPLIERS
(no specific order—may not be a complete listing)

Acadian Nursery and Garden Center (LA)
Transplant Nursery (GA)
Blackwell Nursery (AL)
Shepherd Hill Farms (NY)
Briggs Nurseries (WA)
Carlson Gardens (NY)
Chandler Gardens (NC)
Collier Gardens (OR)
A&P Nursery (LA)
Cummings Gardens (NJ)
Tom Dodd Nursery (AL)
Eastern Shore Nursery (VA)
Rarflora Nursery (Australia)
Laurel Hill Nursery (TX)
Bills Creek Nursery (LA)
Garden South (GA)
Sunshine Farm (WV)
Goza Nursery (GA)
Hyde Park Nursery (MO)
Greer Nursery (OR)
Grimes Nursery (AL)
Che' Key's Nursery (GA)
James Harris Nursery (GA)
Kinney Nursery (AL)
Lazy K Nursery (GA)
Rocky Ridge Nursery (WA)
Meeks Nursery (GA)
Azaleas To Go (GA)
Hills Nursery (GA)
Stonehouse Creek Nursery (VA)
Northern Neck Nursery (VA)
McGinness Farms (GA)
McNeals Greenhouses (GA)
Milfields Nursery (CA)
Nuccio's Nursery (CA)
Flowerwood Nursery (AL)
Oak Hill Farm (SC)
Pinecrest Azaleas (MO)
Pike Nurseries (GA)
Pope's Azalea Farm (TX)
Reid's Azalea Farm (GA)
Richbourgh Nursery (FL)
Dogwood Hills Nursery (LA)
Rosemont Acres Nursery (OR)
Azalea Patch (NC)
Van der Giessen Nursery (AL)
Ted Van Veen (OR)
Vital Earth Resources (TX)
Green Spirit Nursery (LA)
Marshy Point Nursery (MD)
Ten Oaks (MD)
Azalea Acres Farm (MD)
Whites Nursery (MD)
Dutch Mans Farm (SC)
Wingards Nursery (SC)

HYBRIDIZERS
(no specific order—may not be a complete listing)

Hugh Caldwell (FL)
Fred Galle (IN)
Charles & Wanda Hanners (MD)
James Harris (GA)
Mark Hill (GA)
Dr. August Kehr (NC)
Ernest Koone (GA)
Joseph Kilmavicz (VA)
Fred Minch (WA)
Flowerwood Nursery (AL)
Nuccio's (CA)
Tom Rowland (GA)
Robert Lee (LA)
Dennis Royal (GA)
Lewis Shortt (GA)
Fred Sorg (SC)
Joseph Schilds, Jr. (TN)
Dr. John Thornton (LA)
Don Hyatt (VA)
Bob Stewart (VA)
Steven Yeatts (GA)
Ray Goza (GA)
Earl Sommerville (GA)
Phillip Waldman (NY)

LANDSCAPE ARCHITECTS
(no specific order—may not be a complete listing)

Naud Burnett (TX)
Steve Brainerd (TX)
Hadden Landscaping (TX)
McAdams Designs (TX)
Garden South (GA)
Pike Nurseries (GA)

CULTURAL NOTE

Importance of pH

Have you fertilized your azaleas well, but they still look anemic and stagnant in growth? The problem could be the pH of the soil. If the pH is not right for the plant, the plant can not get its nutrients.

How many of us know what the meaning of pH is? We all recognize it as a measure of the acidity of soil or water, and that's it. The actual definition of pH is a count of the hydrogen ions in gram equivalents per liter, which identifies the acidity of the medium. The "p" does not represent percentage, as might be imagined, but it is the mathematical symbol denoting the negative logarithm exponent of the concentration. Pure water has a hydrogen ion concentration of

0.0000001 per liter, which can also be expressed as 1 x 10^{-7}. The logarithm of this number is the exponent of 10, which is -7. This gives a pH of 7 (the negative exponent) and is neutral. A concentration of hydrogen ions greater than 10^{-7} is acidic, and a concentration of less than 10^{-7} is alkaline. Each change in pH by a whole number represents a change in concentration by a factor of 10. For example, a pH of 6.0 means the concentration is 0.000001, or 10 times as many hydrogen ions as for a pH of 7.0. *Lower pH numbers mean higher concentrations and higher pH numbers mean lower concentrations of hydrogen ions.* Got it?

We are familiar with the fact that the pH of a soil determines the availability of *proper* nutrients for plant growth. For example, azaleas and rhododendrons need a pH of 4.5 to 5.5, the range where soluble iron is available for the plants. Above 5.5, the availability of soluble iron falls off rapidly, which is not good for these plants. Insufficient chlorophyll is generated, the plants appear anemic, and growth ceases. Different plants have varying needs for nutrients, and thus need soil with the appropriate pH. A good pH meter can be used to indicate the pH of the soil; don't rely on inexpensive models. The best method is to obtain a good soil testing kit, or take a sample to the local extension office.

This Cultural Note is reprinted from THE AZALEA CLIPPER, the newsletter of the Northern Virginia Chapter. ❑

IN MEMORY—JOHN C. PAIR

With the death of John C. Pair, horticultural researcher and Director of the Kansas State University Horticulture Research Center, Wichita, Kansas, last January following a year-long battle with a brain tumor, the nursery industry lost a powerful advocate. As Director of the newly established Horticulture Research Center in Wichita, Kansas, John Pair established a woody ornamental research program that included the introduction, evaluation and sometimes propagation of ornamental plants that have shown superior performance in adaptability and offered potential for landscape use in Kansas. Among his many contributions are the Ozark Spring dogwood, which is suited to cold winters, and the Wichita osage orange, a thornless male selection. Among the many other accomplishments of Dr. Pair was his legacy to Wichita in the establishment of the city's Lawn, Flower and Garden Show, now considered one of the 10 best in the nation by Horticulture Magazine. In 1995, the American Society of Horticultural Sciences awarded John Pair the Distinguished Achievement Award for Nursery Crops, the highest award in horticulture, in recognition of his life's work.

If John had been asked what his mission statement was he would have said, the Horticulture Research Center and finding the best landscape plants for Kansas, suited because of their heat and drought tolerances as well as their cold hardiness. In the last 25 years Dr. Pair planted and evaluated hundreds of plants, often over 50 accessions in a single year. Of John's many findings Michael Dirr said "John is quoted in my book more that I am." John Pair's work included participation in numerous national plant evaluation trials, including NC-7, introductions of Harold Pellett of Minnesota, the U.S. National Arboretum, Morton Arboretum, and several nurseries. John was the type of person who instilled enthusiasm for plants in everyone he met. He was willing to share his interest and show each person he met how to plant the "seeds" of understanding plants, as well as the plants themselves.

The process is underway to rename the Wichita Research Center after John Pair, in memory of over 25 years of dedication to development of a highly respected center for horticultural research in the Midwest through integrated research, analysis, and education. The Board of Directors of the Wichita Lawn, Flower and Garden Show has established a $1,000 endowed scholarship in John Pair's name for a horticultural student at Kansas State University. Other similar memorials are also underway. To all who knew John, his quiet easy going manner, and boundless enthusiasm, he will be missed.

For additional information contact Alice Le Duc, Assistant Professor, Department of Horticulture, Forestry and Recreation Resources, Kansas State University, 2021 Throckmorton Plant Sciences Center, Manhattan, KS 66506. ❑

(continued from page 33)

Surely the Azalea Society has much to offer to the mass of gardeners buying and planting azaleas in their yards. The abundant expertise and the knowledge base inherent among the Society members, the thousands of varieties obtainable (many from other Society members only), the excitement associated with hybridizing beautiful flowers, should all contribute to making Azalea Society membership very attractive.

The non-renewals may be from disenchantment in the programs of the chapter, from expired interest in azaleas, or from developing physical limitations affecting the ability to continue gardening. As a chapter, we can do something about the first item, *the program of the chapter*. Any ideas here from members are welcomed.

But we must not relax in the endeavor to bring in new members; there are benefits to membership. We can help them in getting and/or maintaining their plants. We can interest them in plants they may have never seen, how they were hybridized, where the original plants came from, and other background facts. It takes a group effort to accomplish this task. We have brochures explaining the benefits of membership; they will be available at the meetings or can be obtained by contacting the Chapter President, Joe Klimavicz.

When we look at the beautiful azaleas, we can see that they do their part in enriching our lives. It's up to us to see that the organization continues to expand this enjoyment to as many as possible. ❑

SOCIETY NEWS

Northern Virginia Chapter

A Chapter meeting took place on April 19, 1998, at the Green Spring Farm Park Administration Building. Joe Klimavicz, our Chapter President, presented the program. Joe has had "hybridizing fever" since the late 1980s. Each year he makes five to ten crosses, and raises 500-1,000 seedlings that he moves out of his basement into cold frames for the growing season.

Joe is always glad to share what did and what did not work. He has many experiences to talk about, and can name specific examples that have produced beautiful flowers. He showed many slides of his work, and he had some sample seedlings available for attendees to take home. For those of you who have considered hybridizing but have not caught the fever, here is your opportunity to jump on the bandwagon.

This meeting was less than two weeks away from the National Convention to be held here at Tysons Corners. The business part of the meeting was devoted to finalizing plans for activities and participation of members in hosting this convention. The attendees were urged to support the Chapter in this undertaking.

There were refreshments and door prizes as usual. There was also a plant exchange.

There was a potting party after the meeting. The plan to acquire "liner" azaleas for favors at the convention banquet fell through. Joe Klimavicz has offered seedlings from his hybridizing experiments for favors. These are now crowded in trays, and need to be put into small pots. Bring gloves, small pots, and help pot these seedlings after our Chapter meeting on the 19th.

At the February 22, 1998 meeting the speaker was Steve Cockerham, Manager of Betty's Azalea Ranch on Lee Highway between Fairfax and Centreville in Virginia. He grew up on the ranch working with his mother, "Betty", so he has extensive experiences to relate in growing azaleas.

For fertilizing, he recommends *Agriform* cubes for both potted and planted plants during the growing season. It is slow release, and should be placed just under the mulch around plants in the ground.

He talked about weed control. They have several products which he recommends for application in the fall, spring and summer. These are products that remain in the weed's roots, and do not leach into the ground to damage desirable plants. He suggests the use of *Wilt Proof* mixed in the spray to ensure it sticks to the leaves.

In regard to a question about the dogwood vulnerability, he recommends that the trees be fertilized well. All in all, there were a lot of questions and Steve was very forthcoming on giving informative answers. Of course, the products he recommends can be obtained at the Ranch!

Phil Louer

Oconee Chapter

Jim Thornton called the meeting to order on behalf of Earl Hester. He thanked Earl for his guidance the past two years. Jim then introduced our new Chapter President Mike McNeal. Ruth Bryan then presented the speaker Richard Clapp. Dick showed slides and talked about the Asticou Garden and Heritage Plantation and its Dexter rhododendrons.

After a brief refreshment intermission, a business meeting was held during which future trips, flower shows and meeting sites were discussed. The April meeting was at the Beasley's Nursery. A flower show for late blooming azaleas was contemplated for May. This was discussed at the forthcoming business meeting. Please call Mike McNeal for further details. The cutting party was held at Hester's Nursery, June 20.

Ruth Bryan, Secretary

Outgoing/Incoming

First, we want to thank Earl Hester for being our president for the last two years. Though it's an hour drive, each way, he came to just about all the meetings, even when he didn't quite feel up to it. Both Dorothy and Earl are a little under the weather right now, so let's keep them in our thoughts and prayers.

Mike McNeal stepped forward to become our new president and we didn't have to twist his arm! Mike, a long time member and azalea collector, is retired from Southern Bell and is now owner, chief cook and bottle washer of McNeal's Greenhouses in Conyers. He and his wife, Sylvia, grow bedding plants, hanging basket arrangements and other plants just about all year round. Mike has a lot of ideas and should be an asset as president of our chapter. We look forward to his leadership.

A day at the Hesters. At our last meeting, we agreed to go down to Dorothy and Earl's Azaleas-To-Go Nursery in Fayetteville, GA. to help pot-up some flats of azalea cuttings. (Both Dot and Earl are not moving around too swiftly nowadays, and after all, you can only leave cuttings

in six packs so long.) Anyway, a crack team of azalea potters (Tom Anderson, Ruth and Frank Bryan, Gail and Chan Schmalz and I) was formed, and on April 2 off we went.

We potted about 2,000 azaleas, and we didn't even make a dent. Maybe, hopefully, at our April meeting, we can get up another team and at our cuttings swap, in June, which is going to be at the Hesters anyway, we could go early and stay a little later and do more potting. They would appreciate the help. Think about it!

If you bought the new Encore azaleas last fall, let me know how they fared during the last cold (18 degree F) spell. Three of mine, 'Rouge', 'Embers' and 'Amethyst', got hit pretty hard.

Jim Thornton, Public Relations and Membership

Members' News

Jim Thornton has been on the tour circuit lately, having a great time and hopefully bringing in some new members. Recently, he was invited to speak at both the Rockdale and Newton County Extension Offices to talk about azaleas. The presentation was a slide presentation of various azaleas and gardens. He has been invited back to talk about how to propagate azaleas in June.

If any of you have an occasion to speak or participate in these types of activities, please let us know so we can blow your horn! Besides, we need to let groups know we're available, and we need the visibility.

We just heard that Ben Reid is recovering from open heart surgery...five by-passes. He is doing great and Jim Thornton told him that we look forward to seeing his smiling face at meetings again.

We now have an azalea to name in honor of Ralph Bullard. It's a seedling grown by at-large member of the ASA and member of the ARS, Earl Sommerville. Earl has promised to take cuttings for us and the local ARS Chapter this summer. We look forward to getting these plants and start sharing. (Don't forget to register that plant with Jay Murray!)

Transplant Nursery, the site of the next meeting, has a web site (http://transplant-nursery.com.trans_main.ntml). It consists of their catalog of bloom time, native azaleas, rhododendron, evergreen azaleas, camellias, and companion plants.

Azalea Society of America

Minutes of the Business Meeting

Tysons Corner, McLean, Virginia

May 2, 1998

The evening started with a social hour and after a delicious dinner, Harry Weiskittel gave the keynote talk about the Marshy Point Nursery and his hybridizing hobby. After a five-minute break, Joe Klimavicz resumed the proceedings and thanked all the garden hosts and chapter workers for their marvelous work. (Secretary's note: many marveled at the planning around D.C. traffic.) He then turned the meeting over to the President, Jim Thornton, for the business meeting. Jim congratulated Joe, his team and the Northern Virginia Chapter for a job well done.

Bob Hobbs announced that there was a tie for the award for best article in **THE AZALEAN** for 1997. The winners were Alice Holland for "How It All Began" and Dr. Kathleen Kron for "Identifying the Native Azaleas".

Bill McIntosh has resigned as the Society Secretary and will be greatly missed. Ruth Bryan was introduced as the new secretary. Art Vance will maintain the Society's data base and the slide library. Charles Owen has stepped down as a director and Maarten van der Giessen has joined the board of directors in Doctor Owen's place. A biography of Maarten follows these minutes.

Bob and Belinda Hobbs are retiring as editor and associate editor of **THE AZALEAN** after ten years of invaluable service. The big job of finding a new editor is in progress. An editorial staff will be formed to work with chapters to solicit articles for **THE AZALEAN**.

Jim stated that the Society needs membership, new direction and new image. Jim also announced a new corporate relationship with Pursell Industries, Inc. makers of STA-GREEN® fertilizer and by doing so can help towards the new direction and new image for the ASA. A recruiting committee has been formed to entice younger adults to become members. Vice President Bill Bode will chair. Joe Klimavicz, Bill Lucas and John Migas will serve as advisers. A welcome package will be re-vamped and sent to chapters to assist in these goals.

There is to be a one-time sale of complete sets of back issues of **THE AZALEAN**. Order forms will appear in a future issue of **THE AZALEAN**.

Maarten van der Giessen gave highlights of the forthcoming Azalea Society Convention to be held in Mobile, AL, April 1-4, 1999.

Ruth Bryan, ASA Secretary

Maarten van der Giessen

Maarten van der Giessen attended Memphis State University from 1976-78, and majored in Chemistry at the University of South Alabama in Mobile, AL from 1979-1984. He worked for Cottage Hill Nursery; Container division in Mobile, AL as Propagation, Production, and finally Assistant Manager from 1985 to 1990. In 1990 he left Cottage Hill to start van der Giessen Nursery, Inc. in Semmes, AL with his father, Peter, where he is currently Vice-President and manager.

Van der Giessen Nursery is a seven-acre greenhouse operation producing a wide range of ornamental liners for

the wholesale trade. Currently, they are producing approximately one and a half million liners and rooted cuttings annually. The nursery leased a 90-acre site in 1997, and is expanding into the container market.

Maarten is an active member of the Azalea Society of America, the American Rhododendron Society, the International Plant Propagators Society, and Past President of the South Alabama Nurserymen's Association. His interest in "alternative" azaleas dates to his work with azaleas at Cottage Hill. He and Peter are actively pursuing ways to introduce new plants into commercial markets at van der Giessen Nursery.

WANTED !

At the convention the Board of Directors authorized several projects for us to work on and we need your help!

The first is to find a replacement Editor for **THE AZALEAN** since Bob and Bee Hobbs will be retiring with the completion of the December issue. So far we've been unable to find someone internally and we're seeking outside help, possibly from a college or university, or maybe another professional editor.

Bill Bode, our Vice President, is heading up the search and would like your input. He can be reached at 504-892-5105 or 235 ROBINHOOD RD., COVINGTON, LA 70133.

In addition to this, Bill is also heading up a new petition to gain new members. Assisting Bill with the Membership Recruitment Committee are Joe Klimavicz, John Magis and Bill Lucas. If you have any ideas, etc., please contact these guys.

About the back issues of **THE AZALEAN**....ASA Director Col. Murray Sheffield (and wife Inez) will be distributing and collecting your money. Details will come out in the September issue.

Finally, another project I will head up is to revamp our welcome package and application brochure. In addition we plan to develop a pamphlet on the basic azalea culture. Again your input will be greatly appreciated but please hurry, we want to get started like NOW! You can reach me at 884 June Drive, Conyers, GA, (770) 483-1593 (fax same #).

Jim Thornton, President ❑

Chapter Achievement

Following is a list of Chapter membership numbers as of May 19, 1998.

	Members	
	Total	*New*
Ben Morrison	**33**	*1*
Brookside Gardens	**126**	*10*
Dallas	**46**	*5*
Louisiana	**31**	*2*
Northern Virginia	**67**	*7*
Oconee	**77**	*6*
Richmond, Virginia	**31**	*11*
Tri-State	**24**	*1*

Society Honor Roll 1998

Endowment Members

L. Malcolm Clark
Jane Newman
Don Voss

Sustaining Members

William B. McIntosh
Dr. and Mrs. Donald E. Moreland
W. T. Norris, Jr. MD

PRIZE FOR BEST ARTICLE IN THE AZALEAN—1997

Alice Holland
&
Kathleen A. Kron

In 1989, the Board of Governors authorized the editor of **THE AZALEAN** to establish an annual prize for the best article to appear in **THE AZALEAN**. The concept was to acquire through donations, a fund which when invested would provide an annual prize for the best article published in **THE AZALEAN**. Funds were donated by the following chapters to establish the "CHAPTER'S PRIZE":

Tri-State
Richmond, VA
Ben Morrison
Northern Virginia
Brookside Gardens

As stated in the September 1990 issue, the best article each year will be selected by a poll of the membership. The prize will be announced and awarded at the Annual Meeting of the Society.

The prize for Best Article in **THE AZALEAN** in 1997 has been awarded to Alice Holland for her article "How It All Began" which appeared in the December 1997 issue of **THE AZALEAN** and to Dr. Kathleen A. Kron for her article "Identifying the Native Azaleas" which appeared in the September 1997 issue. The editor and staff wish to express a special thanks to these authors for their efforts on behalf of the members of the Azalea Society of America. ❑

Report of the Membership/Public Information Committee for 1998

William C. Miller III

For the period May 1, 1997 to March 31, 1998 (an 11-month period and a one-time adjustment to better fit the National Meeting and **THE AZALEAN** cycle), I submit the following report. Fifty-two items of correspondence excluding electronic mail (e-mail) were received from twenty-three states (and the District of Columbia) and four non-North American countries (Poland, England, Australia, and Sweden). The most mail came from North Carolina with nine followed by Virginia with five. May and October of 1997 were the busiest months with eleven and nine items of correspondence respectively.

Last year I reported on the existence of the Internet web page that the Louisiana Chapter had established. Beaten to the punch, my plans for a personal web page finally came to pass in May, and I created a home page for "The Azalea Works," my personal academic and commercial endeavor (the Universal Resource Locator or URL is www.theazaleaworks.com). Following the example provided by the LA Chapter, I thought to include information about the ASA and a membership application. As of April 1, 1998, six people have joined the ASA, as a consequence of discovering my web page. It is probable that they would not be members today otherwise. With the advent of my web page came e-mail capability. E-mail messages from as far away as Australia have been received. If nothing else, the experience demonstrates the importance of the ASA moving forward and establishing its own official web presence without delay. Also, I predict that e-mail will begin to play a bigger role in the administrative operation of the ASA.

I would like to thank the nurseries who sent me catalogs and plant lists. On occasions, I am asked where a particular cultivar can be obtained. It is helpful to me to have your catalogs and plant lists on hand. I would also extend a special thanks to the folks who promoted the ASA in their catalogs. Every little bit helps. Please make sure that you report the dues as $25 and the address as:

Membership Committee
The Azalea Society of America
P.O. Box 34536
West Bethesda, Maryland 20827-0536

For those who are comfortable with the World Wide Web and would like to obtain ASA membership information electronically (at any hour of the day), the URL is www.theazaleaworks.com/asa.htm. An application form can be printed from www.theazaleaworks.com/appl.htm.

A supply of membership brochures was mailed to the local chapters on February 21, 1998. Brochures are being supplied from the National level to help support the chapters in their respective local, public outreach programs. As I have stated previously, membership is a local function and a local responsibility.

On the subject of the ASA brochure, a phone message was left on my home answering machine in mid-January. A gentleman had picked up a copy of the ASA brochure while visiting Brookside Gardens and was contacting me since my name was the closest in the enclosed table. He was interested in developing a brochure for a water garden club and was impressed with the design and content of the ASA brochure. He wanted to know if I could tell him who designed the ASA brochure, and he wanted to know who printed it. I was more than pleased to tell him that I had designed it using WordPerfect 5.1 and that Tom Phillips at Hour Printer, Inc., in Silver Spring had done the printing. Someone once said that imitation is the sincerest form of flattery.

While "surfing the Net," I discovered a number of references to the ASA. As I suspected, they were seriously outdated. I contacted the appropriate individuals and provided them with current information. For those who have an interest in locating new web sites about gardening, some URLs are:

The Atlanta Garden Connection:
www.atlgarden.com

GardenNet:
TRINE.COM/GardenNet/GardenAssn

A Guide to Plant Societies:
www.ianr.unl.edu/pubs/NebFacts/
nf94-184.htm

In an ongoing effort, another brochure mass mailing exercise was launched this year to exert a positive effect on ASA membership. Over one thousand brochures were mailed in two batches, 601 in early March and another 414 in early April. Many thanks to Bobbi McCeney, Mary Rutley, and Dottie Murphree of the Brookside Gardens chapter for addressing all those brochures. Special thanks also go to Bee and Bob Hobbs for pre-processing and mailing both batches.

An experiment was conducted with the dues renewal notices for the current (1998) membership year. Rather than having renewals returned to the official ASA address as has been routinely done in the past, all of the renewals for this year were sent directly to the Treasurer. The experiment has not yet been evaluated, but from my perspective there were no major problems, and in fact, my burden was lessened. One minor problem involved members who utilize subscription services (usually institutional members). The subscription services (e.g.,

Faxon, EBSCO) did not get the word and renewals were sent to the official box rather than directly to the Treasurer. The redirection of the dues renewal notices also meant that it was now the Treasurer's responsibility to closely coordinate with the updating of the database, the production of mailing labels by the database manager, and any late (post March 1) renewals so that no members fell between the cracks. Invariably, there are always renewals, address changes or modifications, or new members that surface after the mailing labels are generated but before **THE AZALEAN** is mailed. These have to be coordinated with Bee and Bob Hobbs.

It is worth taking a moment to remind all hands that all ***new*** membership applications should be directed to the official ASA address at the West Bethesda post office. There were a number of instances recently where the regular procedure was not followed. This complicated matters and caused delays in new members receiving the "new member welcome packet" which contained time-sensitive information.

On the subject of the "new member welcome packet," we desperately need someone to write a four to six page "introduction to azaleas" that could become part of the new member welcome packet. It should be designed to get the new member, who perhaps knows little or nothing, up to a basic level of understanding. The final product would have to be reviewed and approved by the BOD, and it should be general enough to be applicable to any part of the country. If anyone would like to tackle such a project, they should contact me at:

Bill Miller
7613 Quintana Court
Bethesda, MD 20817
(301) 365-0692 after 7 p.m.
bill@theazaleaworks.com

At the National Meeting in Atlanta, the Board of Directors (BOD) approved a policy change regarding the receipt of new applications with insufficient dues. With all of the membership brochures that have been distributed over the last twenty years, occasionally an old one surfaces. As one might expect, the frequency of such occurrences increases significantly with every dues increase (e.g., the most recent dues increase from $20 to $25 in 1997). The old policy was to return the application and the insufficient check with a personal note that explained matters. This was a bit of a hassle for me, but it had the advantage of giving the applicant complete control with no lingering administrative complications. Either they resubmitted their application with the proper dues, or they didn't. Historically, most people responded in short order with the necessary amount and everything was fine. Believing that it was "bad business practice" to return money, the BOD directed the Membership Committee to accept all insufficient checks and to process the memberships normally. A "special notice" form letter was to be included in the new member welcome packet that explained that an additional sum was required to bring the dues up to the proper amount. The new process meant that I no longer had to write a personal letter, an improvement from my perspective, but it did nothing to repeal the law of unintended consequences. For example, what does the ASA do if the new member is not responsive to the notice that an additional sum is required? There is nothing in the bylaws that says that the BOD can write it off (as some have recommended), and presumably it becomes the Treasurer's responsibility to pursue such debts. What happens when renewal time comes around and the debt remains unpaid? If the member in question belongs to a chapter, one solution would be to require the local chapter to cover the debt...but that would not work for an at-large member. I believe the change in policy has proven to be a good idea since it has reduced the number of letters that I have had to write. Still, the BOD needs to give this matter some additional thought to resolve the bylaws issues.

A final word on dues...dues notices are mailed in October or November for the coming year. At the end of January or the beginning of February, a second dues notice is mailed to those members who have not responded. My thanks to those members who respond promptly to the first dues notice every year. All members should make every effort to respond to the first notice. It only makes sense.

Finally, I wish to thank Dr. Bill McIntosh with whom I have shared the membership committee responsibility since 1994. Due to personal circumstances, Dr. McIntosh has had to give up his management of the ASA database, a major contribution to the infrastructure and day-to-day operation of the society. It has been a pleasure working with him. His attention to detail, his dependability, and his professional approach to this critically important function have made my job easier while insuring that his successor will have a tough act to follow. ❑

New Members

AT-LARGE MEMBERS

Bob & Sharon AIfaro
303 THORNBERRY CT
MT AIRY MD 21771
410-549-0391

Merton A Bell
536 MAIN ST
COTUIT MA 02635-3121
508-428-1515

Charles Brocklehurst
1923 FAIRVIEW ROAD
FOUNTAIN INN
SC 29644-9137
864-862-3016

Peter J Cercy
840 PLEASANT GROVE ROAD
YORK HAVEN PA 1737-9012
717-266-4730

Eugene Courtney
35 CAMBRIDGE ROAD
WOBURN MA 01801-3422

Marianne & Bruce Feller
88 OLD FIELD ROAD
OLD FIELD NY 11733-1646
212-578-2659

Gordon & Linda Greenman
5337 LANSDOWNE LANE
MERCER ISLAND WA 98040-4648
206-232-8176

Carol Hiller
22 RENI ROAD
MANHASSET NY 11030

Gary Hwang
P. O. BOX 425
ZEBULON NC 27597-0425
919-269-4101

Tom & Yvonne Lowe
114 NORTHSIDE DRIVE
CEDARTOWN GA 30125-2226
770-748-5004

Geoffrey L Mehl
RD 1 BOX 80
HENRYVILLE PA 18332-9721

Bruce A Paquette
6360 SOUTH 151st PLACE
SEATTLE WA 98188-2584
206-242-4270

H Dickman Pfann
11140 WESTHEIMER ROAD #108
HOUSTON TX 77042-3208

Carter Taylor
1214 AUGUSTA
HOUSTON TX 77057-2212
713-782-3992

BROOKSIDE GARDENS CHAPTER

Irene Asian
12405 BACALL LANE
ROCKVILLE MD 20854-1026

James Boeringer
1131 NOYES DRIVE
SILVER SPRING MD 20910-2720
301-565-5133

Marty Broadhurst
P. O. BOX 482
SHEPHERDSTOWN WV 25443-0482
304-876-1083

Ms Judith Chettle
4702 JAMESTOWN ROAD
BETHESDA MD 20816-2923
301-320-3793

Mr & Mrs Robert H Craft, Jr
5010 MILLWOOD LANE
WASHINGTON DC 20016-2620
202-966-5420

John S Kaylor
11462 HAUGH'S ROAD
KEYMAR MD 21757-8763
301-845-0535

Michael J Raupp
DEPT OF ENTOMOLOGY
UNIVERSITY OF MARYLAND
COLLEGE PARK MD 20742-4454
301-405-3912

Paul & Hazel Shade
9307 EAST PARKHILL DR
BETHESDA MD 20814-3950
301-530-0695

Frances Stickles
3914 BLACKTHORN ST
CHEVY CHASE MD 20815-5056
301-656-0955

Anna Urciolo
6914 WILSON LANE
BETHESDA MD 20817
301-320-2290

BEN MORRISON CHAPTER

Mrs J Hanson Briscoe
P. O. BOX 94
PR FREDERICK MD 20676-0094
410-257-0471

DALLAS CHAPTER

Philip R Monsey
6600 NW 34TH STREET
BETHANY OK 73008-3916
405-789-3974

J C & Robbin Morris
5107 SPRINGMEADOW DRIVE
DALLAS TX 75229-4327
214-369-1596

Barbara S Stump
536 E PILAR ST
NACOGDOCHES TX 75961-5113
409-569-2929

Bill & Linda Summers
5715 DESERET TRAIL
DALLAS TX 75252-2327
972-250-2294

LOUISIANA CHAPTER

Patricia Knight & Hiram Baldwin
576 HWY 26 E
POPLARVILLE MS 39470-3558
601-795-2579

NORTHERN VIRGINIA CHAPTER

Mr & Mrs Norman Beaudry
7921 DEEPWELL DRIVE
BETHESDA MD 20817-1927
301-365-0130

Janet E Edwards
3320 BARKLEY DRIVE
FAIRFAX VA 22031
703-275-6529

Mrs Arthur Frazer
1903 MARTHAS ROAD
ALEXANDRIA VA 22307-1953
703-765-7800

Arlene Kigin
3170 N 18th STREET
ARLINGTON VA 22201-5242
703-524-3651

Linda Knerr
10609 VICKERS DRIVE
VIENNA VA 22181-3029
703-938-1351

Margaret White
3301 HAWTHORN LANE
FALLS CHURCH VA 22042
703-532-1794

Dave Willmore
7500 PRINCE COLE CT #8
MANASSAS VA 20111-1724
703-361-1492

OCONEE CHAPTER

Andrea C Bowen
1056 TURNER ST
CONYERS GA 30012-4534
770-483-3456

Lewis Hull
726 McDANIEL MILL ROAD
CONYERS GA 30094-5038
770-483-8687

Theresa Schrum
1365 TARAMORE DR
SUWANEE GA 30024-2849
770-497-1011

Bruce Seal & Liz Rachun
137 BUTTONWOOD LOOP
ATHENS GA 30605-4947
706-549-3380

Leo F Shatzel
920 KENYAN COURT
LAWRENCEVILLE GA 30045-7349
770-682-7453

Colin D Stewart
UGA DEPT OF ENTOMOLOGY
1109 EXPERIMENT STREET
GRIFFIN GA 30223-1797
770-228-7297

RICHMOND VIRGINIA CHAPTER

Virginia A Boudreaux
7 OLD POST OFFICE ROAD
COLES POINT VA 22442
804-472-2323

Azalea Calendar

1998

September 8	Dallas Chapter Meeting at Highland Park Town Hall at 7:00PM
October 13	Dallas Chapter Meeting at Highland Park Town Hall at 7:00PM

1999

April 1-4	Convention and Annual Meeting, Mobile Alabama