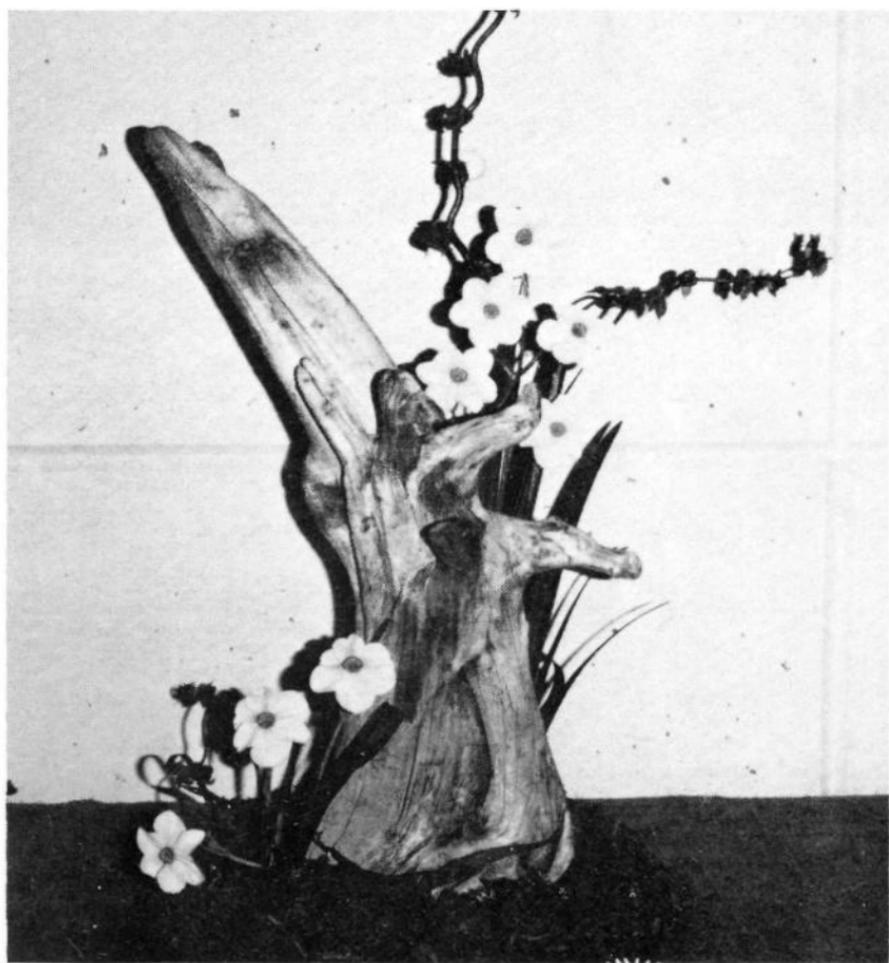


Vol. 16, No. 1
September 1979

The

DAFFODIL JOURNAL



Quarterly Publication of
AMERICAN DAFFODIL SOCIETY, INC.

The Daffodil Journal

ISSN 0011-5290

Quarterly Publication of the American Daffodil Society, Inc.

Vol. 16

Number 1

SEPTEMBER 1979

OFFICERS OF THE SOCIETY

CHARLES H. ANTHONY, *President*

27 Gale Road, Bloomfield, Conn. 06002

MRS. JOHN BOZIEVICH, *First Vice President*

6810 Hillmead Road, Bethesda, Md. 20034

MRS. ERNEST K. HARDISON, JR., *Second Vice President*

1950 Chickering Road, Nashville, Tenn. 37215

MRS. MARVIN V. ANDERSEN, *Secretary*

7 Perth Drive, Wilmington, Del. 19803

WELLS KNIERIM, *Treasurer*

31090 Providence Road, Cleveland, Ohio 44124

Executive Director — WILLIAM O. TICKNOR

Tyner, North Carolina 27980

(Tel. 919-221-8388)

All correspondence regarding memberships, change of address, receipt of publications, supplies, ADS records, and other business matters should be addressed to the Executive Director.

THE DAFFODIL JOURNAL is published quarterly (March, June, September and December) by the American Daffodil Society, Inc., Tyner, N.C., 27980. Second class postage paid at Tyner, N. C., and additional mailing office. Subscription price (including membership) is \$7.50 per year, \$20.00 for three years. Single copies of current or back numbers are \$1.50.

Chairman of Publications

Mrs. William Pardue
2591 Henthorne Road
Columbus, Ohio 43221
(Tel. 614-486-2775)

Editor, Daffodil Journal

Mrs. Paul Gripshover
Rt. 3, 1206 Natchez Trace Road
Franklin, Tennessee 37064
(Tel. 615-790-6202)

Articles and photographs (glossy finish) on daffodil culture and related subjects are invited from members of the Society. Manuscripts should be typewritten double-spaced, and all material should be addressed to the Editor.

DEADLINE FOR THE NEXT ISSUE IS OCTOBER 15, 1979

SCHEDULE OF MEMBERSHIP DUES IN THE AMERICAN DAFFODIL SOCIETY

Individual	\$7.50 a year or \$20.00 for three years
(Juniors, through 18 years of age, \$3.00 a year)	
Family	\$10.00 a year for husband and wife, with one copy of the Journal, or \$27.50 for three years.
Individual Sustaining Member	\$10.00 a year
Individual Contributing Member	\$15.00 a year
Overseas Member	\$5.00 a year or \$12.50 for three years
Individual Life Membership \$100.00	

THE COVER PHOTO

is of the arrangement which was Best in Show in Columbus, Ohio, at the Midwest Regional Show. It was the winner of the Helen K. Link Trophy and is the entry of Mrs. Nancy Heber, Columbus, Ohio. (Gripshover photo)

IN THIS ISSUE

<i>Designing Delightful Daffodils</i>	<i>Jennie Belle Adler</i>	3
<i>Bulletin Board</i>		7
<i>Christmas Gift!</i>	<i>William O. Ticknor</i>	11
<i>The 1979 Daffodil Shows</i>	<i>Mrs. Herman L. McKenzie</i>	14
<i>The Convention: Boston, 1979</i>	<i>Richard T. Ezell</i>	30
<i>Preferred Daffodils</i>	<i>Willis H. Wheeler</i>	34
<i>Daffodil Diseases and Pests: II</i>	<i>Dr. Theodore E. Snazelle</i>	35
<i>Here and There</i>		43
<i>Planting Tips</i>	<i>Frances Armstrong</i>	47
<i>Board of Directors Meetings</i>		47
<i>Origin of Tazettas</i>	<i>W. T. Aesop</i>	49
<i>That Brave Yellow Daffodil</i>		50
<i>D-Day 1979</i>	<i>Mrs. William C. Baird</i>	51
<i>Tazetta Breeding: An Update</i>	<i>Dr. Harold Koopowitz</i>	60
<i>Index to Volume 15</i>		63

DESIGNING DELIGHTFUL DAFFODILS

JENNIE BELLE ADLER, *Columbus, Ohio*

Do you arrange daffodils as well as grow them? Hopefully this article will inspire you to try. Daffodils do have some difficulties in arranging, as all flowers do, but these can be overcome nicely.

1. The stems are quite straight and perhaps you need a slight curve. To achieve this, insert a pipe cleaner into the stem and gently bend it to your specification.

2. The stem, being hollow, is difficult to put into a pin cup or oasis without the bottom curling. Simply wrap a piece of florist tape around the bottom of the stem but leave the bottom open for water.

3. The pose of daffodils is enchanting, but you do not want all of them looking directly at you in a design. Place them in slightly different positions so some look sideways or upwards. Also place some in the back of the design to give depth.

4. In a flower show, niches are various sizes but it is a bit difficult to fill a 44" x 30" niche with a daffodil design as the blooms are not too large. This can be solved by using smaller niches.

5. In your design, give your plant material "breathing room." A compact design does not hold the eye as well as an airy one. This is

achieved by using interesting line material, other small flowers, or unusual foliage. Whenever you use plant material that is not commonly known, put the name on a card by your design to educate others.

You must always keep in mind the Elements and Principles of Design. I quote from the National Council of State Garden Clubs, Inc. *Handbook for Flower Shows*.

ELEMENTS OF DESIGN

SPACE	the placement of lines and forms that determine the size and limits of space
LINE	creates visual paths enabling the eye to travel easily through the design
FORM	shape or outline — may be closed or open, regular or irregular
SIZE	visual effect
COLOR	a practical knowledge and understanding of the color sense itself, the way in which the human eye, brain, and psyche react to what is seen (Study the color wheel.)
TEXTURE	surface finish of materials which appeal to sight and touch, e.g. rough or smooth, coarse or fine, glossy or dull, hard or soft
PATTERN	silhouette of the finished design

PRINCIPLES OF DESIGN

BALANCE	visual stability; the result of placing equal weight on opposite sides of an imaginary central axis; can be symmetrical or asymmetrical
PROPORTION	relationship of areas and amounts to each other and to the whole
SCALE	size relationship; size of flowers to each other, other plant material used to flowers, design to accessory, etc.
RHYTHM	suggests motion, makes design alive
DOMINANCE	implies subordination; for something to be more effective, something else must be less effective
CONTRAST	achieved by placing opposite or unlike elements together in such a way as to emphasize differences

HELPFUL SUGGESTIONS FOR A FLOWER SHOW OR A DESIGN IN YOUR HOME

Plant material should always predominate unless the schedule states otherwise. Accessories give aesthetic pleasure when used, but you must be sure they are in scale and really belong with your design. If you have any doubt, leave it home.

Many fascinating line materials and foliage may be used with daffodils to add texture. This is necessary because daffodils have a smooth texture as opposed to rough.

Daffodils may be grouped together, making a large form, which is most elegant for use in abstract or modern design.

A horizontal design for a coffee table is most attractive and easy to do because of the straight stems. Use oasis in your container.

Antiques, such as coffee grinders, candlesticks, etc., have a great affinity with daffodils and make charming designs.



Left: An Oriental style arrangement by Ruth Pardue, Columbus, Ohio; right, a modern arrangement by Jackie Roederer, Columbus, Ohio.

Daffodils and fruit designs are beautiful especially because of the delicate clarity of colors. Most vegetables are a bit large, but many smaller vegetables combine with daffodils very well.

Let us not forget the dainty miniature daffodils. They are most pleasing in small 3, 5, or 8 inch designs. A small jewel box makes an ideal container.

Have you tried the new and exciting exhibition table designs? Or how about a lovely breakfast tray class in a show or for your home?

Daffodils have a spiritual quality for use in a religious class. Here if you are using a Madonna as your accessory, be sure the size of your bloom does not overpower the figurine. Line material may be above her head, but no flower.

Attractive door hangings can be made with daffodils using pin cups or oasis for holding plant materials. This is good for your front door on May Day.

Be sure all plant material in your arrangement is conditioned and clean.

Daffodils are especially lovely combined with weathered wood or rocks. It will give a most tranquil feeling. Use woody plant materials such as ferns. For you who dry flowers, do make a daffodil plaque on a piece of

wood, slate, reed mat, etc., for a show and then have more enjoyment when you put it on a wall of your home.

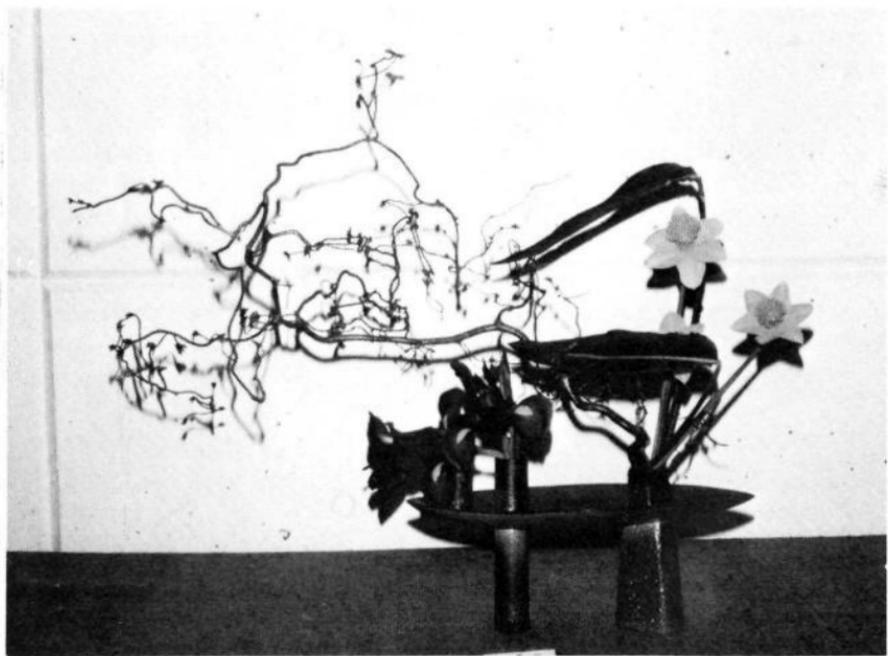
Daffodils, either dried or fresh, make adorable nosegays combined with other plant material such as baby's breath, forget-me-nots, or small roses.

Have you ever tried a corsage? For a show, corsages can be staged on a parasol, on a fan, or on an evening purse.

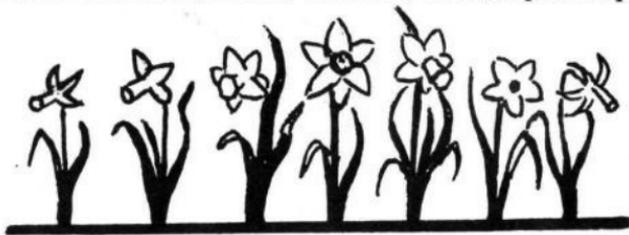
Daffodils are excellent for use in all types of Oriental designs. Since many of these arrangements use very little plant material—they depend on the beauty of line—the blossoms really stand out.

Daffodils also lend themselves to delightful mass or line arrangements in all shapes of baskets. Try these, one or more, on your table for a dinner party.

Please do try arranging this most beautiful flower. You cannot learn by watching someone else, reading a book, or looking at pictures. You **MUST** do it yourself—trial and error and then success! You will have many "magical moments" with the aristocratic, dignified, and captivating daffodil.



Arrangement by Sherry Barber, Columbus, Ohio (Gripshover photo)



BULLETIN BOARD

The 1980 American Daffodil Society Convention and Show will be held March 27-29, 1980, in Memphis, Tennessee, at the Hyatt Regency Hotel, 939 Ridge Lake Boulevard. The show will be held on March 27, and entries may be made from 4-10 p.m. on March 26, and 7-10 a.m. on March 27. Convention chairman is Mrs. Glenn L. Millar, and Show Chairman is Mrs. Morris Lee Scott. Complete details will be in the next *Journal*.



"WHERE CAN I GET . . .?"

CULTIVAR:	DESIRED BY:
Gloriosus 8W-Y (orW-O?)	William Welch, Garzas Road Carmel Valley, California 93924
USA cultivars to swap for NZ cultivars	R.J. Hill, Kaimatorau Rd., No. 3. R.D. Palmerston North, North Island New Zealand

(Editor's note: Before sending bulbs to New Zealand, check on requirements for health certificates, etc.)



NOTE FROM THE PRESIDENT TO THE CHAIRMEN OF STANDING COMMITTEES

I have gradually been approaching the task which I announced at my election, of having written descriptions of each Standing Committee's duties. From time to time I have discussed the subject with such Chairmen, and asked at the same time for their suggestions for changes that would improve the value (if possible) of their assignments.

I have had excellent co-operation as far as I have gone. But as I approach the end of my term of office, I find I still have quite a way to go to complete the job.

If those whom I have not yet approached would take this as a request, it would be most helpful.

Letters dated after October 1st should be addressed to me in Bermuda. My address there is: "Idlewild," Shelly Bay, Hamilton Parish 2-13, Bermuda

Air mail postage (quite necessary) is 25¢ per half ounce. Air mail forms available at all post offices are 22¢.



October 1, 1979, is the deadline for sending information for 1980 spring shows to be listed in the December *Journal*. Include the date, city, if State or Regional show, the name of the sponsoring organization, location of show, and name of the person to contact for information. Send all information to Mrs. Phil M. Lee, 6415 Bresslyn Rd., Nashville, TN 37205.

A revised edition of the Procedure for Obtaining Awards has been printed. Copies may be obtained by sending \$1.00 to Mrs. Lee. Make check payable to the American Daffodil Society.



DAFFODIL SEED BROKER

The Seed Broker is loaded with down under open pollinated seeds and also has a fair amount of North Carolina open pollinated seeds. Since all of these seeds came from plantings where fine parents abound they could produce some world beaters—and in variety, too. Jim O'More and Phil Phillips of New Zealand apparently have a bee hive at the end of every row of daffodils. The Seed Broker had open pollinated seeds in a jonquil seedling; in Division 5 Havilah; and in Division 8 Aspasia, all of which should have been sterile. (Those seeds are already planted.)

There is also available a great amount of *N. jonquilla* seed that is almost certainly selfed. This came from particularly vigorous, heavily flowered plants in the gardens of the early 18th century Cupola House in Edenton, N. C. The June issue of the magazine *Antiques* has an illustration showing the Cupola House and its *jonquillas*.

Anyone who wants any amount of open pollinated daffodil seeds should send one or two 15¢ stamps to the Daffodil Seed Broker, Tyner, N. C. 27980.



DAFFODILS 1979-80

Daffodils 1979-80, the widely known RHS annual on daffodils, can be purchased from the Executive Director, Tyner, North Carolina, 27980, for \$4.25. Checks should be made payable to the American Daffodil Society. Those persons on the special list to receive the RHS book will have it sent to them automatically and billed. The list has been revised to drop those who so wished and to include those who asked that their names be added.

—W.O.T.



The Royal Horticultural Society's publication *Daffodils 1979-80* will contain a full account of the International Daffodil Convention, as seen through the eyes of the various visiting contingents.

John Blanchard, who delivered the Convention lecture of species daffodils in their natural haunts, will be contributing a resumé of the talk. Fred Whitsey, Editor of *Popular Gardening*, will be making a contribution, as it were, from the man in the street. There will be memories too from Ron Sargent — known to exhibitors at Westminster for over forty years and the guiding light behind the scenes.

Frank Waley, one of the most knowledgeable on species, along with David Lloyd and Michael Jefferson-Brown will be adding their not inconspicuous weight to the specialist field, along with F. W. Shepherd on jonquils.

Early publication is promised and a block delivery should arrive by the fall.

—D. J. PEARCE, Colchester, England



ARTIFICIAL CHROMOSOME DOUBLING IN NARCISSUS AND ITS IMPLICATION FOR BREEDING *N. tazetta* HYBRIDS, by C. North, *Scottish Horticultural Research Institute*

ABSTRACT

Twin scale portions of bulbs of *Narcissus* × *poetaz* cultivars (n = 17 or 24) were treated with 0.1% colchicine placed as a drop between the scale portions where they join the base plate. From 26 bulbs, 25 bulbils with double the chromosome number of the original cultivars were obtained, representing 3.8% of the total number of treated scales.

(The complete text of the above was published in *The Daffodil Society (of England) Journal* for January, 1978. Xerox copies available from the ADS *Journal* editor for 50¢ to cover Xerox and mailing costs.)



(reprinted from The Daffodil Journal, March, 1968)

There may be directors who are unaware of the fact that expenses incurred in attending meetings of the Board of Directors are deductible from their federal income tax returns. On Nov. 23, 1959, the Internal Revenue Service ruled that the ADS was exempt from federal income tax as an educational organization under Sec. 501 (c) (3) of the Internal Revenue Code. As such, contributions to the ADS are tax-exempt and expenses incurred in attending board meetings are considered to be contributions to a tax-exempt organization. This applies to transportation, lodging, and meals which can be directly attributed to carrying out one's responsibilities as a director. Receipts for transportation and lodging should be obtained and kept in case the deduction is questioned. Some IRS auditors, and a good many private tax practitioners, are not familiar with this section of the Code and disallow the deduction, but it is a proper one and can be made to stand up, although occasionally it requires an appeal from the auditor's decision.



RHS COLOR CHART

The Society has for sale the Color Chart of the Royal Horticultural Society. It is a long range investment for any gardener and almost a must for a hybridizer. A hybridizer should describe his newly registered daffodils by this chart. It consists of 800 color swatches in a total of four fans. The Executive Director tried it against a dozen different daylilies and it was easy to use and convincing.

An enormous amount of thought, both technical and horticultural, went into the development of this chart and a thorough description of it plus a cross reference to earlier color charts is included. The price for the chart is \$12.50 postage included. A limited number are on hand but all orders will be filled in time.



U. S. CUSTOMS SAYS "NARCISSUS"

(reprinted from *The Daffodil Journal*, March, 1968)

Part 125.15 of the Tariff Schedule of the United States includes narcissus bulbs in its list of items dutiable at the rate of \$2.10 per 1,000 bulbs. In that list there is no reference to the word "daffodil." Therefore, when narcissus bulbs pass through Customs and the accompanying invoice or packing list merely shows "bulbs" or "daffodils," the Customs official handling them is quite unlikely to know that they are narcissus. Consequently, he considers them to be governed by Part 125.30 of the tariff regulations which is a "basket" category covering many odd kinds of bulbs not mentioned in Part 125.15. Those bulbs in the "basket" category are subject to a higher duty rate of 5.5 per cent ad valorem (the invoiced value).

There are two things to do with regard to a duty overcharge. First, instruct your foreign shipper to show "narcissus" on the invoice and any other papers accompanying the consignment. Second, if you are overcharged, pay the duty (unless you are at the port of entry and are dealing with the one actually making the duty decision) and then submit a claim for a refund. To do so, send your request to the Collector of Customs at the port where the bulbs entered. With it send a photocopy of any papers accompanying the shipment (invoice, receipt for duty paid, etc.) and point out that while the papers showed the common name "daffodil," the bulbs are technically "narcissus."

ADS JUDGING SCHOOLS

Course II of ADS Judging School is scheduled for April 14, 1980, in Richmond, Virginia. Chairman: Mrs. Lester Belter, Rt. 2, Box 217-A, Mechanicsville, Virginia 23111.

Course III will be held Sunday, April 20, 1980, at Goethe Link Observatory, Brooklyn, Indiana. Chairman: Mrs. Goethe Link, P. O. Box 84, Brooklyn, Indiana 46111.

Students needing make-up in sections of Courses II and III should watch for future school listings in the *Journal*, or if there are enough students from a region who need make-up they may ask their own Regional Vice-President about the possibility of make-up courses. Make-up courses in THEORY may be held at any season but the Identification and the Point Scoring make-up course must be given when daffodils are in bloom.

Mention was made in the March, 1979, *Journal* that a notation is made on the file cards of all accredited judges who audit Course I. Although there is no requirement for this, there are twenty-seven of our judges who have done so.

From Arkansas, they are Mrs. Volta Anders, Mrs. Jesse Cox, and Mrs. Charles Dillard; from California, Dr. Stan Baird, Mrs. Robert Robinson, and Mrs. James R. Wilson; Mr. & Mrs. Charles Anthony from Connecticut; Mrs. Merton S. Yerger from Maryland; Mrs. Betty Barnes, Mississippi; Mrs. J. E. Anewalt, Mrs. Alfred Hanenkrat, Mrs. Neil Macneale, and Mrs. Harry Wilkie from Ohio; Mrs. S. F. Ditmars from Oklahoma; Mrs. W. D. Bozek, Mrs. Royal Ferris, Mrs. Frank Harmon, Mrs. S. L. Ligon, Mrs. W. D. Owen, Mrs. James Piper, Mrs. R. H. Rodgers,

Jr., and Mrs. J. E. Weaver from Texas; and Mrs. LaRue Armstrong, Mrs. George Parsons, Mrs. D. B. Perrin, and Mrs. Berkeley Williams, Jr. from Virginia.

MRS. MERTON S. YERGER, *ADS Judging Schools Chairman*

CHRISTMAS GIFT!

WILLIAM O. TICKNOR, *Executive Director*

In my part of the South we have a custom on the 25th of December of yelling "Christmas Gift" when we first see a relative or friend. Whomever says it first is supposed to give the other a gift. It doesn't work, of course, but the idea makes for a pleasant game.

I realize I'm a bit early yelling "Christmas Gift" but we don't publish our *Journal* too often and sometimes in spite of great effort our December *Journal* arrives in January. So, I will suggest now some sure fire Christmas presents that you can buy for a friend or suggest to your spouse that he or she may buy for you. It is a peculiar fact that daffodil fanatics come alive in January. They suddenly want something to read and dream about while bleak winter hides the promise of spring. It is, strangely, a busy time for the Executive Director.

George Lee started a book selling service and a service it is. We are a non-profit organization — and deliberately so. Costs are covered in the sales and any small profits go back into new inventory. Prices on old books go up and postage zooms so prices do increase. George Lee started the service with a great quantity of *RHS Daffodil and Tulip Yearbooks* purchased for the Society by Serena Bridges years ago. This large stock has now been largely sold out. George made additional purchases as he could and of course added new yearbooks as they were published — but never in great quantities.

As a disciple of Mr. Lee, I have the old stock in hand and have acquired quite a number more of the old and new *RHS Yearbooks*. There are some years for which we have none or one or two. If there are none when your order arrives we will back order it and send it in time. It might be best to order and be billed on delivery although a check might stir us to greater effort.

For those of you who do not know the *RHS Yearbook*, it is the time honored annual bible of daffodils. As seen by the British eyes and with contributions by Americans and others, it tells the story each year of the best daffodils, the latest, and the different. It is well illustrated and the books teem with articles by Guy Wilson and all of the other daffodil greats. Until and including 1971, the *Yearbook* was a sewed bound book in the old sense of the word. Today's high costs put it into a smaller but still useful version the first of which was called *1971 Daffodil Season Report*.

Following are the yearbooks presently available as of the date of this *Journal* and their price until further notice.

RHS DAFFODIL AND TULIP YEAR BOOK

1913	none	.....	1951-52	5	5.00
1914	1	20.00	1953	4	8.00
1915	none	.....	1954	1	12.50
	(None published)		1955	2	8.00
1933	none	.....	1956	3	8.00
**1934	1	8.00	1957	1	8.00
**1935	1	8.00	1958	5	5.00
**1936	1	8.00	1959	2	8.00
**1937	1	8.00	1960	3	8.00
1937	1	12.50	*1961	1	7.50
1938	none		*1962	none	7.50
1939	1	12.50	*1963	none	7.50
1940	1	12.50	*1964	none	7.50
***1942	1	5.00	*1965	1	7.50
	(War years)		*1966	none	7.50
**1946	1	4.00	1967	12	5.00
1946	10	5.00	*1968	1	7.50
1947	2	8.00	1969	12	5.00
1948	11	5.00	*1970	none	7.50
1949	10	5.00	*1971	1	8.00
1950	6	5.00			

DAFFODIL SEASON REPORT

1971	1	\$4.00
------	---	--------

DAFFODILS

1972	5	4.00
1973	4	4.00
1974	3	4.00
1975	4	4.00
1976	4	4.00
1977	3	4.25
1978	6	4.25

*copies of these books are on order and should arrive by fall

**paperback

***combined AHS-RHS

The above list includes books that are brand new with shiny dust covers. Some are second hand and some are without dust covers. All are clean, legible, well bound books. Within the cult of daffodils there is a sub-cult of collecting the yearbooks. A pure snob is one who admits to having the entire set.

OTHER BOOKS

In so far as it is available anywhere at all the Society has something on daffodils for everybody. The back cover of the *Journal* tells the prices of our other literary treasures. *Daffodils to Show and Grow*, 1977, and the *Handbook for Judging and Exhibiting Daffodils* are "musts" for exhibitors. *The Daffodil Handbook*, 1966, is useful and delightful to any one who

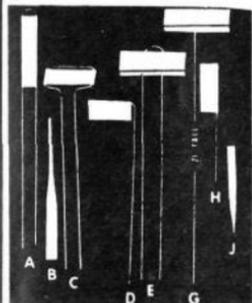
loves daffodils and it is probably the best book published on the subject. A few copies of the reprint of Peter Barr's delightful 1884 book on daffodils are available. Two copies of Elizabeth Lawrence's *Lob's Wood* are available for \$2.50.

A new and completely up to date Print-out of the *Daffodil Data Bank* will be available early this fall. Those who have the older edition and who buy *Daffodils 1979-1980* with its list of new registrations should be in good shape.

Two copies only of Reverend Joseph Jacobs' book, *Daffodils* (about 1912) are available at \$8.00. Delightfully illustrated, it reads like a novel but tells the story of daffodils of its day. It describes the Classification System — the one preceding Leedsii and Barrii.

Fresh off the press is a most useful little ADS publication called the *Brief Guide*. It tells the story of daffodils and our Society in its simplest form and we send a copy to each new member. It first came into being when Bill Pannill was president and the Executive Director was an eager but minor member of the Publications Committee. The fifteen page book suggests basic show varieties — and also garden varieties — as well as sources for daffodils, advice on culture, and lots else. It even tells of the difference between a daffodil and a narcissus! Every old timer knows all of this but their ideas aren't as well organized if they are about to give a talk. It costs \$1.00. High compliments must be paid to Marie Bozievich, Frances Armstrong, and Mary Lou Gripshover for their part in this revision but most of all to Publications Chairman, Ruth Pardue, who put it all together.

New and most worthwhile is the book, *Daffodils in Ireland*. The excuse for the book was the great World Daffodil Convention but the Northern Ireland Daffodil Group seized the opportunity to tell a remarkable story — a rich story that has to be known by anyone who considers himself knowledgeable about daffodils. Guy Wilson, Lionel Richardson, W. J. Dunlop and their daffodils come alive; the story of Carncairn, Ballydorn, and Rathowen is told. Brian Duncan, Kate Reade, Sir Frank Harrison, Tony Kingdom, Lord Skelmersdale, and George Tarry share their wisdom and tell what is and what is likely to be with British daffodils. It is highly readable and an excellent reference book, well worth the price of \$5.00.



THE PERMANENT METAL LABEL

A—Hairpin Style Markers	10 for \$1.65
B—Plant or Shrub Labels	50 for \$1.50
C—Cap Style Markers	10 for \$1.65
D—Swinging Style Markers	10 for \$1.50
E—Rose Markers	10 for \$1.65
F—Tall Display Markers	10 for \$2.25
G—Tall Single Staff Markers	10 for \$2.15
H—Pot or Rock Garden Markers	10 for \$1.25
J—Small Plant Labels	50 for \$1.25

PAW PAW EVERLAST LABEL COMPANY

Box 93-B

Paw Paw, Michigan 49079

Quantity Prices Available

Postage Prepaid

THE 1979 DAFFODIL SHOWS

MRS. HERMAN L. MCKENZIE, *Jackson, Mississippi*

Daffodil exhibitors never learn. They fuss and fret about the weather, although they can't do anything about it. Sometimes they almost lose faith in their daffodils. But if they persevere, the daffodils themselves will bloom, on their own schedule it often seems; and each spring will seem ever more miraculous.

Mrs. David Frey, the show chairman at Bloomington, reported, "Indiana's weather for at least three weeks before the show was generally cold and stormy with high winds, and we doubted whether we would have sufficient daffodils for a show. Nevertheless the show was staged and amazingly had a high number of first quality blooms with various divisions well represented."

Another experience shared by show chairmen and exhibitors everywhere was related by Mrs. R. H. Rodgers: "We had a very late season and were delighted with the number of entries after a very difficult winter. We had very few first-year blooms, consequently the old reliable flowers of quality recommended themselves."

Across the South and on up through the Midwest Daffodil Belt, a very cold winter and even wetter spring cut the number of entries to about half the usual. But on the West Coast, "For weeks before our show the weather was cool and overcast with intermittent light rains that produced large size and good color for this area, and especially some of the best doubles in many years," according to LaCanada chairman Jay Pengra. In the four California shows there were more than twice as many entries as last season. Another show, this one at the northeast tip of the nation, reporting a big increase was the Nantucket show, with three times as many entries as in 1978.

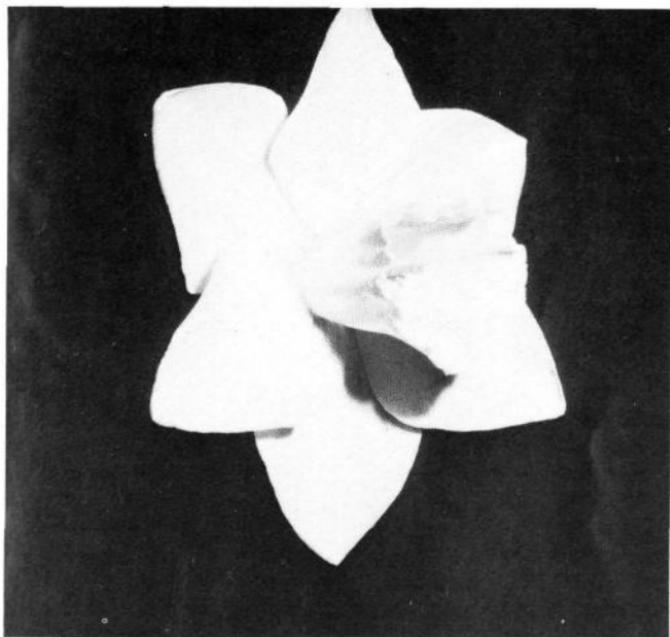
Faith, hard work, and some imaginative promotion pay big dividends in show attendance. Thomas Dunn, chairman in Dayton, said, "We were afraid our show would be small because several of our major exhibitors were in Ireland. But others rallied round, and Course II for judges brought student judges from three other states. We had excellent radio, TV, and newspaper coverage before and through the first day of the show. Over a thousand people viewed the show during its two days; we had our largest show ever, 1,418 stems, compared to 1,222 in 1977."

1979 was the year of the well-traveled exhibitor, and transcontinental showmanship. Kate Macneale took a beautiful bloom of Ceylon from Cincinnati to win the Junior Award in Oakland, while Richard Bailey carried three stems of Charity May from his garden in Olympia, Washington, to win the White Ribbon in Atlanta.

Handy Hatfield of Stoutsville, Ohio, must be declared the winner of the blue ribbon for traveling exhibitors this season. He began his show schedule by winning the Purple Ribbon in Nashville, with a quintet of cyclamineus. In Chillicothe he won the White Ribbon with three blooms of Festivity. In Dayton he won the Quinn Silver Medal, and closed the 1979 year with a spectacular Green Ribbon winner in Columbus.

THE NATIONAL CONVENTION SHOW

Shadow was the Gold Ribbon winner for Mrs. John Bozievich at the ADS Convention Show in Boston. I remember the show-stopping quality of this glistening white large-cup with its beautiful green eye when it was just a numbered seedling in the Murray Evans exhibit at Williamsburg in 1973 and can easily understand its also being chosen the best American-bred flower in the Columbus show. Three blooms of the lovely Richardson double Gay Symphony won the White Ribbon for Mr. & Mrs. Charles H. Anthony. Mr. and Mrs. Anthony were also awarded the Miniature Gold Ribbon for Flomay, and the Miniature White Ribbon went to Mrs. C. G. Rice for Picoblanco.



Shadow, exhibited by Marie Bozievich, was the Gold Ribbon winner in Boston. It was also the best American-bred flower in Columbus. (Knierim photo)

Mrs. James W. Riley won the Purple Ribbon with a collection of white daffodils which included Verona, Stainless, Angel, White O'Morn, and Dew Pond. Mrs. Bozievich took the Maroon Ribbon with a selection of exciting new reverse bicolors, Drumawillan, Moonfire, Intrigue, New Day, and Dotteral. In addition, Mrs. Bozievich's Green Ribbon winner included Lemon Beauty, Widgeon, Falstaff, Fastidious, Barnsdale, Milestone, Broomhill, Snowcrest, Lea 1/31/64, Limpkin, Sabine Hay, and April Love.

Dr. Tom Throckmorton used a colorful set of his own hybrid daffodils to win the Red-White-and-Blue Ribbon, among them Suave, Painted Desert, Cherry Bounce, Wedding Band, and Whirlaway.

The Carey Quinn Gold Medal, given to an exhibitor who wins this award at a national show, was won by Richard Ezell. His brilliantly colored collection included Rameses, Olympic Gold, Silken Sails, Tahiti, Cairngorm, Quetzal, Stratosphere, Otterburn, Silver Leopard, Salmon

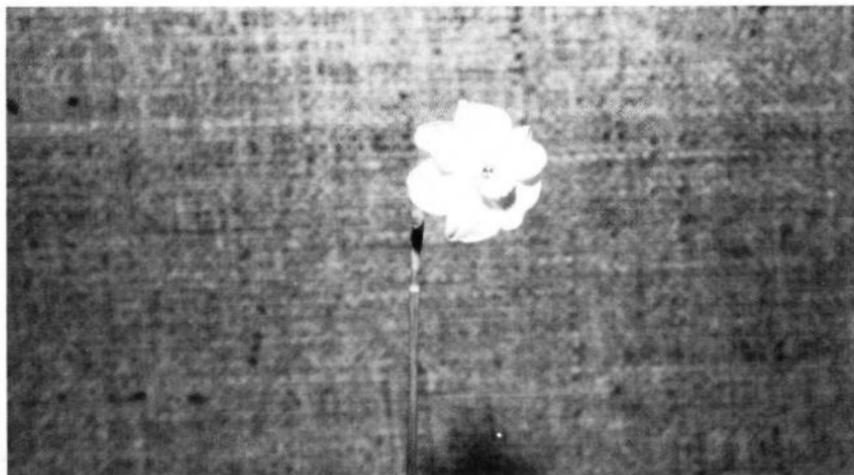
Spray, Altruist, Fairmile, Joybell, Irish Coffee, Downpatrick, Larkfield, Camelot, Daydream, Lysander, Circler, Paradox, Aircastle, Green Woodpecker, and Old Satin.

Dr. Bill Bender won the Grant and Amy Mitsch Award the first time it was offered with #67-1 Orion \times Anacabri. This award is for three stems of a standard seedling. Dr. Bender also won the Rose Ribbon for a Milan \times Cantabile seedling, and repeated as the recipient of the New Zealand Trophy with Back Chat, Kazuko, Highfield Beauty, Divine, and Ezra.

The Carncairn Cup is offered annually for a collection of five standard daffodils bred in Ireland. The 1979 winner was Richard Ezell with Rameses, Tahiti, Olympic Gold, Green Linnet, and Empress of Ireland.

The Maxine Lawler Memorial Trophy is given for three stems each of six cultivars of all white daffodils from at least three divisions. The winning exhibit this spring, staged by Mr. and Mrs. Charles Anthony, included Stainless, Misty Glen, Inishmore, Gay Symphony, Polar Imp, and Arish Mell.

Surfside won for Mrs. J. R. Kraemer both the Matthew Fowlds Silver Medal, given for the best standard named cyclamineus in a national show, and the Olive W. Lee Memorial Trophy for the best bloom in Division 5, 6, 7, or 8.



Flomay, winner of the Miniature Gold Ribbon in Boston, as exhibited by Mr. & Mrs. Charles Anthony (Gripshover photo)

THE QUINN MEDAL

Six Carey E. Quinn collections of twenty-four cultivars from no less than five divisions were winners in ADS shows this year, three of them bringing silver medals to ADS members who won this award for the first time: Dr. Theodore Snazelle in Memphis, Mrs. Alfred Gundry in Baltimore, and Handy Hatfield in Dayton.

The Quinn Ribbon is given to a previous winner of the Quinn Silver Medal; Mrs. Morris Lee Scott won the Quinn Ribbon in Hernando and Richard Ezell won it in Chambersburg, in addition to his Gold Medal at the National Show.

Mildred Scott's ribbon winner contrasted striking golden trumpets such as Aurum, Inca Gold, and Slieveboy with delightful species hybrids such as Bushtit, Dove Wings, Harmony Bells, Sweetness, and Trevithian. Mr. Ezell's ribbon winner had twelve large-cups, including such lovely cultivars as Broomhill, Canisp, Ringmaster, Torridon, and Golden Aura.

Dr. Snazelle's colorful medal winner focused on such brilliant flowers as Shining Light, Torridon, Irish Light, Rockall, and Perimeter. Among the most striking flowers in Mrs. Gundry's entry were Avenger, Jetfire, Falstaff, Rose Royale, and Hotspur. Mr. Hatfield complemented the pinks of such taller flowers as Gossamer and Fair Prospect with the pinks of the smaller Cotinga and Lavender Lass.

THE WATROUS MEDAL

The Roberta C. Watrous Silver Medal for a collection of twelve miniature daffodils representing at least three divisions was awarded to Fred G. Pollard at Gloucester and to Harold Koopowitz at Santa Barbara; three weeks later Mr. Koopowitz won the Watrous Ribbon, given to those who have won the Watrous medal in previous shows.

All three winning collections included Hawera, Jumblie, Minnow, *rubicola*, *bulbocodium conspicuus*, *bulbocodium obesus*, and *triandrus albus*. Mr. Koopowitz also used Chit Chat, *N. triandrus concolor*, April Tears, *bulbocodium asturiensis*, Snipe, Picoblanco, *bulbocodium citrinus*, Tiny Tot, and four of his own miniature seedlings in his pair of winning entries. Mr. Pollard also included Yellow Xit, Xit, Segovia, Sundial, *N. scaberulus*, \times *macleayi*, and \times *tenuoir* in his medal winner.

THE BRONZE RIBBON

The Bronze Ribbon is offered only at regional shows and is given for a collection of twelve cultivars, three stems each. In 1979 there were Bronze winners at three regional shows.

Mrs. John Bozievich had the Bronze Ribbon winner in Washington with Fiery Flame, Doubtful, Sir Ivor, Wakefield, Coreen, Javelin, Aurum, Perky, Golden Aura, Andalusia, and Bill Pannill seedlings PL 66/A and 68/18.

At Fortuna, Sid DuBose's Bronze Ribbon winner exhibited Tahiti, Glenwherry, Sleveen, Ballyrobert, Willet, Fair Prospect, Bantam, Merlin, Chinese White, Polar Imp, Salmon Trout, and Green Jacket.

Dr. Theodore Snazelle won the Bronze Ribbon in Nashville with Sparkling Jewel, Corofin, Actaea, Mahmoud, Rockall, Obelisk, White Marvel, Rio Rouge, Downpatrick, Jenny, Slieveboy, and Gay Colours.

THE GOLD AND WHITE RIBBONS

What makes a daffodil Best in Show? Probably it's new, but not too new. It might be striking and quite different, like Tahiti, or small and quite graceful, like Bushtit, or stately and quite impressive, like Canisp, Festivity, or Patricia Reynolds. It might have the simple elegance of form and perfection of color seen in Bethany and Golden Aura. But certainly it is right for the season, and is grown by discriminating exhibitors who recognize perfection in their own gardens.

These seven daffodils were the ones to win either the Gold and/or White Ribbons at more than one ADS show in 1979. They proved once

more that a good daffodil is good anywhere. Canisp won in Oakland and Chapel Hill, Tahiti at Oakland and Princess Anne, Bushtit in Santa Barbara and in Bloomington.

Four ADS members were double winners. Mrs. John Bozievich won the Gold and the White Ribbons in Washington, plus the Gold at the national show in Boston. Handy Hatfield won the Gold in Columbus and the White in Chillicothe, Sid DuBose the Gold at Oakland and the White at Fortuna, and Bill Pannill two Golds, at Chapel Hill and in Nashville.

Winners are listed here with the name and the place of the show, number of entries in each, and the date on which the show opened. (G-Gold, and W-White).

SHOWS	WINNING CULTIVARS	EXHIBITORS
Santa Barbara, Calif.; 125; 3/3	H. Tuggle sdlg. HT32 (Ceylon × <i>triandrus</i>)G Bushtit W	Harold Koopowitz William Hesse Sid DuBose Ben R. Hager
Northern Calif. Daffodil Society, Oakland; 352; 3/10	Canisp G Tahiti W	
Texas State, Dallas; 239; 3/16	Dipper G Cantatrice W	Mrs. C. R. Bivin Mrs. W. D. Bozek
Pacific Regional and Calif. State, Fortuna; 646; 3/17	Loch Hope G Glenwherry W	Stan Baird Sid DuBose
Arkansas State, Mayflower; 660; 3/24	Falstaff G Aurum W	Mrs. Kenneth G. Ketchside Mrs. Kenneth G. Ketchside
Mississippi State, Hernando; 451; 3/24	Celilo G Dove Wings W	Mrs. Leslie Anderson Mrs. Leslie Anderson
Southern California, La Canada; 354; 3/24	Tournament G Firestorm W	Mr. and Mrs. Ed Johnson Gerard Wayne
Southeast Regional, Atlanta, Ga.; 286; 3/29	Bethany G	Mr. and Mrs. Maurice Abercrombie Richard Bailey
Tennessee State, Memphis; 443; 3/31	Charity May W Bethany G	Mr. and Mrs. Herman L. McKenzie Mr. and Mrs. Herman L. McKenzie
	Coral Ribbon W	Bill Pannill Mrs. W. L. Wiley Miss Julie Coley Mrs. Raymond Roof Mrs. George F. Parsons Mrs. Leroy A. Collins
North Carolina State, Chapel Hill; 595; 3/31	Canisp G Shining Light W	
Kentucky State, Bowling Green; 344; 4/7	Woodvale G Widgeon W	
Somerset County Garden Club, Princess Anne, Md.; 231; 4/7	Tahiti G Harmony Bells W	
Garden Club of Gloucester, Va.; 1,481; 4/7	Cul Beag G Rockall W	Fred G. Pollard Mrs. William F. Thomas
Southern Regional, Nashville, Tennessee; 433; 4/7	Genteel G Golden Aura W	Bill Pannill Mrs. Harold Stanford
Adena Daffodil Society, Chillicothe, Ohio; 209; 4/12	First Frost G Festivity W	Mrs. Betty Beery Handy Hatfield

SHOWS

Indiana Daffodil Society, Bloomington; 560; 4/14

Illinois State, Carbondale; 442; 4/14

Tidewater Daffodil Society; Hampton, Va.; 554; 4/14

Washington Daffodil Society, Washington, D. C.; 237; 4/14

Maryland Daffodil Society, Baltimore; 467; 4/18

New Jersey Daffodil Society, Princeton; 273; 4/19

Northeast Regional, Plymouth Meeting, Pa.; 300; 4/19

Harford County Garden Club, Bel Air, Md.; 163; 4/21

Southwestern Ohio Daffodil Society, Dayton; 795; 4/21

South Side Garden Club, Islip, N. Y.; 254; 4/24

Pennsylvania State, Chambersburg; 452; 4/24

Garden Class, Women's Club, Downingtown, Pa.; 301; 4/25

Connecticut State, Greenwich; 483; 4/26

Delaware State, Wilmington; 398; 4/27

Central Ohio Daffodil Society, Columbus; 578; 4/28

Nantucket Garden Club, Nantucket, Mass.; 447; 4/30

National ADS Convention Show, Boston, Mass.; 768; 5/3

WINNING CULTIVARS

Viking G
Bushtit W

Panache G
Patricia Reynolds W

Chiloquin G
Alicante W

Prologue G
Wakefield W

Ave G
Ave W

Willet G
Willet W

Empress of Ireland G
Descanso W

Golden Aura G
Golden Aura W

Roger G
Patricia Reynolds W

Rushlight G
Festivity W

Irish Coffee G
Stainless W

Night Light G
Kansas W

Tiki G
Broomhill W

Ben Hee G
Foundling W

Inverpolly G
Palmyra W

Pure Joy G

Shadow G
Gay Symphony W

EXHIBITORS

Mrs. Verne Trueblood
Mrs. Goethe Link

exhibitor returned award
Glen C. Sands
Mrs. Henning Rountree
Mrs. G. W. Burton

Mrs. John Bozievich
Mrs. John Bozievich

Mrs. Joseph Purdy
Mrs. Joseph Purdy

Mrs. Robert L. Hoen
Mrs. Robert L. Hoen

Richard T. Ezell
Mrs. James J. Tracey

Mrs. Fred Viele
Mrs. Fred Viele

Mrs. Hubert Bourne
Mrs. Goldie B. Vernia

Mrs. Henry Wenzel III
Mrs. Edwin Buchanan

Mrs. Owen W. Hartman
Mildred Bender
Michael A. Magut
Mrs. Gordon Carpenter

Mrs. James W. Riley
Mrs. Helen Farley
Sarah B. Andersen
Mrs. W. Lee Wiley
Handy Hatfield
Mrs. Wyman Rutledge

Mrs. Earle MacAusland

Mrs. John Bozievich
Mr. & Mrs. Charles
H. Anthony

THE MAROON RIBBON

The Maroon Ribbon for five different reverse bicolor daffodils was awarded at twelve different ADS shows. Twenty-eight different flowers were used in the dozen winning entries; twenty-one were Mitsch hybrids. Daydream appeared in eight entries, Bethany in seven.

Mrs. John Bozievich's Maroon winner in Boston was striking, including Drumawillan, Moonfire, Intrigue, New Day, and Dotteral. Mrs. William Pardue's blue ribbon entry at Columbus focused on the jonquil reverse bicolors, including Dickcissel, Pipit and Oryx.

Others winning this award included Stan Baird at Fortuna, Mrs. D. O. Harton, Jr., at Mayflower, Harold Koopowitz at LaCanada, Jack Yarborough in Atlanta, Mr. and Mrs. Herman McKenzie in Memphis, Dr. John L. Tarver in Gloucester, Mrs. J. W. Swafford at Nashville, Mrs. James Liggett in Dayton, Mrs. Stanley Carrington in Islip, and Jean MacAusland at Nantucket.

(Note: Inadvertently, some show chairmen were sent report blanks which omitted the spaces for the Maroon and Lavender Ribbons. If your award winners were not included, please write to the Show Reporter, and they will be listed in the December *Journal*.)

THE RED-WHITE-AND-BLUE RIBBON

The Red-White-and-Blue Ribbon is awarded to a collection of five American-bred daffodils. Seventy-five different cultivars were included, in addition to numbered seedlings.

Three exhibitors, including Dr. Tom Throckmorton at the National Show; Bill Pannill at Nashville with Manifest, White Hunter, Rhine Wine, La Mancha, and Diamond Head; and Sid DuBose in Fortuna with his attractive numbered seedlings, relied completely on the results of their own hybridizing.

Of the remaining twenty successful entries, eleven used a combination of Oregon-bred daffodils, mixing Mitsch and Evans cultivars to prove a winner.

Mrs. Verne Trueblood, at Bowling Green, mixed Matthew Fowlds, Evans, and Mitsch bulbs for a small, graceful award winner, using Willet, Harmony Bells and Dipper with Lemon Meringue and Cordial. Leslie Anderson in Hernando also had a delightful collection of smaller flowers, including Bushtit, Piculet, Quail, Chickadee and Pretty Miss. Jay Pengra's La Canada winner included four Murray Evans flowers: Chloe, Arawannah, Peace Pipe, and Arapaho, and Mitsch's tall jonquil Stratosphere.

Three ADS members won the R-W-B Ribbon in two shows. Jay Pengra won in Oakland as well as at La Canada, Mrs. Verne Trueblood at Bloomington as well as Bowling Green, and Dr. John L. Tarver at Gloucester and at Hampton.

Other R-W-B Ribbon winners for 1979 included Gerard Wayne in Santa Barbara, Mrs. J. C. Dawson at Mayflower, Jack Yarborough in Atlanta, Mrs. Wayne Anderson in Memphis, Mrs. Robert Walker in Chapel Hill, Mrs. John B. Korn in Carbondale, Mrs. Quentin Erlandson in Baltimore, Mrs. Evadene Holyoke in Dayton, Mrs. Owen Hartman at Chambersburg, Michael A. Magut in Downingtown, Mrs. Lewis Clarke at Greenwich, Mr. and Mrs. W. R. Mackinney at Wilmington, and Jean MacAusland in Nantucket.

THE GREEN RIBBON

The Green Ribbon is awarded to a collection of twelve stems of different cultivars from at least four divisions. Since only one bloom of a cultivar is needed, this is often the showcase for brand new introductions. And, probably because an exhibitor has just exhausted his or her supply of American-bred daffodils in staging a Maroon and/or Red-White-and-Blue entry, the Green Ribbon often takes on the aura of the British Isles.

Handy Hatfield's Green Ribbon winner at Columbus was simply spectacular. He focused on five shimmering new whites, Shadow, Achnasheen, Panache, Inverpolly, and Ashmore, contrasted with such colorful flowers as Throckmorton's Painted Desert, Evans' Buckskin, and Richardson's Golden Ranger.

Typical British/Irish collections were those of Mrs. J. W. Swafford at Nashville which included Richardson's Golden Aura, Ariel, and Extol; J. S. B. Lea's Canisp, Loch Stac, and Loch Owskeich; and Dunlop's Glenwherry and Irish Charm. At Bel Air, Mrs. J. Raymond Moore's winning entry had seven Irish-bred daffodils: Golden Rapture, Cantatrice, Slieveboy, Kilworth, Tudor Minstrel, Vulcan and Rockall. Mrs. Leroy Collins' winner at Wilmington had daffodils bred by seven different growers from the British Isles.

The Green Ribbon also offers scope for specializing. Mrs. John B. Korn in Carbondale revealed her fondness for collar daffodils, using Square Dancer, Party Dress, Orangery, and Gold Collar. At Plymouth Meeting, Dr. Bill Bender selected eight from Division 2: Chemawa, Signal Light, Wedding Gift, Golden Joy, Tiki, Loch Owskeich, and Arctic Doric.

On the West Coast, Sid DuBose won the Green Ribbon at both Oakland and Fortuna, each time with all his own numbered seedlings.

THE PURPLE RIBBON

The Purple Ribbon may be awarded to any of the five-stemmed collections of standard daffodils designated as eligible by the show schedule, with the exception of the two collections for which other ADS ribbons are offered. Variety was the keynote in 1979. Three winners each came from white, large-cup reverse bicolor, large-cup, and cyclamineus collections, with four quintets of trumpets earning the Purple Ribbon. But there were also all-yellow, jonquil, bicolor trumpet, small-cups, British-Isles, and even species collections on the victory roster. The only double winner was Mrs. Goethe Link, at Bloomington and at Dayton.

Gerard Wayne in LaCanada had an impressive white group: Ulster Queen, April Love, Vigil, April Message, and Cataract. Another winner which was all-white was Mr. and Mrs. Charles Anthony's white trumpet group at Greenwich, including Cantatrice, Vigil, Empress of Ireland, Churchman, and Ulster Queen. In Columbus Mrs. James Liggett won with Cold Overton, White Mist, White Sprite, Mary Ann, and Shadow.

The large-cups are the most prolific division within the classification system, so they lend themselves most easily to groupings. Three Purple Ribbon winners were all reverse bicolors: Sid DuBose in Oakland, Leslie Anderson in Hernando, and Jean MacAusland at Nantucket. Other large-cup entries won for Mrs. Goethe Link in Dayton, Mrs. Elliott T. Cato at Princess Anne, and Mrs. John F. Gehret in Wilmington.

Purple Ribbon winners using all trumpets were Mrs. J. W. Swafford in Atlanta, Mrs. Goethe Link in Bloomington, Richard T. Ezell at Plymouth Meeting, and Mrs. J. Raymond Moore in Bel Air.

Small-cups and cyclamineus collections are always popular. Three winning entries featuring small-cups were made by Otis Etheredge at Chapel Hill, Mrs. George Burton at Hampton, and the winner at Carbondale.

Division 6 was also popular. Mrs. John Bozievich at Washington staged Andalusia, Surfside, Willet, Trena, and Delegate; Handy Hatfield in Nashville also used Surfside, and added to it Estrellita, Ibis, Killdeer and Swift; while Mrs. Richard Frank, Jr., at Memphis chose Roger, Beryl, Dove Wings, Charity May, and Bushtit.

The Purple Ribbon specifications offer scope for everyone's tastes. Ken Dorwin at Santa Barbara used Sweetness plus four of his own yellow trumpet seedlings; Mrs. Kenneth C. Ketchside at Mayflower staged the only jonquil winner, using Sweetness, Shah, Pretty Miss, Trevithian and Kinglet. Mrs. Verne Trueblood in Bowling Green won with five bicolors, while Michael Magut used five from the British Isles to win at Downingtown. Fred G. Pollard's Purple winner at Gloucester was perhaps the most unusual of all—five species: \times *odorus* Plenus, *poeticus*, *Compressus*, \times *odorus*, and *obvallaris*.



The Purple Ribbon Winner in Nashville exhibited by Handy Hatfield included Ibis, Killdeer, Estrellita, Swift, and Surfside.

THE MINIATURES

"Ohs" and "Ahs" and awe—that's the reaction the miniatures provoke in daffodil shows across the country. At Princess Anne, "All the miniatures generate 'Ohs' and 'Ahs,'" according to show chairman Mrs. Thomas Whittington, while Mary Rutledge reports from Chillicothe, "The miniatures always create awe in the public for their size and perfection."

The Miniature Gold Ribbon is awarded to the best miniature bloom in the show, and the Miniature White Ribbon is given to the best three stems of one cultivar or species.

Mrs. Frederick J. Viele was the most successful exhibitor of miniatures in 1979. She won the Miniature Gold at Greenwich and the Miniature White in Baltimore, and took both awards at Bel Air.

Four other ADS members were double winners in the miniature category. Nancy Wilson won the Miniature White at both Oakland and Fortuna. Mrs. James Liggett won the Miniature Gold both at Columbus and at Dayton. Harold Koopowitz took the Miniature Gold in Santa Barbara and in LaCanada. Wallace Windus won the Miniature Gold both at Plymouth Meeting and Wilmington and added the Miniature White in Wilmington.

The winning flowers were: (1-Miniature Gold Ribbon, and 3-Miniature White Ribbon):

Segovia-Division 3

Mrs. Robert Cartwright, Memphis 1,
3

Mrs. Merton Yerger, Princess Anne 1

Mrs. Goldie Vernia, Chillicothe 1

Mrs. John Payne Robinson, Baltimore
1

Mrs. Frederick Viele, Bel Air 1

Richard Ezell, Chambersburg 3

Minnow, Division 8

Mrs. William Pardue, Dayton 1

Mrs. John W. Flemer, Princeton 1, 3

Mrs. Orville Nichols, Hernando 3

Violet Wright, Chillicothe, 3

Mite, Division 6

Nancy Wilson, Oakland 3

Nancy Wilson, Fortuna 3

Victor Watts, Mayflower 3

Mrs. Goethe Link, Bloomington 3

Xit, Division 3

Mrs. Raymond Roof, Bowling Green 1

David Cook, Nashville 1

Mrs. Fred Viele, Baltimore 3

Mrs. Fred Viele, Bel Air 3

April Tears, Division 5

Mrs. Raymond Lewis, Hampton, 3

Harold Koopowitz, LaCanada 1

Wallace Windus, Wilmington 3

Mrs. Earle MacAusland, Nantucket 1

Flyaway, Division 6

Mrs. W. L. Batchelor, Downingtown 1

Mrs. George D. Watrous, Jr.,
Washington 1

Mrs. John M. Bates, Nashville 1

Sundial, Division 7

Mrs. James J. Tracey, Plymouth
Meeting 3

Mrs. W. L. Batchelor, Downingtown 3

Mrs. T. E. Tolleson, Atlanta 1

Snipe, Division 6

Harold Koopowitz, Santa Barbara 1

Mrs. D. O. Harton, Jr., Mayflower 1

Mrs. James Liggett, Dayton 3

Jumblie, Division 6

Christine Kemp, Fortuna 1

Mrs. Morris Lee Scott, Hernando 1

triandrus albus, Division 10

Wallace Windus, Wilmington 1

Mrs. Henry Wentzel III, Islip 1

rupicola, Division 10

Mrs. Goethe Link, Bloomington 1

Mrs. Verne Trueblood, Bowling
Green 1

triandrus pulchellus, Division 10

Fred G. Pollard, Gloucester 3

Mrs. James Liggett, Columbus 3

Yellow Xit, Division 3

Lee Dickinson, Gloucester 1

Mrs. George D. Watrous, Jr.,
Washington 3

Other Miniature Gold Robbon winners were:

Quince: Wallace Windus, Plymouth Meeting

Pencrebar: Ruth Greenwalt, Chambersburg

N. bulbocodium conspicuus, Mrs. John Montgomery, Columbus

N. gaditanus: Mr. and Mrs. Jay Pengra, Oakland

Pango: Mrs. Herschel Hancock, Dallas

N. jonquilla: Mr. and Mrs. William Hesse, LaCanada

Raindrop: Mrs. T. E. Tolleson, Atlanta

N. scaberulus: Dr. John Tarver, Chapel Hill

N. jonquilla Flore Pleno: Mary Robinson, Hampton

Other Miniature White Ribbon winners were:

Hawera: Mrs. John C. Anderson, Princess Anne

Cobweb: Mrs. Frederick Viele, Bel Air

N. cyclamineus: Marta Wayne, Santa Barbara

Canaliculatus: Major Francis Klein, Chapel Hill

Tete-a-Tete: Carbondale

THE LAVENDER RIBBON

Eleven exhibitors staged successful Lavender Ribbon entries featuring forty-five different miniature daffodils in twelve ADS shows. Mrs. James Liggett was a double winner, taking top honors both in Dayton and in Columbus. Mrs. Liggett used ten cultivars, staging Flyaway, Minnow, *rupicola*, Sundial, and Tete-a-Tete at Dayton and Stafford, Fairy Chimes, Clare, Rikki, and *triandrus albus* in Columbus.

Sundial appeared in six of the winning entries, and Jumblie in four. Nine of the twelve winners used one or more species miniatures; Jay Pengra in LaCanada selected four, *bulbocodium nivalis*, *triandrus albus*, *jonquilla*, and *bulbocodium conspicuus*, to appear with Hawera.

Mrs. Goethe Link's entry at Bloomington received many favorable comments; it included Atom, Snipe, Jumblie, *rupicola*, and *watieri*. Other winners of this award were twelve-year-old Marta Wayne in Santa Barbara, Mrs. C. R. Bivin in Dallas, Nancy Wilson in Fortuna, Mrs. Jesse Cox in Mayflower, Mrs. J. W. Swafford in Atlanta, Dr. John L. Tarver in Gloucester, David Cook in Nashville, and Mrs. Frederick Viele in Bel Air.

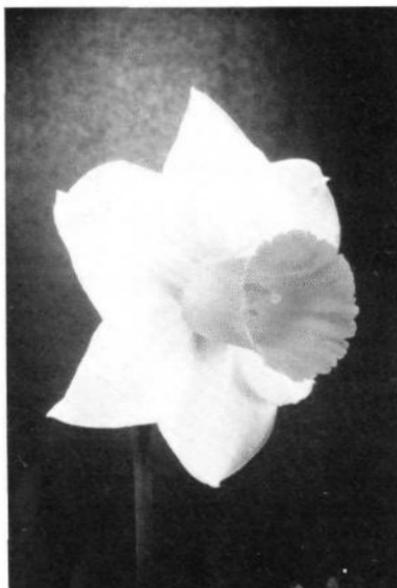
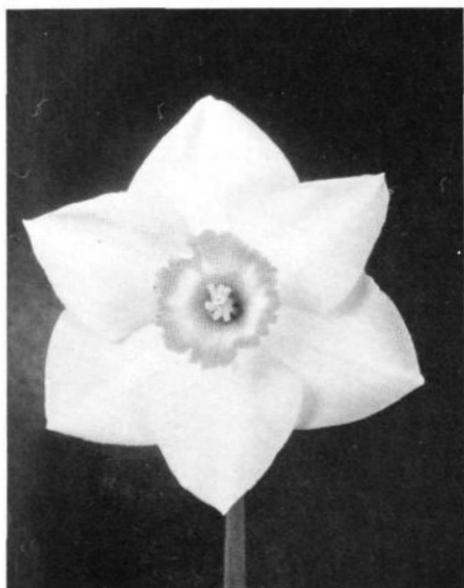
(Note: Inadvertently, some Show Chairmen were sent report blanks which omitted the spaces for the Lavender and Maroon Ribbons. If your award winners are not included here, please write to the Show Reporter and they will be listed in the December *Journal*.)

THE ROSE RIBBON

The spring of 1979 was a very satisfying season for seedling raisers. Beautiful seedlings bloomed in unprecedented quantity in the California shows, responding well to those weeks of cool, misty weather. Twelve ADS members won Rose or Miniature Rose Ribbons, or were awarded other major ADS awards for impressive seedlings.

Sid DuBose won the Green Ribbon both at Oakland and at Fortuna, and also the Red-White-and-Blue Ribbon at the latter show, all with his own seedling daffodils. Nancy Wilson, chairman for the Oakland show, called his Green Ribbon winner, "The most impressive entry in our show," noting that it focused on large-cups with white perianths. The Rose Ribbon in Oakland was awarded to his #D10-1, a 1W-Y, a Bethany o.p. seedling. Two of the most striking DuBose seedlings at Fortuna,

appearing in both winning collections, were #A-14-1, a 2Y-Y Aircastle × Salmon Trout seedling, and #B-52-4, a 2W-Y Peace Pipe × Carita.



Left: DuBose A14-1 (Aircastle × Salmon Trout) (DuBose photo)

Right: DuBose B52-4 (Peace Pipe × Carita) (DuBose photo)

Three other Californians were blue-ribbon hybridizers. Harold Koopowitz won the Rose Ribbon at Santa Barbara, with #K74-1, a 2Y-Y, Ormeau × Ambergate. This bloom, measuring nearly six inches across, was runner-up for Best in Show. #B72/2, a 2Y-WWY Binkie × Ambergate seedling, won Koopowitz the Rose Ribbon at LaCanada. He also won the Miniature Rose Ribbon at Santa Barbara with #75/1, a 12Y-Y *bulbocodium conspicuus* × Gay Time, and used this flower and several of his other fine miniature seedlings in his Watrous Medal winner at LaCanada.

Ken Dorwin won the Purple Ribbon at Santa Barbara with an all-yellow collection which included four of his seedlings. Receiving much favorable comment in this group was #8-4, a deep gold, very smooth Arctic Gold × Fine Gold. At LaCanada, Ed Zinkowski won the Miniature Rose Ribbon with #74-5N, a Soleil d'Or seedling with five flowers to the stem.

At another of the early-season shows, in Mayflower, Arkansas, Mrs. D. O. Harton, Jr., won the Rose Ribbon with #98/100, a 1WG-Y, Festivity × a white seedling. According to Mrs. W. O. Evans, show chairman, this seedling of Mrs. Harton's had "a long pale yellow cup with green halo where the white perianth joins the cup. It has good form, substance and texture." Also at Mayflower, Dr. V. M. Watts' seedling #197/1, a 2Y-Y of unknown parentage, received much favorable comment because of its excellent form and bright color.

Two Kentuckians had prize-winning seedlings. Mrs. Luther Wilson won the Rose Ribbon in Bowling Green with #W7/9, a Pera × Richardson sdlg. #132; this flower has a white perianth and a lovely fluted red cup. Dr. Glenn Dooley won the Rose Ribbon in Carbondale with #D7/J-A1, a jonquil with white petals and a soft yellow-orange cup, Blarney × *N. jonquilla*. Always a missionary for the poet daffodil, Dr. Dooley could also take great pride in a five-stem collection of poet seedlings exhibited at Carbondale which was a real show-stopper.



Watrous #665

Mrs. George D. Watrous, Jr., won the Miniature Rose Ribbon in Washington with #665, Snipe × *N. jonquilla*, with several pale yellow flowers on 8-inch stems. Mrs. Paul Gripshover had one Rose and one Miniature Rose winner. In Nashville it was # 73-1-1, a 6Y-Y, Bagatelle × *N. cyclamineus*. The winner in Columbus was # 72/23/2, Redstart × Fox-fire.

Bill Pannill won the Rose Ribbon in two shows. At Chapel Hill, his #66/52T, a white double, Gay Time × Zero, was "a thing of beauty," according to show chairman Dorothy Ford Wiley. In Nashville, top seedling honors went to the Pannill seedling #H-22, a lemon 2Y-Y, Camelot × Daydream, with a pale lemon perianth and equally pale lemon cup. Show chairman Theodore Snazelle said, "Bill Pannill entered spectacular seedlings, as well as his own named varieties," and singled out for special mention the Rose Ribbon winner, several seedlings with yellow perianths and pink cups, and Genteel, a white trumpet, which won the Gold Ribbon.

Dr. Bill Bender could take great pride this season in the performance of his seedlings not only in the National Show at Boston, but also at Plymouth Meeting, where #63/3, Arctic Gold × Golden Rapture, a 2Y-Y, which has a yellow perianth and a deeper yellow almost-trumpet cup, not only won the Rose Ribbon and appeared in his Green Ribbon winner but, in a vase of three, was a strong contender for the White Ribbon. The judges commented very favorably on its smooth perianth and straight stems.

THE JUNIOR AWARD

Santa Barbara neglected to put a Junior Award in its show schedule this season, so Marta Wayne simply moved into the adult division and captured not only the Miniature White Ribbon with *N. cyclamineus*, but also the Lavender Ribbon; later she won the Junior Award at LaCanada with Tuesday's Child.

For the third straight season, Nathan Wilson won the Junior Award at Fortuna, this year with Revelry, and also won the Rose Ribbon with his seedling #2-1-79.

At least a dozen experienced young Junior members appear to be on collision course for next year's National Convention Show in Memphis. Except for the two Californians, all of the dozen Junior winners live

within reasonable driving distance of Memphis; even distance should be no real handicap, as Kate Macneale brought a lovely bloom of Ceylon from Cincinnati to win the Junior Award at Oakland.

At Hernando, Martha Marie McElroy took the Junior Award for the third straight year at the Mississippi State Show in Hernando. Kevin McKenzie's bright-colored Bunting won the Junior Award in Memphis.

Sallie Bourne won the Junior Award in Columbus with Aircastle, Zane Sands took top honors in Carbondale with Cadence, Andy Schneider captured the ribbon in Atlanta with Revelry, Virginia Clover's Flaming Meteor won the Junior Award at Bowling Green, while Galway won for Bobby Beasley in Dallas.

Blaine Snazelle was the only Junior to win in two shows. He took the blue ribbon with Top Notch in Nashville, his third straight victory there, and also won with Delightful in Dayton.

THE SILVER RIBBON

The exhibitor who earns the greatest number of blue ribbons in the horticultural section of an ADS show is awarded the Silver Ribbon. Top honors this year were shared by Mrs. Harold Stanford in Nashville and Dr. Glenn Dooley in Carbondale, each with 27 blues. Mrs. James Liggett was the season's only double winner, winning in Columbus with 20 blues, and at Dayton with 13.

Other top winners this year were Ben R. Hager with 24 at Oakland, Mrs. Charles B. Scully with 23 at Islip, Gerard Wayne with 22 at LaCanada, Mrs. Helen Farley at Greenwich and Mrs. C. R. Bivin in Dallas with 21 each, and Fred G. Pollard at Gloucester and Mrs. Gordon Carpenter at Downingtown with 20 each.

The roster of Silver Ribbon winners for 1979 also includes: Mr. and Mrs. Maurice Abercrombie (19), Atlanta; Miss Martha A. Simpkins (18), Princess Anne; Mrs. Goethe Link (18), Bloomington; Mrs. Kenneth C. Ketchside (17), Mayflower; Leslie Anderson, Hernando, Mr. and Mrs. Herman L. McKenzie, Memphis, Mrs. George D. Watrous, Jr., Washington, and Mrs. John Payne Robinson, Baltimore, all with 15; Harold Koopowitz (14), Santa Barbara; Richard Kersten (14), Princeton; Mrs. John F. Gehret (14), Wilmington; Mrs. George Burton (13), Hampton; Mrs. Gordon Brooks (12), Chapel Hill; Mrs. Luther Wilson, Bowling Green, Mary Rutledge, Chillicothe, Mrs. James J. Tracey, Plymouth Meeting, and Jean MacAusland, Nantucket, all with 10; Stan Baird, Fortuna, and Mrs. Charles Bender, Chambersburg, 8 apiece; and with 7 apiece, Mrs. Frederick Viele at Bel Air, and Dr. Bill Bender at the National Show in Boston, who tied with Mrs. G. S. Mott but won on counting red ribbons won.

THE ARTISTIC CLASSES

Each year the percentage of ADS shows including flower arrangements increases. This season 23 of the 32 shows included artistic arrangements numbering 731. The Bowling Green show had the largest number, 74, with 65 arrangements being staged at Fortuna and 62 at Nantucket. Those shows with forty arrangements or more included Oakland with 46, and Downingtown with 41; Mayflower, Gloucester, Chillicothe, Carbondale, and Baltimore all had at least thirty.

These artistic designs, all of which must include some daffodils, add to the beauty of the show room. Mrs. David Frey, show chairman at Bloomington, commented, "There was an abundance of golden daffodils, which made the theme, 'A Host of Golden Daffodils' quite appropriate. Large brass containers on pedestals with mass arrangements of golden daffodils flanked the entrance to the show."

The artistic division may also offer an opportunity to recruit new ADS members. Mrs. James Liggett noted at Columbus, "Most of the arrangements in our excellent design section were done by student judges of the National Council of State Garden Clubs who needed to earn blue ribbons. Five of them succeeded, and four of these also won blue ribbons with daffodils in our Small Growers' section. Maybe this will develop their interest in growing daffodils as well as arranging them."



Arrangement by Mrs. Charles Chilton at the Nashville show (Gripshover photo)

WHICH FLOWERS WERE FAVORITES?

Move around among the exhibits and especially the area near the Awards Table after the show is open to the public, and you will find out very quickly what Mr. and Mrs. I-Only-Grow-King-Alfred think about show daffodils, large and small, old and new, brilliant or subdued.

The split coronas are gaining in favor. At Baltimore, Palmares, an 11W-P, attracted much attention from show-goers and even appeared on television. Orangery's striking color was noted at Hampton, and split coronas stimulated much interest in Mayflower. But, as Mary Rutledge noted at Chillicothe, "Gold Collar either has those who love it or who hate it."

The doubles were also very popular in 1979, though newcomers may still ask, as they did about Tahiti at Dayton, "Are you sure that's a daffodil?" Petit Four, a unique white with a fully pink double crown, was the center of attention both in Dallas and in Mayflower. At LaCanada, a well-formed double, Tournament, which won Best-in-Show was greatly admired by visitors, as was another Division 4 flower, a Falaise open-pollinated seedling which was runner-up.

Pinks are always in favor. Cotinga was shown at LaCanada where it was said, "This appears to be perfection for a Division 6 pink." Salmon Trout blooms shown at Gloucester were judged especially lovely. In Baltimore the show chairman noted, "As usual, the pinks were the major attention getters, especially appealing to new growers." At Princess Anne, the two favorites among those who exhibited in the class for those who grow less than fifty cultivars were the pinks Salome and Gossamer. Tullycore was a crowd-pleaser at Carbondale, as was Sentinel. It was said of Arctic Char at Tidewater that the spectators were fascinated with its color. Knightwick was judged the best pink in the Columbus show. And, as always, Foundling was a favorite. It was called "the most popular flower" at Wilmington, where it won the White Ribbon, and was highly commended at Gloucester.

White was a favorite with judges and show visitors alike. A dozen or more white daffodils won either the Gold or the White Ribbon. Shadow was probably number one, winning the Gold Ribbon at the National Show and being voted the Best American-Bred flower in Columbus. The LaCanada chairman noted many good newer whites, of which the best was a large, flat April Love. Sleveen was called "eye-catching" at Princess Anne, and, "Ave was particularly beautiful this year," the Baltimore chairman reported. Ashmore was highly praised in Columbus.

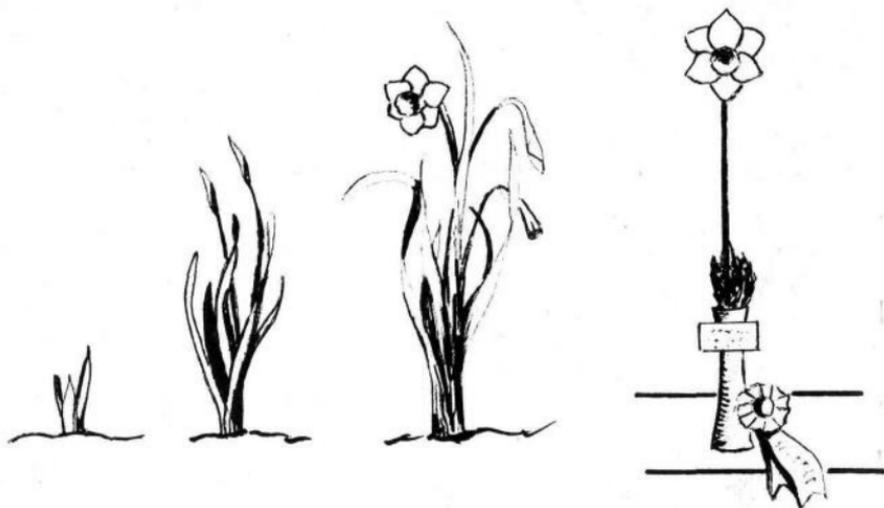
Yellow and gold trumpets have been somewhat out of fashion in recent years, as have their near-trumpet golden large-cup relatives. But a fine specimen can still find favor. Golden Aura was a top choice in Bel Air. Show-goers at Bloomington noted the many fine blooms of Viking. Aurum was a particular favorite at Mayflower, and its blooms were considered especially fine. Irish Luck was popular at the Princess Anne show, as was Emily at Columbus.

Brilliant red cups are eye-catchers always, particularly if fine substance and form accompany the color. Falstaff was much admired in Mayflower for its intensity of color, perfect balance, and great substance. An entry for a local award in LaCanada of orange-perianth flowers elicited much interest in Coppertone, Sabine Hay, and Ambergate. Apricot Distinction

and Snow Gem were praised in Princeton, and one of the most impressive exhibits at Wilmington was a garden club competitive project using Vulcan. Palmyra, winner of the White Ribbon in Columbus, was termed "a knockout, with very smooth perianths of thickest substance, and cups a lovely shade of red with yellow."

It's not only the large flowers which receive praise. Discriminating show-goers have small flower favorites, too. Surfside in Gloucester, Bushtit in Bloomington, Erlicheer and Greenlet at Carbondale, Dainty Miss at Hampton, Willet at Princeton, all were crowd-pleasers. Among the miniatures, Mite, Minnow and Segovia were tops in 1979.

But a daffodil doesn't have to be new to be admired or coveted. As Mary Rutledge said at Chillicothe, "Sweetness, Accent, Festivity, and Daydream still have people writing down their names to get for their garden."



Drawings by Frances Armstrong

THE CONVENTION: BOSTON, 1979

RICHARD T. EZELL, *Chambersburg, Pennsylvania*

Since daffodils bloom in the Northeast at the time roses take over in much of the rest of the country, the New England Region has been called the caboose on the daffodil train. This year the caboose was fitted out as an elegant party car, named the American Daffodil Society Convention, and loaded with a host of ADS members. A good time was had by all.

The twenty-fourth annual convention of the American Daffodil Society, held May 3, 4, 5 at the Copley Plaza Hotel in Boston, included the National Show, not large but of high quality; gardens to see of in-town elegance and rural expansiveness; and programs of information and entertainment, from problems of culture to the wit of Sir Frank Harrison.

For those who had longish waits before being allowed into their hotel rooms on Thursday, the lobby was well-sprinkled with old friends (who couldn't get into *their* rooms either); there was the registration table managed by Mrs. M. van Schaik, the welcome kits prepared by Mrs. R. J. Fraser, and the boutique, supervised by Mrs. C. T. Randt.

And then there was the show, held a brisk walk away in the historic Horticultural Hall of the Massachusetts Horticultural Society. The show *did* get judged, though with the high number of absences among those scheduled to serve as judges, Mrs. W. R. Taylor, whose responsibility it was, must have juggled her judging teams with the skill of a circus performer.

The awards are amply reported elsewhere, but the lovely seedlings of Doctors Bender and Throckmorton deserve special mention. These two amateur breeders, from such diverse locations as Pennsylvania and Iowa, had blooms the equal of any from bulbs of the long-established professional raisers, and between them took an impressive percentage of ribbons. Dr. Bender's Rose Ribbon winner of the 1978 convention was this year exhibited as a vase of three stems to take the brand new Grant and Amy Mitsch Award. This left the way open for another seedling of his, a poeticus hybrid, to take the '79 Rose Ribbon. Dr. Throckmorton's flowers, many of them probing the limitations of his own color coding scheme, are becoming more familiar to us, but remain no less impressive now that a number of them have become available commercially. The best of his fine lot at Boston was Star Wish 3W-GYR, and ironically, thanks to the inflexibility of color coding, it had to be shown "for exhibit only—not in competition."

Dinner and the evening's entertainment Thursday were "on your own," though not absolutely so, since a special group of tickets for the performance of the Boston Pops Orchestra had been offered to ADS convention-goers.

Friday, on the other hand, was chock full of scheduled activities, beginning with a discussion of "Problems of Culture in Peripheral Areas of the United States" by Mrs. J. W. Riley, Mrs. D. L. Farley, Mr. Willis Wheeler, Mrs. W. D. Owen, and Mr. W. M. Roesé. The rest of us were given some idea of the patience and ingenuity exercised by those gardening along the periphery of the map of the U. S. from frigid Maine down to humid Florida, across oven-baked Texas, to winterless Southern California.

Mrs. Marvin V. Andersen, Mrs. E. K. Hardison, Jr., and Mrs. Neil Macneale recounted briefly some of their impressions of the just-completed tour of England, the Netherlands, and Northern Ireland. Up to this point the ADS convention had mostly been aware of the World Convention group walking around in a sort of daze punctuated by occasional coughing spells, suffering apparently from jet lag, or virus—or both. Now we began to glimpse the truth: there had been more to the tour than chills and fever—a display of landscaping and gardening skills on a level rarely, if ever, reached this side of the Atlantic. "Why, at Saville Gardens," said Louise Hardison, "even the skunk cabbage was beautiful!"

Mrs. Hardison, in the next portion of the program, compared her experiences judging in England and Northern Ireland with the way judging is done in the United States. The British, she felt, emphasized size, color, length and sturdiness of stem more than Americans do, while

not paying nearly so much attention to substance and texture. But after her exposure to a number of internationally constituted judging panels, it was her opinion that there were many more similarities than differences in the various approaches to daffodil judging.

Dr. Throckmorton, the man who devised our color code, and who ushered the daffodil into the age of computers, spoke on the limitations of both color coding and computers when applied to the judgment of daffodils. "Computers are color-blind," said the Doctor, "and color is really what daffodils are all about." Computers are rigid; classification schemes, including color coding, must be rigid; it is up to judges to be flexible, to *know* flowers and not expect any scheme of classification to do the job of weighing all the factors that go to make up an ideal bloom.

Mrs. Betty Barnes, ADS Chairman of Judges, who presided over this part of the program, spoke about the ethics of daffodil judging, or as she preferred to call it, "judging responsibilities." She stressed the desirability of judges conducting themselves with dignity, being courteous, knowledgeable, and unbiased. A judge's "book knowledge," she said, must only complement the experience of growing and studying a wide variety of daffodils. In closing she urged judges to, "Be human, be considerate, be enthusiastic; and last but not least, have fun."

Between programs, at lunchtime, and whenever, there was on view in the suite of President and Mrs. Charles Anthony a small but fascinating display of blooms flown from Northern Ireland for the convention. Most were from Ballydorn Bulb Farm, with some from Carncairn Daffodils Ltd. Due to the perversity of this year's season in Northern Ireland, most of Ballydorn's flowers had been picked in tight bud; thus they still looked fresh and bright despite the rigors of their journey. The rimmed and green-eyed things from Division 3, with their whitest-of-white petals, were most eye-catching, but there were a number of unfamiliar and appealing cultivars. One we shall certainly be seeing in our shows was Ballydorn's 6Y-Y Golden Wings, large and smooth with overlapping, gracefully swept-back perianth.

The afternoon's planned activity was a walking tour of the Beacon Hill gardens of Mrs. Samuel Roberts, Mrs. D. J. M. Wilson, and Mrs. Charles Townsend. Each different from the others, these small city gardens showed ingenious and imaginative use of space, color, and form. Our tour was arranged by Mrs. Wellington Wells, Jr., whose Beacon Hill Garden Club has planted 3,000 daffodil bulbs on Boston Common, which project is working beautifully, we were told, so long as the Boston Park Service can be kept from mowing them down while in full bloom.

After dinner that evening and the Annual Meeting of the Society, presided over by President Anthony, there came the presentation of the awards by Mrs. E. A. Conrad, looking remarkably unaffected by the multiple strains of having served as Chairman of the convention and negotiating all the perils of the World Daffodil Convention. Following the awards presentation there was shown a film produced by the Arnold Arboretum that highlighted recently developed techniques of propagation of many sorts of plants.

Saturday morning dawned somewhat chill and blustery, but undaunted, hardy convention-goers climbed aboard three buses for a trip to historic Salem, and a look at three large gardens northeast of Boston. The bus loading was accomplished by the unusual division of those who liked

lobster and those who did not. Some got the impression they were being asked to share a seat with a lobster, but—with perhaps a couple of exceptions—that seems not to have been the case.

Upon our arrival at Salem, the Peabody Museum occupied the attention of most of the group, with its bewildering variety of relics of early New England's sailing, whaling, and trading industries. Intricate, beautiful, and marvelous curios and beautiful things patiently collected and brought home by New England's seafaring adventurers were attractively displayed.

Afterward there were the gardens of Mr. and Mrs. Conrad, Prides Crossing; Mrs. C. G. Rice, South Hamilton; and Mrs. Thomas G. Stevenson, Hamilton. Everybody managed to see at least two of the spacious and attractive gardens, and all were served an ample box lunch (lobster rolls for all those who had not objected to the creatures back at the hotel). The hospitality of our various hosts and hostesses was more than warm enough to overcome the chill winds off the Atlantic.

Dinner Saturday evening brought an invitation from Mrs. Bert C. Pouncey, Jr. to next year's convention in Memphis, March 27, 28, and 29.

Dinner also brought to the head table Sir Frank and Lady Harrison, as delightful a pair as the American Daffodil Society has ever contrived to have as its guests. On this occasion Sir Frank did the talking for them both, beginning by disclaiming for the evening all the honors and responsibilities with which President Anthony had credited him in his introduction, save that of "daffodil hybridizer." Although brief, Sir Frank's remarks ranged widely, touching, for example, on such notable events in the history of British-American friendship as the Battles of Lexington and Concord, and the Boston Tea Party, to which latter occurrence he attributed all manner of evils, including the invention of the tea bag (in the earnest but misguided attempt to make the best of the few shreds and scraps remaining after the "party"). However patriotic their motives, the colonists had been quite wrongheaded, he said, in throwing the *tea* overboard . . . they should have thrown the customs officers instead!

Turning to more serious business, Sir Frank asked rhetorically, "Who are the enemies of daffodil hybridizers?" He listed three of the most important: "First we must turn our faces to . . . judges. The trouble with all judges is they think they know best because they *are* judges. This is a comforting, a warming conviction; but it is, alas, quite erroneous." Listen, he suggested, to the visitors at a daffodil show, as *they* judge the flowers, and, in effect, the judges as well.

His second important enemy proved to be the hybridizer himself, who fails to apply rigorous critical standards to flowers of his own breeding. "Far too many flowers have been, and are being, named," he maintained.

Sir Frank's third major "enemy" turned out to be the spiritual descendants of those customs officers the colonists should have tossed overboard, those present day officials who "seek to prevent entry of flowers into a country for exhibition purposes, who, with elephantine skill, search through your flowers to find a speck of dust . . . or God knows what."

An impromptu slide show followed Sir Frank's remarks. There were pictures from Wells Knierim of some of Grant Mitsch's and Murray Evans's newer flowers; Bill Pannill and Bill Roesé showed slides of some

of their own seedlings; and Matthew Zandbergen had some shots of the annual Austrian Narcissus Festival.

The innate good spirits of daffodil people, plus the hard work of Chairman Conrad, Registrar Mrs. C. Campbell Patterson, Regional Vice-President Mrs. James Riley, Jr., President Anthony, and a host of others, enabled Boston, 1979, to become another memorable ADS convention.

PREFERRED DAFFODILS

WILLIS H. WHEELER, *Gainesville, Florida*

With the passing of 1Y-Y King Alfred as the number one daffodil in commercial narcissus flower production, others have moved in to take its place.

In the Netherlands our ADS member, Matthew Zandbergen, told members of the 1979 World Daffodil Convention that P. D. Williams' 2Y-Y Carlton (1927) represents the largest daffodil acreage in that country. Next in volume is 1Y-Y Golden Harvest registered by Warnaar & Co. in 1927. Why are they popular? Because they have good color, because they force well, and because they are high in flower yield per ton of bulbs.

And now to down under. When I mentioned daffodil preferences to Mr. D. Hayes who lives in Invercargill at the southern tip of New Zealand, he named as his two top choices for cut flower purposes 1Y-Y Kingscourt and 2Y-Y Galway. The first was registered in 1938 and the second in 1943, both by J. Lionel Richardson of Prospect House, Waterford, Ireland. Neither is mentioned in the narcissus bulb statistics published in Holland in 1979. Why does Mr. Hayes like those two? Forcing is not his first concern and both produce beautiful yellow flowers in the field. Then too, both do well in dry bulb sales for home gardens.

Returning to the northern hemisphere, there was one other daffodil that came forcibly to my attention when we of the World Daffodil Convention were visiting Springfield, Spalding, in Lincolnshire in the outskirts of London. At the display gardens at that location were several different beds of daffodils. Among them was a magnificent planting of M. P. Williams 2Y-Y St. Keverne (1949). Mr. Tony Kingdom of the Royal Horticultural Society's Daffodil Committee pointed out the excellence of that cultivar, nearly every flower in the bed being of show quality. However, when I discussed this daffodil with Matthew Zandbergen he said it, like many other beautiful daffodils, does not meet the commercial productivity standards of the Dutch bulb industry. In that land of limited bulb acres many cultivars are considered but few are chosen.

Leaving our consideration of the commercial cut flower cultivars, I turn to three other daffodils that stand out in my memory. First was Grant Mitsch's 6Y-R Jetfire (1966) nodding in gay abandon in the windswept beds of Northern Ireland. Equally magnificent was a vase of Carcain's 6W-P Foundling (1969) on a mantle in a beautiful New England home. It was as fresh and dainty a sight as was Jetfire's bold display in a Northern Ireland planting. And finally, there were the magnificent stems of Grant Mitsch's 3W-Y Aircastle (1958) as grown by Major and Mrs. R. H. Reade of Carncairn Lodge at Broughshane, Ballymena, County Antrim, Northern Ireland. That daffodil really likes the climate of the British Isles.

DAFFODIL DISEASES AND PESTS: II — FUNGI AND FUNGAL DISEASES — BASAL ROT

THEODORE E. SNAZELLE, PH.D.

Tennessee State University, Nashville

“Clean and round, heavy and sound, in every bulb a flower.”
Ye Narcissus or Daffodyl Flowre, and bys Roots (1884)

Fungi have been, and will continue to be, both a friend and foe of mankind. In the role of friendship, we only have to recall that the antibiotic penicillin is produced by fungus called *Penicillium notatum* or *P. chrysogenum*. Furthermore, there are few of you who haven't enjoyed the delectable qualities of *Agaricus campestris bisporus*, the common cultivated mushroom, which is available in the produce section of your neighborhood supermarket. To my way of thinking, there is little in this world more appetizing than a steak smothered in mushrooms! Fungi have also been, and will continue to be, the bane of mankind, his animals, and his plants. For instance, the wheat rust fungus, *Puccinia graminis*, ravaged Roman wheat so often that the Romans created two gods, Robigo and Robigus, to whom to pray in order that their wheat might be spared (1). Needless to say Robigo and Robigus were not very good plant pathologists. Perhaps the most devastating plant disease which impacted so heavily on human history was the late blight of potato in 1845 and 1846 which caused a massive famine in Ireland and the immigration of more than one and a half million Irish to the United States. Finally in 1861, DeBary proved that the fungus *Phytophthora infestans* was the cause of the late blight of potato (2). More recently, narcissophiles have been concerned with a most destructive fungal disease of narcissus bulbs, basal rot. This disease is particularly damaging in warm, moist climates such as in the Southeastern United States.

WHAT IS A FUNGUS?

Under older classification schemes, fungi were traditionally placed in the plant kingdom even though they had few characteristics in common with plants, e.g. no chlorophyll to convert radiant energy of the sun into chemical energy which ultimately was found in the bonds (covalent) which bind the carbon, hydrogen, and oxygen atoms together in the glucose molecule. Since fungi are not able to synthesize their own simple organic molecules like glucose as do green plants, they must instead acquire many of their organic compounds from an external source by either being a saprophyte or a parasite. A saprophyte is a microbe such as a fungus which requires a nonliving source of organic carbon to grow, i.e. it might be found growing on decaying vegetation. In contrast, a parasite is a microbe which requires a living organic source of carbon to grow, e.g. a daffodil bulb. In actuality, most of the fungi which parasitize plants are facultative parasites in that they have the faculty or capability to grow as either a parasite utilizing a living source of carbon or as a saprophyte utilizing a nonliving source of carbon. The basal rot fungus,

Fusarium oxysporum f. narcissi, is a facultative parasite. Thus, when the basal rot fungus is infecting a narcissus bulb it is existing as a parasite; however, when it is growing in the laboratory in a petri plate containing potato dextrose (glucose) agar, it is existing as a saprophyte. Today, the fungi are not placed in the plant kingdom. Instead, they are placed in a kingdom all their own, the kingdom Fungi (3).

In morphology, the fungi can be divided arbitrarily into two categories: 1) the unicellular fungi, e.g. the yeasts and 2) the filamentous fungi like the basal rot fungus. Our attention will be directed to the filamentous fungi. The basic vegetative (non-reproductive) structure of the filamentous fungi is the hypha (hyphae, plural). A hypha is a tubular filament which, depending upon the fungal species, may or may not have crosswalls called septa (septum, sing.). If a hypha possesses crosswalls or septa, it is said to be a septate hypha; however, if the hypha lacks septa, it is said to be an aseptate hypha. A mass of hyphae as might be seen growing in a petri plate culture of a fungus is called a mycelium.

Typically, fungi can reproduce either asexually or sexually. Sexual reproduction in most fungi takes place less frequently than does asexual reproduction. Sexual reproduction involves ultimately the union of nuclei which contain the genetic material (DNA) to form a zygotic nucleus. Thus, this process superficially resembles that of mammals where a sperm unites with an egg to form a zygote. The similarity between sexual reproduction in mammals and in fungi really ends with the formation of a zygote. As already mentioned, asexual reproduction occurs more frequently in most fungi than does sexual reproduction. As a matter of fact, a large number of plant parasitic fungi either do not reproduce sexually; or if they do reproduce sexually, they do it so rarely that they

FIGURE 1 - VEGETATIVE MORPHOLOGY OF FILAMENTOUS FUNGI

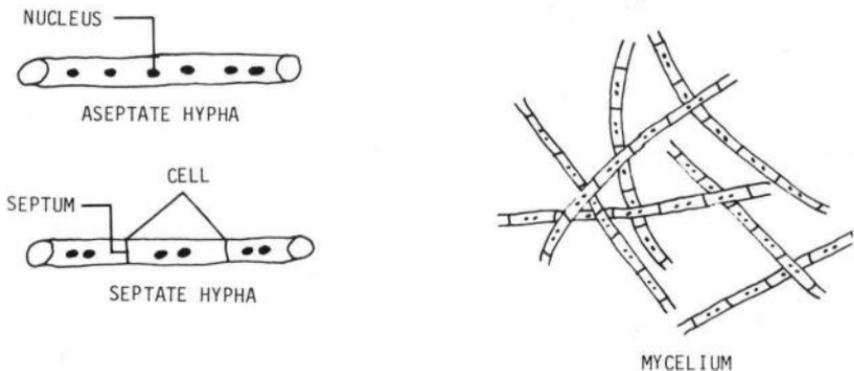
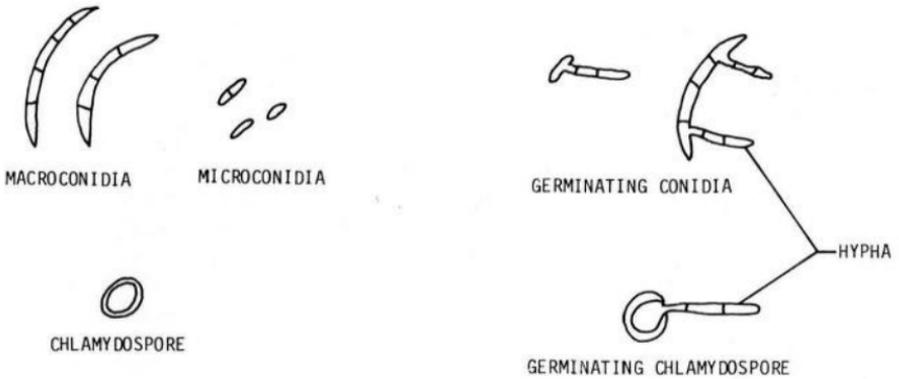


FIGURE 2 - CONIDIA OF FUSARIUM OXYSPORUM



are commonly placed in an order of fungi called the Fungi Imperfecti. "Imperfecti" means that a fungus is imperfect if it lacks a sexual cycle whereas it would be perfect if it possesses a sexual cycle. Asexual reproduction of fungi typically involves the production of conidia (conidium, sing.) or spores. The conidium or spore is a specialized propagative or reproductive body consisting of one or a few cells (Figure 1). When the spore or conidium comes into contact with a proper substrate, e.g. a daffodil bulb, and the conditions are right, e.g. temperature, moisture, etc., the conidium or spore will germinate to produce a hypha which will penetrate the substrate, e.g. narcissus bulb (Figure 2). Thus, the bulb would then be said to be infected by the fungus.

BASAL ROT

In the quote, "Clean and round, heavy and sound, in every bulb a flower," lies the expectation of every daffodil grower. Sometimes this quote does not hold true because of diseases of the narcissus bulb. There are two major diseases of narcissus bulbs. Firstly, there is bulb rot caused by the bulb and stem nematode *Ditylenchus dipsaci*; secondly, there is basal rot which is caused by the fungus *Fusarium oxysporum* f. *narcissi*. In the species name *F. oxysporum* f. *narcissi*, the "f" stands for form. Thus, the form of *F. oxysporum* which infects narcissus bulbs is *F. oxysporum* f. *narcissi*. Some other forms of *F. oxysporum* are *F. oxysporum* f. *lycopersici* which causes wilt of tomato and *F. oxysporum* f. *tulipae* which causes bulb rot in tulips.

Basal rot of narcissus as caused by *F. oxysporum* f. *narcissi* was first described in England in 1887 by M. C. Cooke and in 1911 in the Netherlands by J. Westerdijk (4). It is generally, but not universally, accepted (4) that this fungus is rather specific for its host and is not found in soils not previously cropped with narcissus. Thus, it would follow that this problematical fungus is introduced into the soil by growing narcissus bulbs in it. Thus, the statement by Price (4) rings ominously in my ears: ". . . the bulb itself must carry the seeds of its own destruction." So, it would seem that the basal rot fungus is introduced primarily into garden soil by planting infected narcissus bulbs on the site or by planting bulbs which bear the fungus spores externally on the dry, papery, outer scales. However, Price (4) has also presented some evidence which suggests that the fungus can be introduced into the soil by planting it with tulips. In apparent disagreement with Price, Melville (5) reports that the basal rot fungus can also be found in soils where narcissus bulbs have never been grown.

New infection of narcissus bulbs in the soil primarily occurs in the fall by the germinating spores penetrating wounds in the basal plate which are made by emerging roots (6). Previously, infection of bulbs in the soil was believed to take place primarily late in the growing season when the roots became infected, and the fungus moved into the basal plate and on into the bulb (5,7); however, new work by Langerak (6) of the University of Wageningen, The Netherlands, has shown that new infections only occur during the first few weeks after planting when the roots are emerging from the basal plate. This infection can only occur when the soil temperature is above 12°C or 53.6°F (6). Even though the fungus can thrive in the soil at temperatures below 12°C (53.6°F), it can't infect narcissus bulbs at this temperature. Thus, one aspect of basal rot control would be late fall planting when the soil temperature at 4 - 6 inches deep is 12°C (53.6°F) or below. In the United States, Gould (7) has reported that post-harvest infection is important and begins at the base of the bulb and also at sites of wounding caused during lifting of the bulbs. Post-harvest infection of bulbs in the U. S. has traditionally been controlled through dips in fungicide shortly after lifting. In the Netherlands, no particular benefit in the control of basal rot has been accomplished by immediate post-harvest fungicide dips (6). Instead, the Dutch practice quick drying of bulbs after lifting and storage under temperatures as cool as possible.

Once the bulb has become infected in the soil, the fungus kills the basal plate (Figure 3) and spreads upward through the scales, causing them to become necrotic. This death is easily observed by stripping away the dry, papery, outer scales to expose the inner fleshy scales (Figure 4). These inner scales are typically dark brown as they emerge from the infected basal plate and white nearer the nose of the bulb. In the garden, basal rot is indicated when foliage fails to appear in the spring or by stunted plants having smaller or deformed blooms and early maturing foliage. With bulbs in storage which either were infected the preceding fall when the roots were emerging from the basal plate or which were infected during lifting by the fungus entering wounds, the fungus will spread throughout the bulb causing it to rot and ultimately become only a dust-filled paper shell. Obviously, a hand full of dust in your hand indicates basal rot; however, basal rot is also indicated when the bulb feels soft when it is



Figure 3 — Basal Plate of Narcissus Bulb Infected by *Fusarium oxysporum* f. *narcissi*. (Print made from slide furnished by Dr. Gary Chastagner, Washington State University.)

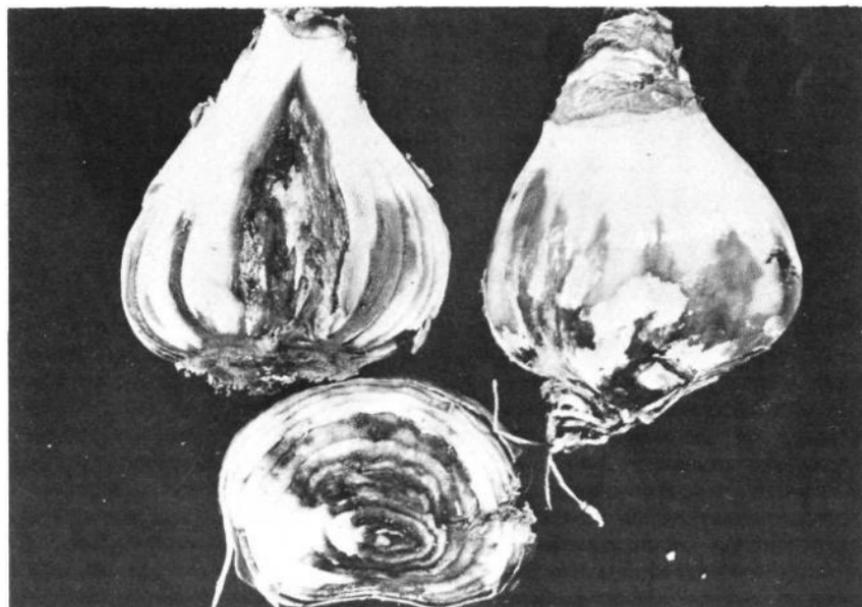


Figure 4 — Fleshy Scales of Narcissus Bulb Infected by *Fusarium oxysporum* f. *narcissi*. (Print made from slide furnished by Dr. Gary Chastagner, Washington State University.)

squeezed. Sometimes the fungus is clearly present on the surface of infected bulbs as a pinkish dust (Figure 5). Although amateur daffodil growers seldom hot water treat their bulbs, commercial growers who routinely practice hot water treatment have observed that infected bulbs have a tendency to float whereas healthy bulbs will sink (5).

Factors which contribute to losses of bulbs to basal rot include: 1) early planting of bulbs when the soil temperature is above 12°C (53.6°F), 2) planting of susceptible cultivars, e.g. "bulb-rotting whites," 3) planting of bulbs in areas which are not well-drained, 4) use of high nitrogen fertilizers when fertilizing, and 5) failure to practice crop rotation to reduce the amount of fungus in the soil.



Figure 5 — Basal Rot Fungus on Outer Scales of an Infected Narcissus Bulb. (Print made from slide furnished by Mr. Willis Wheeler.)

BASAL ROT CONTROL

Factors which can minimize the losses of bulbs to basal rot include the following: 1) avoidance of high nitrogen fertilizers; 2) planting of bulbs only in raised beds or in otherwise well-drained sites, e.g. slopes and hillsides; 3) practice of crop rotation, e.g. not growing bulbs in a previously cropped area for a period of 5 - 6 years will markedly reduce fungus buildup in the soil (5), or fumigate the soil with methyl bromide to kill the basal rot fungus which is there so that crop rotation is not necessary; 4) mulching of beds to reduce soil temperatures; 5) buy bulbs only from a source known to supply basal-rot free bulbs, i.e. bulbs are not

soft when you receive them; 6) avoid planting known susceptible cultivars such as cultivars with white perianths or all white cultivars which have Madame de Graff (1 W-W) in their pedigrees (5); 7) plant cultivars which are known to have a high level of resistance to the basal rot fungus, e.g. St. Keverne (2 Y-Y); and 8) use fungicidal dips, e.g. benomyl, to minimize losses due to basal rot.

In addition to the preceding commentary, I would like to propose a specific annual procedure to be followed by the amateur daffodil grower to minimize losses due to the basal rot fungus: 1) Delay planting of bulbs until soil temperature is below 12°C (53.6°F). 2) Give bulbs a 0.5% benomyl dip, e.g. Benlate, (3 tablespoons of benomyl/gallon of water or 19.0 g benomyl/gallon of water) for 30 minutes and plant while still wet. 3) Lift bulbs as soon as the foliage has completely died down and dip bulbs in 0.5% formalin (19 ml 40% formaldehyde/gallon of water or 4 teaspoons 40% formaldehyde/gallon of water) for 15 minutes or give a benomyl dip as before. This dip, whether it is 0.5% formalin or 0.5% benomyl, should be applied preferably as soon as the bulbs are lifted but definitely within 48 hours after digging (8). 4) Hang bulbs to dry in a cool, dry, and airy place until time to plant. 5) Repeat step #1.

I believe that application of the preceding procedure for basal rot control will substantially reduce losses due to the basal rot fungus. However, it should be noted that no procedure for basal rot control can ever be expected to be 100% effective. Even though the procedure that I have outlined is potentially effective in reducing losses of bulbs due to basal rot, it is not without potential problems. Benomyl to the plant pathologist is what penicillin G is to the physician: benomyl is the most effective fungicide available for control of many fungal diseases of plants, e.g. black spot in roses which is caused by the fungus *Diplocarpon rosae*, narcissus basal rot, etc., whereas penicillin G is the antibiotic of choice for treating numerous bacterial infections. Today, many bacteria which were previously susceptible to penicillin G are now resistant to it. Unfortunately, many fungi are acquiring resistance to the systemic benzimidazole fungicides, e.g. benomyl, thiabendazole, carbendazin, furidazol, and thiophanate (9). Thus, intensive use of the benzimidazole fungicides is not recommended as it might render them ineffective in basal rot control (8). Therefore, to avoid this problem in my procedure, I would recommend a three-year alternative procedure as follows: In the first year, benomyl would be used on bulbs both at the time of lifting and planting. In the second year, formalin would be used on the bulbs at the time of lifting, and benomyl would be used on them at the time of planting. Lastly, in the third year, formalin would be used to treat the bulbs at lifting. As for the third year planting, perhaps it is time to suggest giving the bulbs a formalin dip at the time of planting. As an alternative to the formalin dip at planting in the third year, no dip of any kind would be given. Instead, the only control measure to be used would be late planting when the soil temperature is below 12°C (53.6°F). Formalin has been used for a number of years in the hot water treatment of bulbs. One of the purposes of the formalin in hot water treatment is to kill any spores of the basal rot fungus which might be present and which would conceivably contaminate all the bulbs receiving the treatment. Of course, the reason for a formalin dip at planting time would be for the same purpose. However, I am not aware of formalin ever having been

used as a bulb dip at planting time. Theoretically, it would destroy any inoculum, e.g. spores, present on the bulbs at the time of planting and thereby reduce the chance of infection when the roots emerge from the basal plate of the bulb. This three-year alternative cycle is obviously time consuming and laborious for the amateur grower; however, the reward for such effort very well might be the effective management of basal rot in susceptible cultivars or in new, very expensive cultivars with which you don't wish to take any chances. No matter whether the annual or three-year alternative basal rot control procedure is followed, delay in planting until the soil temperature is below 12°C (53.6°F) is imperative if maximum basal rot control is to be achieved.

With regard to crop rotation to reduce the amount of basal rot fungus in the soil, soil fumigation with methyl bromide (2 lbs/100 square feet) is said to be effective in the control of *Fusarium* (10). However, Apt and Gould (11) reported that the use of methyl bromide (2 lbs/100 square feet) to control the root-lesion nematode of narcissus, *Pratylenchus penetrans*, unexpectedly resulted in an increased incidence of basal rot in the cultivar King Alfred. They attributed this effect to the elimination of fungi which were antagonistic to the basal rot fungus but which allowed the basal rot fungus to survive and thrive. Despite Apt and Gould's observation, fumigants like methyl bromide are generally used in control of nematodes, soil insects, and weed seeds as well as soil fungi (2). A major problem which limits the use of a soil fumigant like methyl bromide is that it is not generally available to the amateur daffodil grower. In Tennessee, it can only be obtained if you possess a pesticide applicator permit which is issued by the Tennessee Department of Agriculture after you have attended a pesticide training session.

CONCLUSION

Within this article, some basic information was presented regarding fungi in general and *Fusarium oxysporum* f. *narcissi* specifically. Much discussion was given regarding basal rot control including two proposed procedures for minimizing basal rot losses which differ substantially from most of the currently recommended procedures.

A subsequent article on fungal diseases of narcissus will cover the following diseases: fire, smoulder, scorch and others.

LITERATURE CITED

1. Horsfall, J. G. and E. B. Cowling. (1977). "The sociology of plant pathology." In *Plant Disease: An Advanced Treatise. Volume I: How Disease Is Managed* (J. G. Horsfall and E. B. Cowling, eds.), pp. 11-33. Academic Press, Inc., New York.
2. Agrios, G. N. (1978). *Plant Pathology*. Academic Press, Inc., New York.
3. Whittaker, R. H. (1969). "New concepts of kingdoms of organisms." *Science* 163, 150-156.
4. Price, D. (1975). "The occurrence of *Fusarium oxysporum* in soils, and on narcissus and tulip." *Acta Horticulturae* 47, 113-118.
5. Melville, S. C. (1977). "Narcissus basal rot and its control." In *Daffodils 1977* (Elspeth Napier, ed.), pp. 17-21. The Royal Horticultural Society, London.

6. Bergman, G. H. H. Bulb Research Center, Lisse, The Netherlands. Personal Communication.
7. Gould, C. J. (1966). "Diseases." In *The Daffodil Handbook* (G. S. Lee, Jr., ed.), pp. 118-124. The American Horticultural Society, Washington, D. C.
8. Gould, C. J. and R. S. Byther. (1978). "Disease Control Recommendations for Narcissus." EM 4313. Washington State University.
9. Georgopoulos, S. G. (1977). "Pathogens become resistant to chemicals." In *Plant Disease: An Advanced Treatise, Volume I: How Disease Is Managed* (J. G. Horsfall and E. B. Cowling, eds.). pp. 327-345. Academic Press, Inc., New York.
10. Velsicol Chemical Corporation. (1960). Pestmaster Fumigant-1.
11. Apt. W. J. and C. J. Gould. (1961). "Control of root-lesion nematode, *Pratylenchus penetrans*, on narcissus." *Plant Disease Reporter* 45, 290-295.

ADDENDUM

Since the preceding text was written, several points have been raised which do require comment. Firstly, in addition to avoiding high nitrogen fertilizers to control basal rot, organic nitrogen sources, e.g. fresh manures, etc., and undecomposed organic matter, e.g. leaves, grass clippings, etc., should be avoided. Secondly, crop rotation of only two to three years in the cool areas of the Pacific Northwest is all that is required to significantly reduce the basal rot inoculum in the soil. Perhaps this might also be true elsewhere. Thirdly, the reference to 0.5% benomyl actually means 0.5% Benlate, Dupont's brand name for benomyl. By formulation, Benlate is 50% benomyl and 50% inert ingredients. Thus, 0.5% Benlate would actually be 0.25% benomyl. Nonetheless, the recommended concentration for a 0.5% Benlate dip is 3 tablespoons Benlate/gallon of water as previously mentioned. Lastly, the suggested use of 0.5% formalin as a pre-planting dip should be used with caution as it could possibly damage the bulb if the basal plate has already begun to swell. Thus, some research on formalin as a pre-planting dip is necessary before it can be recommended for use on a broad scale; however, 0.5% formalin can be safely used as a post-lifting dip.

HERE AND THERE

Since the last issue of the *Journal*, newsletters have been received from various regions, local societies, and overseas societies, providing news of show winners and several interesting articles which we hope to print in the future.

The New England Newsletter includes Editor Amy Anthony's annual review of the catalogues, along with some comments about the proliferation and price of new introductions; while the Midwest Region

is making plans for a fall meeting and Judging School III next spring. The Southeast Region Newsletter included a report from Walter Thompson on the Trial Garden at Clemson University requesting additional cultivars from Division 9, while the Middle Atlantic Region Newsletter includes a long list of new members, some tips on daffodil digging, and plans for a fall meeting.

Virginia Perry's Public Relations Newsletter included a summary of activities in the various regions, and also included a copy of the "Summary of Daffodil Classification" which is used as educational material by the Westchester and Greenwich Daffodil Societies.

Teta-a-Tete is the name of the newest newsletter to come our way. From the Daffodil Society of Minnesota, it included tips for exhibitors for their first official ADS show, plans for a pot luck dinner, and a request for slides of daffodils used in landscaping.

Cods Corner included a report of the World Convention, the Boston Convention and Show, plans for a bulb sale, and purchase of several daffodil books to be placed in the Franklin Park Conservatory and Garden Center Reference Library.

The Northern Ireland Newsletter contains several articles on the merits and/or faults of various trumpet cultivars, along with an article describing many of the newer cultivars bred in Northern Ireland.

The *Journal* of the Daffodil Society of England takes a look at daffodils in the garden and begins a series on the daffodil hybridizers of the past along with a summary of prize winning cultivars. The Tasmanian Daffodil Council Newsletter lists show dates and includes a tribute to Ken Heazlewood who died in October of 1978.

The Australian Daffodil Society Newsletter includes an article on "Nematode Diseases of Narcissus," as well as articles on a lack of bloom in 1978, judging dilemmas, daffodil breeding, and winning cultivars.



From Oregon, George E. Morrill writes that he has surplus three- and five-year-old seedling bulbs of the crosses *Carita* × *Precedent* (forty bulbs) and *Armada* × *N. cyclamineus* (ninety-five bulbs). Depending on the response received, he will be glad to send five or ten bulbs of each, or perhaps only one, to the first members requesting them. If you do not receive your bulbs by late September, the bulbs were all gone before the request was received.



Wells Knierim must have travelled more than any other member this year. After returning from the World and Boston Conventions, Wells wrote, "Arrived home on May 6 and on May 8 we had 100 cultivars, 3 stems each, for our Western Reserve Daffodil Society Show at the Garden Center. There were only two other exhibitors so no ADS awards were given. Then we stored lots more in the refrigerator, and on May 17 we had 65 cultivars, 3 stems of each, for our 'Flower Fair' at the downtown library (4000 visitors) with a single stem of *N. scaberulus* in front to amaze the populace! On May 22, I flew to Salzburg, Austria, to meet Matthew Zandbergen to see the 'Narzissenfest' at Bad Aussee and to see the millions of poets growing wild on the mountain slopes."



Captain Herbert Rommel, USN, Retired, enjoyed the World Convention and sent us a first day cancel of the daffodil stamp which the British government issued to commemorate the event. He says the stamp together with the special card is a "maximum" card to philatelists.



First day of issue, British daffodil stamp



Sid DuBose writes on June 18, 1979, "You might be interested to know that I have daffodils in bloom right now. They are bulbs from Phil Phillips which were received in January. They were refrigerated for six weeks, then potted up and grown off. They weren't too happy with our recent five days of 100+ degree weather, but now that it is cooler (45° nighttime low last night) they seem to be doing better. Now if they will just bloom again next spring at the proper time!!! It will be the quickest reversal of seasons ever!"

—o—

Margaret Roof returned from a trip to China, and sent us an article from the magazine *China Reconstructs* titled "Zhangzhou, Home of the Narcissus." The article states that, "The best varieties are grown in the city of Zhangzhou. . . here the soil is fertile, there is ample sunshine in the morning and shade in the afternoon. Nearly every peasant family raises bulbs. . . Each autumn they are covered with three or four inches of rice straw and then dug out again the following July. Three years later they are ready for the market."

—o—

Vol. 11, No. 5 of *The Avant Gardener* includes a summary of Mrs. Ralph Cannon's article on violets and daffodils which was in the *March Journal*.

—o—

The Hemerocallis Journal for June, 1979, includes several articles of interest. One is "Thoughts for Flower Show Judges" and asks the question, "Is it too much to ask a judge to study?" and another is "Help!!! We are Drowning," which comments on the proliferation of new registrations each year.

—o—

From the July, 1979, *Horticulture* magazine we quote the following:

The Thomas Roland Medal, which is awarded from time to time for "Exceptional skill in horticulture," was presented this year to Gertrude S. Wister.

Mrs. Wister's wide recognition as an expert on bulbous plants is solidly based on her personal long experience in growing them. She and her husband John C. Wister have developed the plantings around their home. There they welcome visitors and share their experiences and knowledge. In addition to the large number of kinds of narcissi and other bulbous plant cultivars, she has grown many crocuses and peonies. As the years have gone by and the trees have grown, her interest in shade tolerant plants has increased until she now has over 100 hosta cultivars and many other kinds of plants that will thrive with them. . . .

—o—



PLANTING TIPS

(From the Middle Atlantic Region Newsletter, August, 1978)

As this is the time to begin preparing for our fall daffodil planting, perhaps a few hints to novices are appropriate. They are offered with reservations as differences in climate and soils preclude uniform directions.

1. Select a well drained site, a place where water flows *through* the ground but never stands.

2. Dig as deeply as the soil requires for good drainage. Poor, heavy clay soils require 18-24 inches but perhaps you are luckier. Raising the bed slightly above the surrounding area will facilitate drainage.

3. Add humus. Peat is good. In hot climates avoid highly organic matter. Also add coarse sand to heavy soils.

4. Several weeks before planting, work in fertilizer high in phosphate and potash but low in nitrogen (2-12-12, 3-18-18, 5-10-10).

5. Assemble your bulbs, sand, Chlordane, tools, and paper and pencil. Some people prefer to open up a long trench for their bulbs; our preference is for digging a hole for one bulb at a time with a long handled bulb planter which is pushed in by foot. If you have the strength, or can find a willing soul who has, a post hole digger might be even better.

6. Dig your hole 6-9 inches deep, on the shallow side if you wish the bulb to increase quickly and if you plan to divide frequently; deeply, if you wish to leave them down for longer periods.

7. Put $\frac{1}{2}$ inch of sand in the hole. Some think this discourages basal rot; others say not. In any event, it makes lifting them later on much easier. Even more sand placed around the bulb makes beautifully smooth bulbs. Perlite may be used in place of sand.

8. Inspect bulb carefully before planting for signs of basal rot (softness or discoloration around base of the bulb) or narcissus bulb fly (watch for small holes where fly has entered).

9. Place bulb in hole and dust with Chlordane for protection against bulb fly.

10. Chart each planting immediately. Labels are not to be trusted, being subject to destruction or removal by children, animals, weather, gardeners, and even birds.

11. Push soil into holes and water well to fill in air pockets.

12. After planting is an ideal time to mulch.

FRANCES ARMSTRONG, *Covington, Virginia*

BOARD OF DIRECTORS MEETINGS

May 3 and 5, 1979

(Abridged from the report of the Secretary)

Forty Directors were present.

The Treasurer, Mr. Knierim, reported that the Society is "in good shape" financially.

Regional reports were received from eight regions.

Committee reports:

AWARDS: Mr. Anthony announced the appointment of Mrs. Phil Lee due to the illness of Mrs. Simms. Mrs. Lee reported that there were 40 shows approved for 1979.

CLASSIFICATION: Mrs. Anthony is still anxious to be informed of errors which the membership may note while using *Daffodils to Show and Grow*.

DATA BANK: Dr. Throckmorton reported that the Data Bank is in the best shape it has ever been. The computer has turned out a *Daffodil Stud Book*. This work is in three volumes and contains about 1,000 pages. It gives the parents and four grandparents of each entry. This book is in the library and was made possible by a contribution to the library.

EDITOR OF JOURNAL: Mrs. Gripshover solicited new contributors and asked for copies of *all* newsletters, Regional and local.

HEALTH AND CULTURE: Mr. Wheeler discussed members' problems with nematodes, bulb flies, and narcissus poisoning.

JUDGES: Mrs. Barnes reported a total of 261 accredited and 100 student judges.

LIBRARY: Mrs. Bloomer reported that the library which now resides in Tyner, North Carolina, has been cataloged, and that the list of contents will appear in a forthcoming *Journal*. Mrs. Bloomer described the *Daffodil Stud Book* and indicated that the book is to remain in the library and not go out on loan. Any particular information on selected cultivars can be secured by addressing questions to Dr. Throckmorton. Dr. Throckmorton will update the book each year provided the old copies are destroyed.

MEMBERSHIP: Mrs. Thompson reported 1353 domestic and 100 foreign members.

MINIATURES: Mrs. Macneale indicated that she spoke to numerous growers in England and Northern Ireland about the ADS Approved List of Miniatures.

PHOTOGRAPHY: Mrs. Stanford said that she had promises for two new slide programs: one from Poeticus Round Robin #1 and the other from the Northern Ireland Daffodil Growers. She needs more slides of cultivars from Division 4, and from Divisions 6 through 11. She asked permission to purchase carousels and mailers. Approved.

PUBLIC RELATIONS: Mrs. Perry indicated that emphasis has been on public plantings, the interest generated by shows, and the societies that sponsor them.

PUBLICATIONS: Mrs. Pardue has camera-ready copy of a *Brief Guide to Growing and Showing Daffodils* which is set to go.

SCHOOLS: Mrs. Yerger indicated that all three schools were held in 1979 in several locations. Two make-ups were also held. Accredited Judges may request applications to become approved instructors from Mrs. Yerger.

TEST GARDENS: Mr. Thompson reported that the test garden at Clemson has been replanted in the new arboretum. A new test garden is in the making at the University of Arkansas. Mr. and Mrs. Victor Watts of Fayetteville are new members of the Test Garden Committee and will take an active interest in the Arkansas venture.

EXECUTIVE DIRECTOR: Mr. Ticknor's report indicated that the year had been successful financially but warned that income is essentially fixed while costs, especially postage, continue to increase. Membership is increasing and dropouts are down.

OLD BUSINESS: None

NEW BUSINESS:

JUDGING SCHOOLS: Concern over the new school rules which now require judging five rather than three shows as a student was expressed. It was felt this might create a hardship on those students who live in areas where accredited judges are most lacking and there are not many shows. A need for refresher courses was mentioned.

BUDGET INPUT: Mrs. Gripshover stated that the Editor or the Publications Chairman should have input to the Budget Committee. Mrs. Bozievich said she planned to solicit input from all committee chairmen. The budget will take effect in January.

DAFFODILS IN IRELAND: Mr. Knierim proposed that the ADS buy 100 copies of *Daffodils in Ireland* for sale to members. Approved.

JOHN AND BETTY LARUS TROPHY: Mr. Anthony asked the Board to accept as a National Award the John and Betty Larus Trophy for three stems of a seedling candidate for the Approved List of Miniatures. The trophy is to be donated by Mr. and Mrs. Anthony. Accepted.

OLIVE W. LEE BOWL: Mrs. Hardison moved to accept the bowl as a National Award. Motion carried.

JUDGING SCHOOLS AT CONVENTIONS: Mrs. Pouncey asked if the sponsoring group would be expected to have a judging school in Memphis. Mr. Anthony stated that such a decision was entirely up to the local group.

Fall Board Meeting will be held September 21-22 at the Cross Keys Inn in Baltimore, Maryland.

1980 Convention will be held March 27-29 at the Hyatt Regency Hotel in Memphis, Tennessee.

The proposed change in the by-laws, as printed in the March, 1979, *Journal*, was approved by the membership at the annual meeting held on May 4, 1979.

ORIGIN OF TAZETTAS

W. T. Aesop

Once upon a time a thousand years ago, Ulysses was having a hard time sailing home from Troy to see his wife in Ithaca. Knowing that he was about five years late for supper he looked around for something to mollify the little woman. He met an interesting young lady named Circe and she suggested that he take home some dragon's teeth. Ulysses wasn't taken in by this as he knew for a fact that dragon's teeth didn't have brown wrappers. Nevertheless he took some and gave her in exchange a couple of his poorest rowers, whom she promptly turned into pigs. Ulysses got home and told his wife a wild tale about Helen and Paris and Agamemnon and gave her the dragon's teeth. She threw them out in the kitchen garden and up sprang — guess what? Beautiful, sweet smelling clusters of white flowers with little yellow cups. Mrs. Ulysses was an Italian girl and she called them tazettas — taz for cup, etta for little.

THAT BRAVE YELLOW DAFFODIL . . .

We got this tale from one of the construction engineers who was rushed up to that crippled reactor at Middleton last Monday morning when it looked as though the whole thing might go. He's a macho kind of guy and seemed embarrassed to talk about it. We're not.

Our friend was at a railroad crossing waiting for some emergency gear to come in on a big truck. You probably saw pictures of those huge flatbeds, thumping and bumping over the tracks, and straining under everything from big lead bricks to giant metal tanks. Well, right along the edge of the blacktop road at the crossing was a clump of grass. And rising tall and proud from the grass was a single, yellow daffodil. You couldn't miss seeing it, our friend tells us, but the dozen or so reactor people, railroad workers, and Pennsylvania State Policemen who were there were too tense and worried to think much about it.

The wheels of the first few trucks to come lumbering in cleared that daffodil by a hair. Then one of the policemen walked over and put one of his great, booted legs on each side of the yellow flower. Then, as the rigs came by the cop signaled them, with the heels of his hands, to keep clear. They did. We're told that policeman looked as big as a cooling tower as he stood there straddling the lonely daffodil.

Our friend swears that the flower stood safe and tall when he left the plant yesterday. The drivers and everyone were looking out for it. We think that's great. Daffodils are flowers of hope. They help in time of trouble. So we're partial to them this time of year. And we're partial to people who care about them, too.

—reprinted with permission of *The Bulletin*,
Philadelphia, Pennsylvania

CHARLES H. MUELLER Bulb Specialist

River Road, New Hope, Pa. 18938

WORLD'S FINEST BULBS

VISIT OUR SPRING DISPLAY — a living catalogue, open to the public from April 1 to May 25. It contains more than 1,200 varieties of spring-flowering bulbs from which to select and order your bulbs for fall planting. Blooming times range from the earliest Snowdrops, through Hyacinths, Daffodils and Tulips, to the last Wood Hyacinths.

TULIPS include newest Dutch hybrids, some of which can be seen only here.

DAFFODILS include best Dutch, English, Irish and West Coast varieties.

Write for Special Daffodil Offer or Fall Folder.

D-DAY 1979

MRS. WILLIAM C. BAIRD, *Columbus, Ohio*

D-Day 1979, the 17th of April, 1979, is when more than eighty strong from all over the world descended on London for the second World Daffodil Convention and a tour of England, Holland and North Ireland. We came from all sections of the United States, one from Canada, from Tasmania and the mainland Australia, and both North and South Islands of New Zealand. We represented all walks of life with a common bond, our love of the daffodil. It had been a very cold winter and spring in London but the weatherman learned we were coming and turned up the heat and brought out the sun to greet us.

Daffodilians had been invited to enter flowers in the RHS Show; the Vances from Virginia, Kathy Andersen of Delaware, and Peggy Macneale from Ohio had accepted the challenge. I had the pleasure of joining them and helping them with their entries. This afforded me the chance to get a preview of things to come. So as I gathered properties I stopped to visit with those I knew and met many new faces. At the Rathowen stand I met Tom Bloomer who seemed to be giving his moral support to Brian Duncan and Clarke Campbell who were busily engaged in grooming flowers. And what beauties they were. The center of their exhibit was to be a huge triangle of all gorgeous white daffodils. I found Sandy McCabe wandering around with a handful of daffodils. Tony Kingdom seemed to be just everywhere helping people with their entries. Here and there I met up with old acquaintances from down under, who, like I, were getting a preview: Phil Phillips, Jim O'More, Miss Veery, and Alf Chappel to name a few. Robin and Kate Reade with daughter Patsy, who had designed their stand this year, were having a "tea break" and invited us to join them. I suddenly realized that this is really a family effort. Here



Peggy Macneale and Kathy Andersen prepare entries for the RHS show with Tony Kingdom's help. (Baird photo)

was Betty helping John Lea with his stand; she had created lovely vases of Dove Wings to soften the corners of his stand. In another aisle I found the John Blanchard family all at work helping John with his entries; the youngest son was clowning it up with a "new variety" he had made by thrusting a grooming brush through the cup of a white petalled daffodil. I stopped to talk to Lord Skelmersdale who was putting the finishing touches on his Broadleigh exhibit. Close by I found Barbara Abel-Smith and we traded pleasantries. I saw competitive classes in the making. Everybody was hard at work but had smiles of welcome for all of us and time to speak and offer their assistance. The flowers were magnificent and I kept asking myself how had they done it with such adverse weather conditions. But I learned that all flowers had had to be forced in glass houses. What an effort! All classes are staged on raised tiers covered with dark green cloth; green ceramic vases stuffed with green moss hold the flowers in place and green daffodil leaves are added to give the naturally grown look. It was a happy, fun experience for me. That evening the RHS gave us a welcoming cocktail party where we renewed friendships and made new friends from all over the world. Matthew Zandbergen was there to greet us, too. This was just a taste of what was to follow.

The RHS show was magnificent. Entries were down because of the bitter weather, but the quality was superb. I myself spent an hour at the Alpine Show which was being held in the adjacent building. I really was carried away with photographing all the pots of miniature species daffodils, some of which I had never seen before. This exhibit was tops in its class and it seemed all of London was there. The RHS Daffodil show was also a mass of people hungry for the first bit of spring which had been so elusive so far. Any attempt to photograph the big winners was a complete frustration. John Lea won the Engleheart Cup and one of his entries in that class, Dailmanach, a lovely pink cup, won the best bloom in the show, a double triumph for Mr. Lea. But the fun part for me was talking to the public who came to the show. I learned that small growers are a bit in awe of entering the RHS Show; they eagerly support their local shows but hold back on this one. I also learned that all entries are grown under glass, never in the open as we are required to grow them. So I was doubly pleased that our Stateside entries had competed successfully and won awards. At the banquet that night Phil Phillips was awarded the Peter Barr Memorial Cup for his efforts in the daffodil field. All in all this had been a great day but one person was missing, Nell Richardson. A very moving Memorial Service honored her at a nearby church that afternoon.

Under the auspices of the RHS and guidance of tireless Tony Kingdom we spent a full day at the RHS Wisley Gardens and the Saville Gardens at Windsor close by. The test gardens were of much interest to us. I was much impressed with the Demonstration Plot which in true life demonstrated the importance of allowing daffodil foliage to die back naturally. There were four rows of daffodils, all the same cultivar growing under similar conditions but for this difference: the first row was very thrifty and represented the natural die back; the second row was a sad lot with scant show of poor quality blooms and in some cases no foliage at all and this represented the removal of foliage after two weeks; the third was a bit better, but still a poorly grown row and this represented removal of foliage after four weeks; the fourth and last row

was a hardy, thrifty and fully blooming row which was equivalent to the first row and represented removal of foliage after six weeks. In the wild flower areas of the Gardens we found masses of bulbocodiums in full bloom looking much like Lilliputian soldiers marching along the grass. Here, too, were species cyclamineus dotting the landscape. We saw them at the Saville Gardens as well, but here we found clump after clump of greenish-blue foliaged pseudo-narcissus waving in the wind. The camera bugs had a field day.

The following day we departed London, drove through the beautiful farmlands of East Anglia to the fenlands of Lincolnshire where the major bulb industry of England is located. The van Geest brothers, originally from The Netherlands, have a vast area devoted to the culture of daffodils and tulips. All culture is mechanized. The chairman, Mr. L. van Geest, hosted us lunch at which time he greeted us with his remarks on the size of the bulb industry. "We export more dry bulbs and more cut flowers than all the rest of the world. We even export to Holland 'like carrying coals to Newcastle.'" At tulip time they hold a tulip flower parade; this year would mark their twenty-first parade at which time they anticipated 250,000 to 300,000 visitors. That afternoon we visited the Kirton Experimental Station which works closely with the bulb industry in Lincolnshire. In recent years the industry has concentrated on increasing its export trade to West Germany and Holland. Daffodils are now grown as a two year crop rotated with potatoes. Herbicides are used but no bulb is touched by hand. They now can grow virus free Soleil d'Or in Yorkshire. Experiments are in constant progress to eliminate bulb scale mite, eelworm, basal rot, and smoulder. Large exhibits of each were on display in the room.

We spent the night in the old city of Lincoln. Our hotel was the White Hart, a very old and quaint inn located just outside one of the gates to the cathedral. It contained a maze of staircases and hallways and at every turn beautiful antique furniture, china, and brasses were a focal point. Each bedroom seemed to have something unique; ours had the "famous bathroom" which was completely tiled with a very decorous tile, probably Delft; another had a fabulous view of the cathedral and the clock and we conjectured if the striking of the hour would keep us awake during the night. But we will never know because it was rigged to be silent between midnight and seven o'clock in the morning. Many of us walked the cobblestoned streets after dinner. It was a beautifully clear evening with just a faint nip in the air. The cathedral was strikingly illuminated and challenged all the photo bugs to get "just the right view." It was fun to window-shop and roam the narrow streets; we were quite reluctant to settle in for the night.

Next day we had the morning free to visit the cathedral, shop, or just watch the local people do their marketing. In the afternoon we travelled through the Midlands en route to the home of John and Betty Lea. Their vintage home is situated in a well landscaped parklike area on the edge of Stourport. The daffodil garden is a small fenced in plot well protected by sheltering hedges. It presented quite a challenge for eighty-odd daffodil enthusiasts to see his garden at one time. Naturally we were all eager to see his winners and beautiful flowers of his trade stand growing out of doors. Later the family ushered us into their lovely home for tea, sherry,

and other goodies. There on a polished table located at the dining room window was ensconced the famous Engleheart Cup in all its shining glory.

On Sunday morning we were the guests of the National Daffodil Society and the Solihull Horticultural Society at their spring flower show which is staged in a tent at a local garden center. This year their schedule included special classes for American, New Zealand, and Australian bred daffodils to honor the World Convention; our VIPs were asked to judge these classes. Barbara Abel-Smith was there to greet us; she had left her home at five o'clock in the morning to be on hand for our arrival. I soon learned their exhibitors come from all parts of England to enter their flowers and they are an enthusiastic, happy, and congenial group and highly competitive. Theirs was a beautiful show with many challenging entries of fine quality. This is where the famous Bourne Cup and F. E. Board Award are offered. Their National Daffodil Society is the only one of its kind in England devoted exclusively to the narcissus; hence their members are from all parts of England and they are an eager lot. We were graciously treated to sherry and other goodies before our rather reluctant departure. It was really hard to break away from such an enthusiastic and friendly group. But it was now time to say goodbye to England, our English friends, and our faithful shepherd, Mr. Kingdom, who had been with us throughout the England tour, and move on to new adventures.

We had no doubts as to where we were when we landed at Amsterdam because we were greeted by two smiling young people wearing hugh daffodil leis. Just beyond we located Matthew Zandbergen wearing a big smile who was eagerly waiting to lead us to our buses for the journey to The Hague and our hotel; here we were greeted with a huge welcome sign and a smiling Mrs. Zandbergen and Suzy. Later we were to meet Suzy's charming husband and little Suzy. Matthew, together with the assistance of Suzy, had prepared for each one of us a special pamphlet of reproductions of the correspondence of Peter Barr and the Reverend Engleheart, a real treasure. We fittingly started the evening with a toast to Queen Juliana. This happy occasion set the tempo for the entire tour. Each of us had been given a "good luck" necklace which we proudly wore during our stay in The Netherlands.

We spent a full morning visiting the acres and acres of bulb fields near Lisse; they were aglow with ribbons of color of the hyacinths, early tulips and daffodils. Suburbia, as in the States, has encroached on this valuable land so in many areas greenhouse culture has replaced growing of flowers out of doors and the cut flower business is flourishing. Many of these greenhouses are so constructed that they can be moved from one crop to another as the seasons develop. They even use heating pipes along the rows out of doors to hasten the blooming period. Everywhere we go, we are more and more aware of the cultivation of each square foot of land. Here, as in England, there is a Bulb Research Centre which works side by side with the Bulb Growers Association. It is supported fifty percent by their government and fifty percent by the Association. Obviously bulbs and the cut flower business are important industries. Mr. H. F. Sloomweg, the Deputy Director, welcomed us to the Centre and gave us a short talk on how it operates. It is staffed by 108 people of whom 17 are Ph.D's and 20 are technicians or specialists who work in four departments: Physiology and Biochemistry, Plant Pathology, Horticulture, and Mechanization. Nothing is overlooked.

We spent an afternoon at the famous Keukenhof Gardens which were a rainbow of color. These are designed, planted, and immaculately groomed by the various bulb firms. Overhead are centuries old trees which form a green leafy canopy; there are trickling streams and many reflecting pools of water; in the background are beautiful blooming shrubs and banks of colorful heather. Cameras were clicking everywhere.

No visit to Holland is complete without a trip to the area of Kinderdijk where nineteen windmills still exist and can be put to use. These date from about 1740. We visited one which was in full operation and were allowed to see its antique interior which has been well preserved; we saw the boots and wooden clogs lined up on the wall just inside the entrance, and the wooden gears which make up the mechanization of the mill. We climbed to the top for a view out the window; from that vantage point we could really sense the power of the sails as they swept past the window. Our tour guide told us an interesting story as to how the sails were adjusted to signal warnings to the people of that area of approaching air raids during World War II. A blustering cold wind seemed to be blowing right through us and a promise of rain was in the air so we were grateful for the shelter of the bus as we drove to Rotterdam for a bite of lunch at the Euromast. This is designed much like a hugh Crow's Nest approximately 92 meters above ground level. From its windows one gets a marvelous view of Rotterdam and its enormous harbor. We saw Delft pottery and wooden shoes being made and we stopped at a cheese factory. Most of us spent a couple of hours at the famous "The Madurodam," a fascinating miniature city of Holland.



Matthew and Nel Zandbergen at the "Party Night in The Hague." (Baird photo)

Our last evening in Holland was planned around typical party games. We were divided into teams to compete for high points and a prize. This was a riotous evening and a very happy ending to our stay in Holland. In the morning, en route to the airport, we stopped at Aalsmeer, the world's largest flower auction. The building is divided into two sections, the buyers' room and the auction department which in itself comprises 60 acres. The auctions begin promptly at 7 o'clock in the morning six days of the week; the growers bring their flowers directly to the buyers' room where they are prepared, loaded onto carts which are conveyed into the auction room, sold, and wheeled to the buyers' room where they are loaded into vans for transport. This operation is so efficient that the buyers have the flowers within fifteen minutes after their purchase. We could view the proceedings from a catwalk above which encircles the entire building. There were cut flowers of all descriptions, roses, orchids, gladioli, and snapdragons to name a few; also there were house plants from begonias to cactus. A fabulous experience! What a fitting end to our Holland tour! Matthew, Mrs. Zandbergen, Suzy, and little Suzy were at the airport to bid us farewell. And so we say goodbye to our daffodil friends, to Holland, its beautiful flowers and gardens, its picturesque windmills and canals, its lovely cities, the bustling cyclists, and all the friendly and industrious people.

We had heard rumors of the preparations being made in Northern Ireland for the invasion of the World Daffodil Tour and with reason. Not a stone was left unturned to give us a warm welcome and make our stay a memorable one. It seemed Willy Toal was always at elbow; Robin and Kate Reade were everywhere; Brian Duncan, Clarke Campbell or Sandy McCabe seemed to appear out of nowhere; Sir Frank Harrison was always available to answer a question; and Mr. Cochrane was always our guide on all the tours. But it was not just our daffodil friends and their Horticultural Societies who sponsored this marvelous tour, but the Northern Ireland Bankers, The Department of Agriculture, the Secretary of State of Northern Ireland, the Milk Marketing Board, Old Bushmills Distillery, and the various Borough Councils as well. We were entertained with receptions, dinners, teas, and coffees wherever we went. How they did it is beyond my comprehension, because they seemed to be tireless; I suspect a few Irish pixies must have been responsible.

We really started this tour with a welcome lunch sponsored by the Northern Ireland Bankers Association and an afternoon visit to Carncairn. En route we passed through Broughshane; Sandy McCabe, our narrator, announced Broughshane is famous because of three famous daffodil people: Willie Dunlop who lives on the edge of the town, Guy Wilson who was born there, and Sandy McCabe who also saw the light of day there. It was fun to visit these communities for which so many daffodils are named. I learned that "Bally" means "town of;" think how many there are. The daffodils at Carncairn grow on a gently sloping field; lucky for us the weather had warmed and many flowers had opened since the RHS show. In the glass house were many seedlings of promise; one which took my eye was a green-eyed glistening white; Little Princess, the Richardson pink cyclamineus, was there. Before leaving Robin and Kate invited us into their big friendly farmhouse kitchen for a cup of tea and biscuits. On the return trip to Larne we traversed hilly, rocky, pasture

land with fences of field stone and sod banks topped with barbed wire. At sea level we followed the north coastal road which was constructed during the potato famine to give employment to men; their wage was one penny per day (and I thought WPA was new). This is a very famous scenic drive winding along the coastline with the sea at one side and tree covered hills and sheer rock on the other. In the evening we were the guests of His Worship The Mayor and Councillors of the Borough of Larne, which was our headquarters for most of our stay in Ireland. This was a warm and friendly evening with the local townspeople who entertained with Irish songs for which they are famous; even The Mayor, who is of good voice and I am told dances equally well, sang for us an old favorite.



Executive Director Bill Ticknor planting a commemorative tree in the Guy Wilson garden. (Knierim photo)

The next day was a full program. First we visited the Guy Wilson Daffodil Garden at Coleraine where our Executive Director, Bill Ticknor, planted a tree commemorating the Second World Convention. This is a garden landscaped on a grass covered slope; the paths wind through the garden between irregularly shaped beds of daffodils with at least twenty-five bulbs to a clump. It is a mass of color throughout with flowering shrubs, evergreens and heather as background. Everything is labeled. All the daffodils are Irish bred and span many years of hybridizing from the very earliest to the most recent. Many of the shrubs planted here are also of Irish origin. While in Coleraine we also visited



The Guy Wilson Daffodil Garden (Baird photo)

The New University of Ulster where we were hosted to lunch. Somehow that day we sandwiched in a visit to The Bushmills Distillery and the world famous Giants' Causeway. We again travelled more of the coastal highway back to Larne. Do Portrush, Ballintoy, Ballycastle, and Cushendall ring a bell? Our host this evening was the Milk Marketing Board which had planned a delightful program of Irish folk dances, not just the typical Irish Jig but more a ballet type of dance which the youthful dancers seemed to revel in performing.

A large weekend was planned at Omagh. En route we stopped for an interesting visit at the Dunman Milk Factory; dairy products are a large commodity in Northern Ireland. We arrived at Omagh in time for lunch which was sponsored by the Omagh Borough Council. Here, in Omagh, was held this year the famous Championship of Ireland Daffodil Show. The daffodils were magnificent and I was glad to see our daffodil friends go away with many prizes. How they managed to make their entries is still a mystery to me because it seems they were always preoccupied with doing nice things for all of us. Here we were housed in the private homes of members of the Omagh Horticultural Society. What a wonderful experience that was. Peggy Macneale and I were roommates; our hosts were a delightful couple, the McLaughlins, who immediately made us feel part of the family. Theirs is a very comfortable and modern home which they had just recently built to their own specifications. It is located on a hillside setting on the edge of the town where he is a Doctor of Veterinary

Science in the Department of Agriculture. Heathers are their horticultural "hangup" and he showed me the cuttings he had made from the heathers in the landscape of their former home. He was now awaiting a break in the weather to finish his plantings, but he showed me his drawings. Theirs will be a showplace when completed. Heathers grow beautifully in their cool and moist climate and from then on I was particularly aware of heather plantings wherever we visited. He is also using large clumps of daffodils in some borders to give that splash of color in the spring. It seems each year the Omagh Show ends with a special Irish Night. This year the Duke and Duchess of Abercorn graciously opened their ancestral home, Baronscourt, and treated us to a typical Irish stew and apple tart dinner. Afterwards we thoroughly enjoyed a wonderful musical evening of Irish songs which ended with the strains of Auld Lang Syne. This is an evening we will remember for a long time. On Sunday the Clarke Campbell family hosted us to a "barn lunch" at their lovely country home, where we visited informally with all the people of Omagh and had a look at the Rathowen Daffodils; their plantings are on a steep hillside in lush rows. There had been quite a bit of rain so the garden was very wet and muddy and one needed boots to tramp the rows. But that didn't stop this enthusiastic group of daffodil lovers. A cold wind developed and we were grateful to hunt for shelter. We spent the rest of day quietly at home with our hosts where we enjoyed a visit before a crackling wood fire, which is really a luxury in Northern Ireland because there firewood is quite scarce. Snow flurries were in the air making it more difficult to say farewell to these warm and hospitable hosts the next morning. As we gathered at the bus station the leavetaking was a chorus of exclamations of the experiences we all had shared. Obviously everyone had had a happy weekend. Unfortunately illness had overtaken some of our party who had to forego this part of our tour.

We departed for Hillsborough which is a beautiful little city of Georgian architecture where we were treated to morning coffee by the local Horticultural Society whose members, who are famous for their floral art, had made stunning flower arrangements for our pleasure. Next we visited the Government House which is the residence of the Royal Family when in Northern Ireland; we toured the rather formal gardens and had lunch in a tent on the lawn. We had a busy afternoon at Ballydorn Bulb Farm, the home of Sir Frank Harrison and Lady Patricia who had a hot cup of tea in readiness. Their farm is located on a hill which overlooks Strangford Lough which is more like an inland sea; many waterfowl and birds frequent this area and the lake is famous for fishing. Their garden of daffodils is not so large but it is planted with quality. The seedlings are planted in the open and must brave the elements or be rogued out. In spite of the brisk winds our party enjoyed every minute spent here.

The morning of the last day of our tour we spent at Greenmount College of Agriculture and Horticulture. This is a beautifully landscaped estate which has been converted into the school. Here are centuries old beeches, a lovely walled garden, greenhouses, and experimental gardens where the students actually do most of the work for experience. When they finish here they go into commercial horticulture and landscaping. They had just held their annual Spring Tour which was attended by more than 4,000 people and many of the especially prepared exhibits were still

on display. Good timing by our guide, Mr. Cochrane. That morning we encountered a tour of school children. For lunch we were the guests of the Ballymena Borough Council where we were warmly greeted at the door by The Mayor and music of the Pipe Major of The Royal Irish Rangers who had composed a Pipe tune, "The Irish Daffodil" to commemorate that Civic Reception. This was a new and delightful experience for all of us and we were given copies of the tune signed by the Pipe Major, Norman Dodds. The decor on the buffet table featured the daffodil and even the whole meats from which we were served were elaborately decorated with daffodils. The Mayor welcomed us and quoted from a Gaelic poem, "Daffodils are here, Spring has come and Summer is on the way," and he warmly invited us to "remember the land of Ulster, return to play golf, fish our rivers, and enjoy our seashore." We visited the Ballymena Daffodil Show where our daffodil friends showed to good advantage. Inverpolly was best of show. Here again as in the Omagh Show I noted that one can make more than one entry in a class but is entitled to only one award; also one may enter an unknown flower but must plainly mark it "Unknown" and it will be judged and in some cases did win. The weather had remained open so competition was keen. The farewell dinner that evening was a very moving experience. All attempts to say "thank you" seemed inadequate. So with the tune of Auld Lang Syne ringing in our ears we prepared to go our separate ways. But from the heart and the lips of His Worship The Mayor of Larne, John R. Begge, came this parting song:

"Will ye no come back again.
Will ye no come back again.
Maneys a heart, will break in twa,
Should ye ne'er come back again."

So we leave this beautiful land of Northern Ireland, its friendly and warm people; we are laden with significant gifts, amongst them the book *Daffodils in Ireland*, a short history of daffodils in Ireland which was written and published to commemorate our visit to Ulster, and a beautifully embroidered emblem depicting the insignia of The Northern Ireland Daffodil Group. The emblem was designed by Louise Harrison, the daughter of the Harrisons, and was worked by her and her embroidery guild. But most of all we leave with a wealth of memories to add to those of England and The Netherlands.

TAZETTA BREEDING: AN UPDATE

HAROLD KOPOWITZ, *UCI Arboretum, University of California, Irvine*

In the past there have been a few reports about the tazetta breeding program we have been following, and the results may be of some interest to readers. As expected, there have been some causes for joy and certainly many causes for despair but the former outweigh the latter. The small but growing group of tazettaphiles should find some of the following of interest.

One of our original goals was to create a pink-cupped tazetta. We have still not achieved it but are continuing along that line. Originally we crossed pink Division 2 flowers onto Paper Whites. These florets had been emasculated while still in the bud, and of the several hundred florets pollinated, primarily with Accent and Carita pollens, several pods and

seeds were collected. The experiment was repeated for three seasons with Paper Whites that had been retarded so that fresh pollen could be used. The first cross was made seven years ago and all seedlings have now bloomed. It took six years to grow the first cross to flowering size in our clement climate. Other batches were grown in a greenhouse where we have been able to speed up maturation and can now get flowers within 18 months of seed germination, but usually it takes two years. None of the Paper White seedlings have shown certain floral characteristics that indicate other than tazetta blood. Either the tazetta genes are completely dominant or the seeds we obtained were the result of parthenogenesis. This is a kind of virgin birth that occurs in some kinds of plants where fertilization does not occur but hormones associated with the pollen cause the formation of seeds from unfertilized eggs. We have intercrossed the best of the seedlings and now must await the offspring's flowers to see which of the two cases is responsible for our plants. If it is merely a case of dominance we can expect to find a few of the second generation showing large cup characteristics. The seedlings do, however, show good fertility and this is not what one would expect if the cross had actually taken.

In many respects the seedlings are superior to the Paper White Grandifloras that are currently grown, but there is considerable variation in both scent and floral characteristics. The best seedlings have very heavy substance and the florets are slightly campanulate (incurved). The outer sepals are so wide as to form a triangle while the inner are narrower. Trusses are heavy, up to 19 florets on a spike and there seems to be a tendency, this year at least, to get two spikes from a single nose. Flowers are heavily scented for one of the seedlings. I think that it smells of cocoanut-vanilla and it makes my mouth water but others find the scent too cloying or even unpleasant. Individual florets are up to 45 mm in diameter (1¾ inches). Another sibling has flowers as wide, but with a flatter perianth and no scent but it carries fewer florets to the truss. Yet another seedling has enormous leaves approximately two inches in diameter across the base and produced two very fine spikes but the florets were smaller, only 1-¼ inches in diameter, and without the best form although form was still acceptable. An unusual seedling had a conical cup about twice as long as usual for a tazetta and although this feature has been retained through three flowering periods we do not think that it reflects the Accent genes. Unfortunately the latter flower tends to have a rather ragged perianth.

Hiawasee, a very fine poetaz from Cassandra × Paper White, was made by Powell in the first half of this century and it shows that some strains of Paper White pollen may be potent. We have never been able to get Paper White pollen to take on other flowers. From a cross Paper White × Autumn Sol two seedlings grew to maturity. One was just another Paper White but the other showed close similarity to Autumn Sol. This second plant had an improved flat circular perianth of ivory (rather than sulphur) color and the neat cup was lemon. The plant had the same scent that Autumn Sol carries. Exceptionally vigorous, the plant was grown in the greenhouse for 18 months and then brought under lath in September. The first florets appeared in November. At this time (February, 1979) some three months later, the 'seedling' has about 15 noses and has produced three spikes.

Autumn Sol is a sulphur-perianthed, yellow-cupped tazetta that blooms in September in Southern California. A series of seedlings between Autumn Sol and other tazettas such as French Sol, Grand Soleil d'Or, Newton, and Bathurst were made at Rosewarne Horticultural Station in Cornwall. Most of these seemed to be very vigorous and fertile. Open pollinated seed was kindly sent to us at UCI by Ms. Barbara Fry in 1976. These were kept under continuous growth conditions and the first flowered in November, 1978. A number of others have since flowered and many have buds at the present time. But there are three hundred or so yet to bloom. So far all of the flowers have been bright golden perianthed with orange cups, but they have inherited the Autumn Sol fragrance through the generations. We will have to see if any have special properties and if they will reliably flower in the early fall in Southern California. Most are very vigorous and have produced multiple noses long before reaching flowering size. We are not sure if they will go dormant. One group of seedlings was deliberately dried out during the last summer and they took months and months to lose their leaves. Others which were merely transplanted never did go dormant but just produced more leaves.

We have known for some time that Matador was a fertile offspring from the poetaz *Admiration* but for some reason very little has been produced using Matador as a parent. Sid DuBose is supposed to have some good cultivars in the wings, and Grant Mitsch has produced some excellent cultivars from the cross Matador \times *jonquilla*. Ms. Fry writes that they have had good results using *Gloriosus* pollen onto poets. We hope that these may eventually become available. Graham Phillips in New Zealand has also put considerable effort into raising new tazettas and we are waiting hopefully for good news from that quarter. Although Matador is fertile as a pod parent, one gets very few seeds from a pod and one needs to pollinate a large number of florets to get a reasonable number of seedlings. I found some years ago that Matador also produced fertile pollen and when put onto standard daffodils allowed one to harvest a large number of seeds. Since then we have used it extensively on trumpets, large cups, small cups, and doubles. The first of these are now about to flower. Ms. Fry wrote that she had used Matador pollen and only had single florets resulting from those crosses, whereas when Matador was the pod parent trusses with multiple florets appeared. This was rather disheartening as I was going into the fourth year of Matador crosses. Were all the other crosses made in vain? Suspense mounted as the first two spikes emerged—one with Matador as the pod parent and one as pollen parent. The first is from Matador \times Macaw. It only has a single bloom in the spike. Hopefully in future years it will produce spikes with more flowers. Both *Highfield Beauty* and *Green Goddess*, the best of the modern hybrids, often throw single blooms from small bulbs. The second seedling is from an unnamed 2 W-Y that appeared in a mixture of Mitsch pink seedlings. At the time of writing, this seedling has just emerged from the spathe and one can see that it has at least two florets. My strain of Matador thus seems to be quite capable of throwing multiple spikes in its pollen seedlings.

Among the crosses waiting in the seedling beds are such esoteric combinations as *Honeybird* \times Matador, *Verona* \times Matador, and *Sentinel* \times Matador. It will be interesting to see if anything worthwhile will now eventuate from these experiments.

INDEX TO VOLUME 15 (September 1978 — June 1979)

Pages 1-60 are in No. 1, September 1978; pp. 61-108 are in No. 2, December 1978; pp. 109-164 are in No. 3, March 1979; pp. 165-216 are in No. 4, June 1979. Asterisk type indicates illustrations.

ADS

- Approved List of Miniatures, 135-136
- By-Laws, change, 140
- Committee Chairmen, 55-56
- Directors, 1978-79, 54-55
 - meeting of, 24; 130-132
- financial report, 214-215
- Judges, 44-53
- Membership, changes 1978, 41-44
 - meeting, annual, notice of, 140
- Officers, 1978-79, 54
- Round Robins, 104-105
- schools, judging, 80-81; 144
- Symposium, 1978, 75-59
- amitrol, effect of, 170*
- Anderson, Mrs. Kenneth B. on U. S.
 - Registrations in 1978, 94-97
- Anthony, Amy Cole with Barnes,
 - Betty on Attention Judges, 71-72
 - on Australian & New Zealand Cultivars, 173
 - on 1978 Classification Changes, 93
 - on Questions from the Classification Committee Chairman, 13
- Anthony, Charles (Chuck) on
 - Comments from the President, 11
 - on From the President's Desk, 71
- Autumn thoughts, 70
- Barnes, Betty with Anthony, Amy on
 - Attention Judges, 71-72
- Blue, Mary Elizabeth on Autumn Thoughts, 70
 - on Introducing the 1978 Winning Collection for the Harry I. Tuggle, Jr., Memorial Trophy, 81
- Bourne, "Tag" (Dolores)
 - on ADS Round Robins, 104-105
 - on *N. tazetta italicus*, 147
 - on Sea Dream, 87
- Bozievich, Marie, cover drawing,
 - No. 2*, New Penny
 - on How They Were Made, 175*-178*
 - on The Irish Connection, 190-195*
 - on New Cultivars and Others, 63*-69*
- Brink, Venice on Adams, Bob, 88
 - on Tazetta Hybrids I Have Known, 19-23, 20*
- Brooks, Polly on The Best Cornet in this Clump! 185*
- Campbell, Clarke, with McCabe,
 - Sandy on Reflections on a First Visit to the USA, 89*-91
- Campbell, William
 - cover drawing, No. 3*, Sundial, illustrations, 115*, 116*
- Cannon, Mrs. Ralph on Daffodils and Violets Hobnob in a Friendly Way,
 - 133-134
 - chairmen, committee, 1978-79, 55-56
 - classification, daffodil, 13; 71-72; 92-93; 173
 - convention, 1979, 72; 139
 - daffodil
 - bulbs, lifting, 101
 - classification, 13; 71-72; 92; 93; 173
 - cultivars
 - Aircastle, 26*
 - Cornet, 185*
 - Lady Serena, 107
 - Rocky Horror, 103
 - Sea Dream, 87
 - Vanilla, 103
 - new, 63-69
 - old, 88
 - Diseases and Pests, Part I, 186-189
 - exhibit, library, 148
 - by MTDS, 201-203*
 - by PADS, 14*, 15
 - flies, 11; 101; 113; 146
 - gardens, public, 82; 129; 167-170,*
 - cover No. 4*
 - hybridizing, workshop 1978, 117*-128*
 - nematodes, 101, 113; 210
 - pollen, 179-180
 - seed, 17-18
 - planting, sand, 141-142
 - N. serotinus*, 209

- seedlings, Australia, 88
 Kentucky, 101
 New Zealand, 88
 US, 120, 122, 126, 150
 show, London, 1979, 86-87
 shows, dates for 1979, 84-85;
 158-161
 England, 1978, 98-100
 New Zealand, 104
 results, 1978, 25-40
 societies, local, 129-130
 stamp, 82
 Symposium, 1978, 75-59
 winners, Tuggle collection, 1978,
 81
- daffodils
 Award of Garden Merit, 168-169
 down under, 211
 . . .Spring Magic, 201-203
 and violets, 133-134
 wanted, 172
- daffodils, miniature
 additions to approved list, 92
 Application for Approved
 Miniature Status, 10
 Approved List of Miniatures,
 135-136
 classification, 92
 culture, 111-113
 difficulties, 92-93
 diseases, 113
 early writings, 116
 Ground Rules for Miniature
 Daffodils, 8-10
 hybridizing, 16-17; 124-127
 hybrids, 113-115
 sources, searching, 181-183
 species, 113-116
 tazetta hybrids, 22; 115
- Dettman, Lindsay on seedlings, 88
 Directors, meeting of, 24; 130-132
 1978-79, 54-55
 regional policy statement, 83
- Dooley, Glenn on Flight of the
 Robins, 101-102; 206-207
- Editor, comments from, 12; 71; 172
- Executive Director, report of,
 142-143; 171
 comments from, 11; 71; 173
 financial report, 214-215
- Frey, Libby on Late, Late Daffodil
 Show in Helen Link's Garden, 102
- gardens, private
 Link, Helen K., 102; 151-156; 153
 gardens, public, 82; 129; 167-170
 award, winner of, 167-170,
 cover No. 4
- Hatfield, Handy, cover photo, No. 4
 Helwig, Willa C. on National Council
 Award to Tom Throckmorton, 18
 Here and There, 23; 82; 146-147;
 204-205
- Hirao, Shuichi on *N. jonquilla*, 211
- Index, Volume 14, 56-59
- Irish Connection, The, 190-195
- Judges, list of, 44-53
 evaluation of, 71
- Judging, single entry syndrome, 161
- Karnstedt, David on "Some Like it
 Hot . . .", 184-185
- Kingdom, Tony on Have a Go at the
 London Show, 1979, 86-87
- Knierim, Wells on Financial Report,
 214-215
- Koopowitz, Harold on Narcissus
 Pollen and Pollen Storage, 179-180
- Larus, John and Betty Award, 178
 construction of, 178
- LeBlond, Bidy on Lilliputian
 Landscape, 14-15
- Lee, George S., Jr., Memorials, 157
- Lee, Mrs. Phil M. on Daffodil Show
 Dates for 1979, 158-160
- Liggett, Naomi on eye-catching
 daffodils, 1978, 149
- Link, Helen K. on Green-eyed Poets
 are Beautiful, 212-213
 on Reminiscences of More than
 Forty Years with Daffodils,
 151-156, 153
 on *N. serotinus* from Seed, 209
- McCabe, Sandy on Recollections of
 Guy L. Wilson, 196-198
 with Campbell, Clarke, on
 Reflections on a First Visit to the
 USA, 89-91
- McKenzie, Mrs. Herman L. on 1978
 Daffodil Shows, 25-40, 26
- Mackinney, Joy on A Seek and Find
 Puzzle, 181
- Macneale, Peggy on Ground Rules for
 Miniature Daffodils, 8-10
 on Last Word on Miniatures for
 1978, 92-93
 on Miniatures Up-dated, 134
 on Searching the Sources, 181-183
 membership, changes, 1978, 41-44
- Meyer, Lillian M., obituary, 84
- Mitsch, Grant and Amy Award,
 174-175
 construction of, 175-177
- Moore, Jane on ADS Symposium for
 1978, 75-79
- Morrill, George E. on Planting
 Daffodil Seed in Sand, 141-142

- Narcissus and Octopus, 145,
144-145
- N. jonquilla*
seed, 17-18; 173
in Japan, 211
- N. poeticus*
description, 6
hybrids 7; 157; 107; 199-200; 212;
213
illustrations, 5
species 4; 6; 199
writings, early, 3-7
- N. serotinus* from Seed, 209
- N. tazetta*
descriptions, 19-23
Golden Dawn, 20
hybridizing, 127
hybrid, miniature, 22; 114
other, 21-22
poetaz, yellow perianth, 19-21
white perianth, 21-23
tazetta-triandrus, 21
wild, 19
italicus, 149
sport, 23
officers, 1978-79, 54
- Pannill, William on Hybridizing
Workshop, 1978, 117-128
- Pardue, Ruth on Display Garden Wins
Award, 167-170
- Perry, Virginia W. on Daffodil
Plantings and Daffodil Societies,
129-130
- Phillips, P. on Hybridizing
Miniatures, 16-17
on Some New Zealand Show
Results, 104
on *N. cyclamineus* seedling, white,
88
- Pollen, narcissus, and pollen storage,
179-180
- President, Anthony, Charles,
comments from, 11
from President's desk, 71
"Purple circled daffodil," cover, No. 1
Puzzle, Seek and Find, 181
Registrations, U. S., 1978, 94-97
Reminiscences, 152-156
Richardson, Mrs. J. Lionel, obituary,
158
- Riley, Cathy on Two Memorials for
George S. Lee, Jr., 157
on What's Doing in Beantown? 139
- Robins, flight of, 101-102; 206-207
Round, 104-105
- Rose, William on Hybridizing
Workshop, 1978, 117-128
schools, judging, 80-81; 144
- Simms, Mrs. W. S. on Daffodil Show
Dates for 1979, 84-85
- Snazelle, Theodore, E., Ph.D. on
Daffodil Diseases and Pests, Part I,
186-189
on Daffodils . . . Spring Magic,
201-203
- Spitz, Cecile on daffodil flies, 210
Symposium, 1978, 75-79
- Tarry, George on The English Season,
1978, 98-100
- Throckmorton, Jean with
Throckmorton, Tom on the Grant
and Amy Mitsch Award, 174-175
- Throckmorton, Tom D. awards to, 18;
82
on Hybridizing Workshop, 1978,
117-128
with Throckmorton, Jean on the
Grant and Amy Mitsch Award,
174-175
- Ticknor, Susan B. on WDS bulb order,
147
- Ticknor, William O.
see also Executive Director
on *N. jonquilla* and Seed
Production, 17-18
on Rocky Horror, 103-104
on The Single Entry Syndrome, 161
- Uesumi, Yashushi on Narcissus and
Octopus, 144-145
- USA, first visit, 89-91
violets and daffodils, 133-134
- Watrous, Roberta C. on Hybridizing
Workshop, 1978, 117-128
- Where Can I Get . . . ? 12; 71; 162; 172
- Williams's Glory — Poeticus, 199-201
- Williams, P. D., 199-200
- Wilson, Guy L., Daffodil Garden, 23
Recollections of, 196-198
- Wilson, Nancy on Species and
Miniature Narcissus in Berkeley,
111-116
- Wood, George on Down under
Daffodils, 211-212
- Worden, Maurice on Propagation of
Daffodil Bulbs from Sliced Bulb
Segments, 208-209
- Yerger, Meg on ADS Judging
Schools, 80-81; 144
on Gordon Harrison Poets, 157-158
on Make Mine Vanilla, 103
on The Poet Lady Serena, 107
on Poets Once Upon a Time — and
Now, 3-10, 5
on Williams's Glory — Poeticus,
199-201, 200

"Schultz-Instant"[®]
LIQUID PLANT FOOD
 10-15-10

Concentrated, High Analysis — All Purpose — 10-15-10 "Starts and Feeds" all Plants Indoors and Outdoors.

Available at your store or send \$1.25 for 5½oz, \$2.50 for 12oz (includes mailing).



"Schultz-Instant"[®]
SOLUBLE FERTILIZER
 20-30-20

Concentrated, High Analysis — All Purpose — 20-30-20 crystals. Grows Vegetables, Flowers, Roses, Trees, Shrubs, Lawns, Etc., in Yards, Gardens, Greenhouses.

Available at your store or send \$7.95 for 5 lb (includes mailing).



SCHULTZ CO. — St. Louis, MO 63043
SEND FOR OUR FUND RAISING OFFER

VIRGINIA DAFFODIL BULBS

Varieties available this year:

CARLTON — \$95.00/1000

HELIOS — \$90.00/1000

FLOWER CARPET — \$100.00/1000

FORTUNE — \$100.00/1000

CHEERFULNESS — \$95.00/1000

(No orders accepted after October 15, 1979)

First year blooming size. Excellent for mass plantings, fund raising, etc. All bulbs Virginia State Inspected.

TERMS: Price F.O.B. Gloucester, Virginia.

Cash with order.

Orders shipped via UPS, Freight collect.

Minimum order 1000. (May be mixed if desired.) For lesser quantities write for special quotation.

G.L. Hall

P.O. Box 594

Gloucester, Virginia 23061

Member: ADS, VFGA

AN INVITATION TO JOIN

Annual Membership
—\$10.00—

American Camellia Society

Annual Membership
—\$10.00—

Membership entitles you to four issues of THE CAMELLIA JOURNAL. Each issue has 32 to 40 pages of interesting articles, news and photographs, advertisements related to camellias and growers of camellias, and usually a four-color reproduction of a new variety.

Each December, members receive the handsome cloth bound AMERICAN CAMELLIA YEARBOOK of some 255 pages, containing the latest information on both greenhouse and outdoor culture, breeding, disease control, history, arrangements, descriptions of gardens and other articles of interest. There are several full color plates of new varieties in addition to numerous photographs illustrating the articles.

The American Camellia Society will welcome you to its program of mutual pleasure and interest.

AMERICAN CAMELLIA SOCIETY P.O. Box 1217 • Fort Valley, Georgia 31030

Our 7-acre garden and headquarters building are open to visitors the year-round—FREE.

PEONIES, Queen of Flowers

Spectacular beauty, fragrant endurance unlimited, practically a permanent perennial. Excellent for use in landscape as an accent plant during blooming season, foliage decorative until hard frosts. Peonies—a permanent investment—will bloom for years.

Join the American Peony Society

Dues \$7.50, paid annually. Bulletin published quarterly.

Send for list of publications.



AMERICAN PEONY SOCIETY

250 INTERLACHEN RD., HOPKINS, MINN. 55343

Does Your Garden Color End Too Soon?

Join the NATIONAL CHRYSANTHEMUM SOCIETY

and enjoy colorful blooms until frost.

Your membership includes 5 issues of The CHRYSANTHEMUM. Also free BEGINNER'S HANDBOOK.

Annual dues \$7.50 Write to;

B. L. MARKHAM

2612 Beverly Blvd. SW
ROANOKE, VA 24015

HEMEROCALLIS (Daylilies)

Enjoy this wonderful flower when your daffodil season is finished. Its long bloom season will greatly expand your garden enjoyment.

Constant improvements in color, size, form and habits insure rapid growth of interest in this fine plant.

Four colorful journals a year filled with informative data on varieties, culture, performance and progress. Many Round Robins open to participation.

ONLY \$7.50 PER YEAR

Join THE AMERICAN HEMEROCALLIS SOCIETY

Joan D. Senior, *Secretary* DeQueen, Arkansas 71832



SERVICES AND SUPPLIES

Slide Sets:

- | | |
|--|-------------------------------------|
| 1. Show Winners | 6. Miniatures |
| 2. Symposium Favorites | 7. Arrangements of Daffodils |
| 3. Novelties and Newer Varieties | 8. Daffodils in Britain |
| 4. Daffodil Primer (Garden Club Special) | 9. Species and Wild Forms |
| 5. 107 from Grant Mitsch | 10. Classification and Color Coding |

Slide rental \$5.00 per set. Confirm dates well in advance. Address all correspondence concerning slides to:

Mrs. Harold E. Stanford, Rte. 2, Lebanon, Tenn. 37087

Membership application forms. No charge.

Publications in the ADS library may be borrowed by members. Incomplete list will be found in *Daffodil Journal* for September, 1965, p. 21. Correspondence invited on items not listed.

ITEMS FOR SALE

Daffodil Pin (tie back, pin back, or ring back)	\$ 7.50
Daffodils — To Show and Grow, 1977	3.50
Handbook for Exhibiting and Judging Daffodils, 1974	2.25
A Brief Guide to Growing and Showing Daffodils	1.00
Daffodils in Ireland	5.00
The Daffodil Handbook, 1966	Paper Cover 3.40
.....Cloth	4.90
Print-out of Daffodil Data Bank	\$15.00; with binder 18.00
Binder for 12 numbers of Daffodil Journal	3.40
Set of at least 15 numbers of Daffodil Journal	5.00
Single copies of Daffodil Journal	1.50
ADS Yearbooks for 1957/8, 1964	2.00 ea.
ADS Approved List of Miniatures, 1979	two 15-cent stamps each.
RHS Yearbook, Daffodils 1979-80	4.25
RHS Yearbooks on Daffodils (as copies become available)	
write for years on hand with prices.	
Show entry cards	500 for \$11.00; 1000 for \$20.00
RHS Color Chart	12.50

Make checks payable to American Daffodil Society, Inc. Prices include postage. Correspondence is invited concerning out-of-print publications on daffodils. Copies of these are sometimes available or names will be placed on want list.

AMERICAN DAFFODIL SOCIETY, Inc.

Tyner, N.C. 27980

Tel. (919) 221-8388