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The

DAFFODIL JOURNAL



Quarterly Publication of

AMERICAN DAFFODIL SOCIETY, INC.

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Quarterly Publication of the American Daffodil Society, Inc.

Volume 14

Number 4

JUNE 1978

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For recent changes in the Board of Directors see page 114. A complete roster will be published as a supplement to the September issue.

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

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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 JULY 15, 1978

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)
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IN THE COVER PHOTOGRAPH

Photographer Peggy Macneale caught future Editor Mary Lou Gripshover and future Publications Chairman Ruth Pardue in a relaxed moment during the 1977 fall Board meeting in New Hampshire.

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CHANGES

It is a time of changes for ADS, with a new President and a new Executive Director at the helm. A new Editor and Publications Chairman will begin preparation, publication, and distribution of the Journal with the September issue. Headquarters of the Society have been moved from New Canaan, Connecticut, to Tyner, North Carolina. Other changes in the Board of Directors will be found in the list appearing in this issue.

Our new President and his wife, Amy, have been active in the New England Region for some years; their hillside garden will be remembered by members who attended the Hartford Convention in 1971. They are both accredited daffodil judges and Amy is the new Chairman of Classification.



Now retired, Chuck Anthony has a background in business and university public relations and fund raising. His horticultural interests include membership in the Connecticut Horticultural Society and the American Rhododendron Society. That he does not spend all his time in the garden is suggested by his membership in the Hartford Golf Club; Weekapaug, Rhode Island, Yacht Club; and Royal Bermuda Yacht Club. He is a graduate of Princeton and of the University of Connecticut Law School. The Anthonys have two daughters, two sons, and five grandchildren.

Mary Lou (Mrs. Paul) Gripshover has contributed in many ways to ADS and *The Daffodil Journal*. The "Where Can I Get . . .?" feature was inspired and continued by her. She has edited "CODS Corner," the newsletter of the Central Ohio Daffodil Society, from which numerous items found wider audience in our Journal.

She has been a Regional Director, Midwest Vice President, Classification Chairman, and Nominating Committee Chairman. She contributed substantially to the work of color coding for the Data Bank, and her most recent job has been as Chairman of a most enjoyable Convention.

She has been active in her local garden club, has studied Japanese flower arranging, hybridizes daffodils, and enjoys golfing.

The Gripshovers have three children, Barb and Greg in college (Barb majoring in botany), and Carol in high school. All the children grew their own daffodils when they were younger, and their parents hope they will grow them again when they have gardens of their own.

Paul Gripshover started his own business last year, Advanced Coating Technology, Inc., which will be located in Franklin, Tennessee, where the Gripshovers are building a house and expect to move by September. Meanwhile, however, contributions for the Journal should be sent to the new Editor at 2917 North Star Road, Columbus, Ohio 43221.

Ruth (Mrs. William) Pardue has also been active in local and state gardening organizations, and is Chairman of the CODS Daffodil Test Garden in Whetstone Park which so impressed recent convention visitors. As Show Chairman for the National Show she won the admiration of exhibitors for her calm handling of all problems. She has given up her position of Midwest Vice President to take on the responsibilities of Publications Chairman.

In addition to gardening (including flower arranging in the Japanese style), she enjoys needlepoint and is actively engaged in the operation of an inner city food pantry, a project of her church.

Bill Pardue is an engineer in the Office for Nuclear Waste Isolation, a division of Battelle International. The Pardues have two children, Sara in college and Todd in high school. (Todd is expected to be very helpful in the mailing of Daffodil Journals.)

JOHN R. LARUS, 1890-1978

The death of John Larus, former ADS President, which had occurred that day, was announced at the close of the evening meeting at the Columbus convention, April 28, by the new President, Chuck Anthony, whose personal tribute follows:

"John Larus was to the Anthonys a marvelous friend and mentor. For years, until age forced him to slow his energetic pace, he accepted almost any request to lecture, judge, or organize shows, and he set a strong example for garden clubs and horticultural societies that continually sought his help, especially in New England. First gladiolus and then the more difficult daffodils became his horticultural love.

"It was John and his lovely wife, Betty, who encouraged and abetted us to succumb to "Yellow Fever" and to take some of the load of work to which they had unstintingly given of themselves. After Betty's death it was our privilege to assist John in continuing his activity in the Society.

"It was a challenge and honor, and has become a pleasure to try to follow his lead."

John Larus was active in ADS from the organization of the Society, being a member of the first Constitution and By-laws Committee, and in addition to serving as Regional Director and President, he was Chairman of the Miniatures Committee from 1968 to 1976. He was awarded the Society's Silver Medal for service to the Society in 1973.

COPING WITH CHANGES

By WILLIAM O. TICKNOR, Tyner, North Carolina

Following is the talk given on March 18 to the Washington Daffodil Society, which both Bill and Laura Lee Ticknor had served as President and in other capacities before moving to North Carolina last summer.

Thank you, Mr. President, for asking us to come. I must say that Laura Lee and I feel very much at home here. My daughter quoted President Joe Peterson as saying I could speak on any subject I wished so I decided to speak on herring fisheries in Chowan County, but daughter Susan said "No way."

Then I thought of talking on the new RHS Classification system and its color coding. I am proud to see that WDS requires it on its show entry cards. However this long and wicked winter didn't allow me any blooms to bring along as examples. Then I thought you might be interested in the administrative problems of a large national plant society. Thirdly, I thought of speaking of the problems of lifting 7,703 daffodil bulbs in 985 lots, moving them in the heat of the summer, and planting them under totally new conditions.

Before I begin on "the great bulb migration" I will touch on the American Daffodil Society. As you know I am President of the Society, and that job entails a certain amount of activity. However, the detailed management of the Society was performed by its one salaried employee, the Executive Director, George S. Lee, Jr., in New Canaan, Connecticut. He sent out notices and collected dues. He sold supplies to ADS members, he paid bills, and performed a myriad of tasks.

George was 80 years old and had health problems and he planned to retire after April and to begin a transition of the job to someone else, after my term of office was up.

However, George Lee died suddenly of a heart attack on January 25. Now it would be nice to think that there was a prompt, smooth, transfer of the work to other persons and an easy continuation of Society activities. It may, just may, have appeared that way to some people.

George died just at the beginning of the busy season. Membership renewals were tumbling in and an annual pre-spring natural phenomenon is the awakening of interest of daffodil growers. George had many requests for Daffodils to Show and Grow, Data Bank print-outs, judges' handbooks, and entry tags.

His death clamped a probate padlock on the door of his house. His mail, on hand or coming in, was not available to us. It was almost a month before we were able to get any records and supplies or correspondence from the house. As President I notified all Regional Vice Presidents and most committee chairmen of George's death and asked them to direct all correspondence to me. We had some properties at our home in North Carolina (Show and Grow, and handbooks) and we could begin to take up George's work. Someone obviously had to.

The Executrix of the Estate was reluctant to act. The Estate lawyer was disinterested. Connecticut was under several feet of snow. The Postmaster was more interested in his rules book than in our Society.

Regional Vice President Cathy Riley lives in nearby Greenwich. With great energy and relentless determination she literally harassed the Executrix into letting her into George's house. By phone and by mail to the Executrix and

the Postmaster I helped to get a flow of correspondence and properties moving south. Checks, bills, books, entry tags, records, and, above all, correspondence, came to us in Tyner. Cathy and another nearby member shipped great boxes of things by United Parcel Service. Soon we were filling all requests within 24 hours of receiving them. On various days we sent out 30, 50, 56, and 28 pieces of mail, with a normal amount of from 5 to 8 pieces daily.

Looking to the future I appointed a strong high-level ad hoc committee to find a candidate for the position and to present his or her name to the Board of Directors at the Convention in Columbus, Ohio, on April 29.

There is still a great quantity of properties (a good truckload) in New Canaan. Certain ADS correspondence going back to January 26 still has not been given to us. Certain administrative matters are still not on an even keel, but generally all shows have been supported, all judging schools cared for, and all membership requirements satisfied.

Shortly before we were married 29 years ago, Laura Lee quit her job and she has not held one since. Now, however, she has received the in-house appointment as Executive Secretary to the Acting Executive Director and, believe me, she has talent and has been busy. I could not and would not have attempted it without her.

Now to change the subject. In November 1976 I retired from the State Department after 35 years of service. I did so because Laura Lee and I wanted a change in our way of living, and, besides, the State Department had found a better man—our son—for my job. In February 1977 by the greatest of good luck we found an ideal new home for ourselves in northeastern North Carolina, a big old farm house and two acres of land. We sold our Virginia house and moved to North Carolina on July 29. But we didn't travel alone. Our quarter-acre lot in Virginia was packed with daffodil bulbs and other choice plants. Foliage ripened early last year and by early June Laura Lee and I began to lift bulbs. Last summer was hot, very hot, and I would get up at 5:00 a.m., begin digging when light enough, and dig until noon, by which time it was too hot. The bulbs were troweled out, each variety, clone, or cross kept to itself, washed, counted, recorded, soaked in Benlate, and bagged. Soon the basement ceiling was festooned with seemingly countless bags of bulbs. Other obligations and visits to the orthopedist for a remarkably sore back kept us from digging every day, so digging continued until mid-July. The great number of lots of bulbs (985) more than the quantity of bulbs, was the major problem. We found very few losses in digging and almost no losses in storage, and I attributed this to our health program of the past several years. I worried considerably about the bulbs cooking enroute to North Carolina, so a good friend offered to carry them at night in her panel truck. I loaded and unloaded the bulbs myself. I then hung them in our open-ended barn until late October. Now we were in unfamiliar territory. I knew how to dig and store bulbs, but planting them in field conditions in flat, low, sandy, wet, tidewater North Carolina was another problem, and quite different from our rocky clay quarter-acre hillside in Falls Church.

The entire $\frac{1}{3}$ -acre field was hilled up, and Laura Lee and I planted variety after variety, two rows of bulbs in hill after hill. Each bag of bulbs was carefully emptied into a box for planting, and records were carefully made as to number and location of each individual planting. Every bulb was dusted with Chlordane. First the collars went in as I wanted to start with something tough and strong in case I decided that my system needed improving. Next in went

all of the New Zealand and Australian bulbs, as the newest of them were showing the strain of their really great migration. Then I began to put in the most favored. First our own seedlings, then the Tuggle and Pannill seedlings and other American amateurs' daffodils, including Steve Haycock's. Then bulbs from Evans, John Lea, Ballydorn, Richardson, Mitsch, and so on. It took us on into November to get everything in. Special raised beds for the miniatures were built with cypress boards and await Roberta Watrous' approval. [They received it.]

Tremendous January rains flooded our fields and washed down the sides of the hills, but shoots look extremely strong and I can see no losses. They will bloom late this year as this has been a late cold winter and the bulbs are all newly planted. Normally my peak of blooms should be the third or fourth week of March.

Our field is on the corner of a major highway and a dirt road and is highly visible. Everyone in the county, and in nearby counties, is fascinated by the 985 shimmering metal tags in the field. Like us, they can hardly wait for the blooms. Our blossoms will create the first traffic jam in northern Chowan County.

I will close by saying that Laura Lee and I are as happy as two children in toyland in our new home. So unless anyone has any questions on the RHS Classification, the color code, the American Daffodil Society, our great bulb migration, or herring fisheries in Chowan County, I will be quiet.

UPDATE, MAY 3, 1978

Subsequent to my talk of March 18, many herring have been caught in Chowan County, and a whole daffodil season has transpired. The blooms have come and gone. A particularly long winter and unkind spring made the season short, but strong foliage indicates that the daffodil bulbs have comfortably settled into their new home.

Daffodil activities prior to the Convention in Columbus have included a talk at Ahoskie, North Carolina, the visit of a high school class to our planting, a host of other local visitors, judging at two shows, teaching judging schools at Atlanta, Georgia, and Roanoke, Virginia, and enjoying as overnight guests in our home, Dr. Bill Bender, Jane and Roxie Moore, Raymond and Fran Lewis, Roberta Watrous, Lettie Hanson, Cathy Riley, Nancy Mott, Lindsay Dettman of Australia, and Phil Phillips of New Zealand. In an hour or so we expect to welcome to Daffodil Corner Matthew Zandbergen of Holland, Brent Heath, and Mrs. Katherine Heath. We do not feel cut off from the world in our Carolina farmhouse!

The work as Acting Executive Director continued at a strong pace until about April 22, when it perceptibly abated. I have gained a great respect for the volume of work George Lee has done for us and for the systems he established. On April 27 I completed my term in office as President. On April 28 the Board of Directors appointed me Executive Director of the American Daffodil Society, succeeding George S. Lee, Jr.

THE COLUMBUS CONVENTION

By RICHARD T. EZELL, *Chambersburg, Pennsylvania*

The Northwest thought spring would never come. The South blinked and missed it. Californians didn't understand what spring was, never having had one. But those who voyaged to Columbus discovered it—spread before them in a spectacle of over 2,000 daffodils entered in the National Show, bursting with full-blown vigor in the opulent Display Garden of Whetstone Park, and in settings you'd love to live in at two private gardens near Columbus.

The 23rd Annual Convention of the American Daffodil Society was gavelled to order by outgoing President William O. Ticknor at 8:10 p.m., Thursday, April 27, but the meeting had been well and truly begun at the 3:00 p.m. opening of the Show, even earlier for those who had driven all night, or stayed up most of it grooming, tagging, and placing flowers; or for those who enjoyed an "on your own" visit to Columbus's charming, historic German Village.

The Show's highlights include Bill Bender's trim and colorfully-rimmed seedling that won the Rose Ribbon and helped him take the Red, White, and Blue; his head-turning pinks, including lovely, trumpet-like Divine, and a not-so-lovely, but startling Eclat; that peerless show flower, Aircastle, winning for Marie Bozievich, as it did in 1974 at the Cincinnati Convention, both the Gold and White Ribbons; Chiloquin, giving evidence that despite lacking size and trumpet character, it has taken over as the premier show flower among the 1 Y-W's; Euphony, all glowing tones of palest, pearly lemon, standing out among a host of "really yellow" 2 Y-Y's; Angel 3 W-GWW, as graceful as it was large (and where, oh where, can one get it?); S-W-8, Roberta Watrous's small gem for this year, an improvement upon Segovia (which seemed in small need of improvement) and Safari 2 Y-O, neater than most and bright as any, shining in several of Kathy Andersen's trophy-winning collections.

Arrangements, educational exhibits, and commercial displays from the Daffodil Mart, Rathowen Daffodils, Carncairn Daffodils, Ltd., and Mrs. J. Abel Smith completed the feast for the eyes of the Convention throng. Rathowen's large group, beguilingly presided over by Clarke Campbell and Sandy McCabe, had Golden Jewel 2 Y-Y and White Star 1 W-W, but little Lilac Charm 6 W-GPP and its larger cousin, Delta Wings 6 W-P received still more admiration. Happily, Kate Reade was on hand, and her Creme de Menthe 2 W-GWW, big and smooth, with its cool, green eye, shared attention with Little Princess 6 W-P and a Foundling × Lilac Charm seedling that had cyclamineus fanciers itching to make out checks. Mrs. Abel Smith brought with her April Love 1 W-W, impressively huge and white, and reputedly more healthy than many in its class.

The Thursday evening meeting featured a welcome from "Tag" Bourne and presentation of show awards by Ruth Pardue. The amazing aspect of this was that these two were still awake and ambulatory after their herculean labors of the long day and long weeks of preparation, Mrs. Bourne as Convention Registrar, and Mrs. Pardue as Show Chairman.

After the Annual Membership Meeting that was convened, adjourned, reconvened, and readjourned, Libbe Capen recounted, for the enjoyment of all, many of the delights of her visit last year to the Netherlands, England, Ireland, and Northern Ireland. Her word pictures as well as her slides must

have done much to sharpen appetites for 1979's World Convention and tour of these areas.

Friday was Workshop Day, a total of eight of them vying for the participation of ADS members eager to share and increase their knowledge. In the Poeticus Workshop Meg Yerger, Libbe Capen, Willis Wheeler, and a kitchen timer that shut each of them up in turn, shared a program covering hybridizing with poets, and poet-related double daffodils, as well as an illustrated historical revue of the division. As a bonus this group got to marvel at Matthew Zandbergen's slides of the Austrian Daffodil Festival, showing undulating waves of wild *N. poeticus radiiflorus*, acres upon acres of them, sparkling against a backdrop of snow-capped Alpine peaks.

In "Photographing Daffodils," Wells Knierim discussed the methods by which he photographs daffodils for the ADS slide collection, taking great care with all the technical minutiae to insure accuracy and uniformity. An important collection of photographic records is being built up, despite such unforeseeable obstacles as the recently introduced changes in the classification system.

Bill Bender presided over a surprisingly cheerful session devoted to the depressing topic of pests and diseases. In addition to his own expert commentary upon a series of color slides illustrating some of the ravages visited upon the innocent daffodil by the likes of fusarium and fly, Dr. Bender's program was enlivened by suggestions from experienced growers from various parts of the country — New Zealand as well, for Phil Phillips had the intriguing, if not particularly helpful, advice that if you gardened on a slope it was better to have nematodes at the bottom of the garden, for the flow of ground water would spread them throughout if they began at the top.

Tazetta daffodils were given a thorough and engaging workout in the workshop led by Helen Link, while Peggy Macneale, with good group participation, conducted a stimulating discussion of miniatures, suggesting good doers for those beginning with littlies, but also bringing out the fact that the miniature which grows well in garden A often fails miserably in garden B. During this meeting the question of the time-consuming process of getting a new cultivar added to the Approved List was also discussed.

The hybridizing panel of Tom Throckmorton, Bill Roese, Roberta Watrous, and Bill Pannill provided such esoteric advice as what sort of hat to wear for which task, but more practical information as well. From Throckmorton: work when the bees are working: temperatures above 50°F., winds light, sun out; rain within five hours after pollination often causes failure. Roese: suggests inbreeding to bring out the best possible (as well as the worst) characteristics of the parents. Watrous: laments the fact that triandrus and jonquilla hybrids are generally sterile; suggests those wishing to breed miniatures use really tiny species, such as *N. rupicola* or *N. scaberulus*, rather than the merely small, such as *N. jonquilla*. Pannill: "If you can't work when the bees are, rub your legs together and hum; the flowers will *think* the bees are working, and the cross will succeed."

Ruth Pardue's Cyclamineus Workshop produced some lively discussion as to what cultivars did or did not belong in the division: Millennium, with many characteristics of the cyclamineus tribe, is registered in Division 1, while Tête-a-Tête, in Division 6, strikes many as too unlike more typical cultivars in that division. One leading miniature grower present reported having had the species *N. cyclamineus* itself come with two florets to a stem,

and suggested slimness of trumpet and reflexing perianth as the chief determining characteristics.

Bill Ticknor outlined the history of Split-Corona or Collar daffodils. Though still objectionable to many purists, the split-coronas have taken remarkable hold of the public's fancy, and are said to have irresistible appeal to florists and arrangers. Claiming for the plants health and vigor, and for the flowers extraordinary substance and staying power, Bill exhibited blooms sent to the Convention by Jack Gerritsen, looking quite fresh and flouncy after four days dry-packed in a box. Among them was a not-exactly-split cup called by Gerritsen a "curled" daffodil, named Flyer. Of this cultivar so far but one bulb has been sold, that one reluctantly parted with for the sum of one hundred guilders (\$450 if you'd like to make your check out in dollars). After this persuasive presentation came an offer some, at any rate, found impossible to refuse: the opportunity to share in a Washington Daffodil Society bulb order of an introductory collection of a dozen Division 11 cultivars.

Friday night Convention-goers received from the Netherlands' Matthew Zandbergen and Northern Ireland's Sandy McCabe a preview of the tour of those parts scheduled for April, 1979, and Bill Ticknor described the English portion of the tour.

New president Charles Anthony proved to have a heavy hand with the gavel, but a light touch at the business of the evening and introduction of Phil Phillips, New Zealand's one-man answer to all the daffodil breeders of the Northern Hemisphere. Describing his efforts to combat the daffodil fly (he's fast with a butterfly net), challenging his audience with literary quotations, picturing himself collecting and planting his *over five quarts* of daffodil seed a year, and advocating the use of hot water treatment of bulbs to improve next year's perianths, he proved a delicious and nutritious dessert for the evening.

Saturday morning saw Mary Lou Gripshover, already as its General Chairman responsible for much of the Convention's success, take on the tightrope-walking task of moderating a panel discussion on "Judging Daffodils." The panel, Helen Link, Bill Ticknor, and Mildred Simms, fielded a number of questions, some loaded, both submitted in advance and live from the floor of the tightly packed hotel auditorium. Here was obviously the ego-involving, intense-interest program of the meeting. "Should Tête-a-Tête have one head, two, or three?" What a giant volume of disputation this little flower has generated over the years. Phil Phillips, from the audience, brought to a felicitous end a lengthy discussion of the significance of its name with the observation, "We judge flowers, not names. If I named a flower 'Lousy,' I hope you wouldn't disqualify it because it had no lice on it."

Cool Flame 2 W-R: isn't it pink-cupped, not red? "Do you really have to enter it with the reds because the color code says so?" Helen Link advised, "Put it in the show; if the judges don't like it, they don't have to give it an award."

"Must collections be balanced in size and color, and if so, should not the point scoring system be changed so as to provide specific penalties for 'imbalance'?" Much disagreement on this one, but Bill Pannill's commonsensical approach concluded discussion, "If your collection looks the best, it's gonna win; if it doesn't, it won't."

After the murk of the judging disputes came the bright sunlight of Whetstone Park and its magnificent Daffodil Display Garden sponsored by the Central Ohio Daffodil Society: almost 1,000 cultivars, carefully laid out, beautifully cared for, and precisely timed for bloom to be at its height when the ADS came to call. It was especially gratifying to see such older flowers as Ceylon and Slieveboy grown to great size and smoothness. Desdemona and Wahkeena stood out too as big and bright, with great garden impact. And what a fine thing the jonquil hybrid Pin Money looked to be . . . but there were so many . . . and the group had almost to be pried forcibly away from this display, but was rewarded with a visit to the Handy Hatfield garden, a garden for all seasons, with its daffodils set among hundreds of hemerocallis, dwarf conifers, crinkly-leaved ajuga, 150 varieties of hosta, a brown thrasher singing in an ash tree overhead, and a picnic lunch of lots of fried chicken.

From there to the charmingly contrasting garden of Lura Emig, where clumps of daffodils, a heady mix of old and new, were interspersed "naturally" among wildflowers, primroses, and dwarf iris along a lightly wooded slope from house down to a stream. All this and lemonade on the terrace.

A festive farewell dinner Saturday evening featured a flaming dessert, followed by Lindsay Dettman from Diamond Creek, Victoria, Australia. Speaking his native tongue, which bore occasional resemblances to English, Colonel Dettman gave his audience a brief and colorful historical sketch of daffodil growing Down Under. Colorful? Of one noted Australian breeder it was observed that "His best flower had a tissue-paper back on it you could spit through."

The evening and the Convention closed with supersalesperson Cathy Riley, New England Region Vice-President, enticing all to Boston, "Fun City East," for the 1979 Convention. May 4, 5, and 6 are the dates, but "for those returning from the verdant pleasures of the 'Auld Sod,' the gates will be open May 3."

Outgoing President Ticknor received a statuette of Christopher Columbus as a memento of the Convention, but all who attended took home with them happy remembrances of what surely must have been one of the best Conventions ever.

1978: ANOTHER FREAK SEASON

A year of late, LATE SNOW. Ah! bitter chill!
No SURGE of daffs' a-poking thru' the ground.
In DREAMLAND all the shows of yesteryear
When TOPNOTCH blooms could easily be found.
We kept our date, BOLD VENTURE that is was.
What EMINENT entries could we hope for then?
SURPRISE, SURPRISE exhibitors came laden.
But would our eager public COME AGAIN?
Dawned the GLAD DAY, a HAPPY HOUR for all
When through the PORTAL visitors did go.
SUPERLATIVE the sight (though numbers small)*
JOYOUS our chairman, JOYOUS best in show.

—BETSEY CARRICK, Princeton, N.J.

* 305 blooms.

A 16-POINT PROGRAM OF DAFFODIL CULTURE

With Special Emphasis on Minimizing Losses from Basal Rot

By the late HARRY I. TUGGLE

The following memorandum, which came to light recently in my files, must have been distributed at the ADS Convention in Asheville, 1964. As it seemed to cover the subject so thoroughly I consulted Willis Wheeler about publishing it in this issue of the Journal. He has revised two paragraphs to reflect present chemical restrictions.

—R.C.W.

The modern daffodil is in many instances not as tough as the older varieties which have long persisted in abandoned gardens or which may be seen in some cases growing through asphalt paving. But we demand more in today's daffodil, and even though they may enjoy the optimum in growing conditions many are quite tough. I have had Ceylon blooming and growing nicely in solid red clay under a huge oak tree for five years. Experience, study, and correspondence indicate 16 broad points of culture for the best blooms and bulbs (or vice versa) in an area in which long hot periods in the summer make basal rot prevention of primary consideration.

1. Buy bulbs from reliable sources, preferably from growers who maintain rigid standards for the health of their stocks, and who have facilities to hot water treat their stocks when needed.

2. Location: daffodils tend to face the prevailing light. Windy, open exposures should be avoided from growing exhibition blooms. Windbreaks, artificial and natural (trees and evergreen shrubs) are beneficial. Avoid planting too near competing roots of trees and shrubs. Exposure and protection strongly influence timing of bloom.

3. Good drainage. Daffodils want *no standing water!* Raised beds are recommended if soil is heavy or mainly clay; the quick drainage of sand is not required, but planting on slopes or in raised beds allows no standing water. Daffodil roots will often reach as far as 24 inches below soil surface if soil is properly prepared before planting. Deep — at least 18 inches — working and preparation of soil before planting results in a better root system, and therefore better flowers and bulbs. In garden borders the simplest method for planting a clump is to reverse the topsoil and subsoil. "It's what's underneath that counts."

4. Soil preference is a crumbly structured loam with adequate and proper supply of humus. Peat moss (sphagnum type, European or Canadian) is recommended as an easy, convenient source of humus. It is clean, i.e. free from any agents that might be harmful to bulbs; it absorbs up to 10 times its dry weight in water, it is a superb soil conditioner when well mixed with soil, and it generates a small amount of acidity each year as it gradually decomposes. Work sharp sand as well as peatmoss into root area if soil is heavy clay. After prepared soil is settled, or well tamped down with feet, plant bulbs on thin ($\frac{1}{4}$ inch) layer of clean, sharp sand. Working in sand and peat moss furnishes humus and improves tilth and drainage. Oak or hardwood leaf mold, if prepared without manure, is an acceptable substitute for peat moss.

5. Work a liberal application of 3-18-18 (5 lbs. per 100 sq. ft., equivalent to 2000 lbs. per acre) into root area when adding peat moss and/or sand.

The more soil is turned and spaded, the better! Use a chemical fertilizer and *not* an organic, with one exception: wood ashes. Do not use bonemeal, cottonseed meal, manure, compost, etc., if basal rot is a problem. (Nine times out of ten the comment "I had that one but it never came back" is a result of basal rot.) USDA tests at Beltsville proved conclusively that organic nitrogen fertilizers actually stimulated the growth of the basal rot fungus. It is interesting to speculate if perhaps some ingredient in the well known natural or organic fertilizers other than nitrogen causes stimulation in growth of *Fusarium*, the basal rot fungus. It was also found in tests at Beltsville that rooting hormones (such as Rootone) also stimulate growth of the basal rot fungus.

6. When bulbs are left down for second or third year, or longer, top dress lightly as foliage comes through soil, avoiding contact with foliage, with an application of 4-8-12 at the rate of 2 lbs. per 100 sq. ft. (800 lbs. per acre). Sandy soils usually require heavier applications than clay based soils. 4-8-12 is a relatively inexpensive, tobacco formula that is easily obtained in many areas. It is available in neutral (or non-acid-forming) formula with calcium and magnesium included, for dolomitic ground limestone is used as filler. No top dressing is needed on first year down bulbs if soil was properly prepared before planting. However, a very light nitrogen application is recommended for some areas if early growth is sluggish.

7. Try to maintain soil pH 5.5 to 6.5, preferably pH 6.0 Daffodils appear to grow healthier in *slightly* acid soil. Having soil tested for pH is strongly recommended. This is done free in many states through local county or extension agents. Seven pounds of dry ground agricultural limestone per 100 sq. ft. raises the pH one whole point, e.g. pH 5.0 to pH 6.0. Two pounds of wettable sulfur per 100 sq. ft. lowers the pH one whole point, e.g. pH 7.0 to 6.0. For sandy soils one-half to one-fourth these amounts are needed. It is especially important to correct pH if it falls below pH 5.5.

NOTES ON NUTRITION

The daffodil would appear to require a small amount of nitrogen primarily from the time foliage appears until blooming. Phosphorus is needed the entire growth cycle, for it effects the root system, cell division, flowering, and setting of seed. Phosphorus compounds, or more usually phosphorus, when applied to the soil surface move downward at a very slow rate, at about one inch per six months in heavy soils! One can readily see that phosphates should be worked into the root area before bulbs are planted.

Long range experiments in England reveal that only the amount of nitrogen and phosphate used from normally fertile soil needs replenishing, but that daffodils respond startlingly to potash (potassium) applications. Neither nitrogen nor phosphate in quantities more than needed for replenishment had any great effect. Application of sulfate of potash at 1-2 lbs. per 100 sq. ft. produces larger bulbs and better increase, and therefore more flowers and better foliage. Potash is the strengthening agent for stems and foliage in plants, and it tends to make harder, more disease resistant daffodil bulbs. It has long been known that unleached wood ashes, high in potash, benefitted daffodil growth, and some growers maintain that such applications give the flowers better color.

Calcium and magnesium are also essential elements, and both are present in dolomitic ground limestone. This product raises the pH of soil, and if soil

test reveals the pH is satisfactory magnesium can be supplied in the form of magnesium sulfate (epsom salts), and calcium can be supplied in the form of agricultural gypsum (calcium sulfate) which has no effect on soil pH. The importance of soil testing cannot be over-emphasized, and if lime is needed ground dolomitic limestone is preferred, for other forms of lime can easily burn. Aside from adjusting pH and supplying calcium and magnesium, lime reduces the solubility of many toxic elements, is essential for growth of beneficial soil bacteria, reduces loss of potassium by leaching, and has superior aggregation activity in clay soils. One particle attracts eight clay particles, and limestone remains one of the cheapest and best soil conditioners. *The right amount of lime can be most beneficial, but need and amount should be determined by soil test. Too much is harmful.* Having the soil too alkaline (sweet), just as having soil too acid, results in making essential elements unavailable, i.e. needed elements become "locked up" in insoluble forms.

Four years of observation on growing the same varieties (Kilworth, Ceylon, Troussseau, etc.) in two different beds, one with 2 lbs. of fritted trace elements for 250 sq. ft., the other without, has revealed no difference in color, general performance, or rate of growth. (F.T.E. contains iron, manganese, zinc, copper, boron, and molybdenum.) Sequestrene of iron (iron chelates) applied as soil drench has made no difference in the color of red and pink tipped varieties. Apparently if any of the trace elements are needed by daffodils they are already present in our red clay soil. However, sandy soils often have deficiencies in trace elements, and the results on sandy soil might be different.

8. Mulch! Benefits of mulching are (1) the soil is cooler in hot weather and warmer in cold weather, i.e. soil temperature tends to be more uniform; (2) prevents soiling and splattering of blooms; (3) conserves soil moisture; (4) some materials gradually improve soil structure. There is no perfect mulching material, but some useful ones are:

- a. Pine needles: attractive appearance, daffodils appear to appreciate; drawback: inflammable when dry.
- b. Buckwheat hulls: especially valuable for smaller bulbs, attractive; drawback, wind blows some; expensive in most areas.
- c. Small wood chips: if hardwood would almost be ideal.
- d. Ground corn cobs: one of the best, and some unknown ingredient causes superior soil aggregation; drawback: not as attractive as darker colored materials.
- e. Aged sawdust: cheap and good; drawback: may lead to nitrogen deficiency, some splattering on blooms.
- f. Peat moss: one of oldest mulching materials but not as good as others. Peat moss when dry will rob the soil of moisture, and it splatters flowers badly.

Remove mulches before digging bulbs. Be careful not to work any of these materials (except peat moss) into soil. "Living mulches" of shallow rooted annuals are valuable in garden borders.

9. (Revised by Willis H. Wheeler for present conditions.) Give a Benlate (Benomyl) dip to cultivars especially susceptible to basal rot. Immediately after lifting wash the bulbs free of all soil and for best results give the dip within the 24 hours following lifting. Dry the bulbs following the dip and before they are placed in storage. The Benlate dip may be repeated at plant-

ing time for cultivars unusually susceptible to basal rot and the bulbs may be planted wet.

10. Store bulbs in cool, dry, well ventilated location that is out of direct sunlight. (May use air conditioner or electric fan.) Too cool a storage temperature (below 55°F) starts root growth, and too hot (above 70°F) encourages rotting. Swift air movement causes desired rapid drying whether bulbs are washed, treated, or not. Store bulbs in mesh bags in which citrus fruit and potatoes are sold. Do not replant in hot soil.

11. (Revised by W.H.W.) If possible practice soil rotation and/or fumigate with the only fumigant now available for use by home gardeners, that fumigant being Vapam, sometimes sold under the name V-Fume. Some of our members have found that chemical the easiest and most effective product to use in the home garden. Rotation and/or fumigation is increasing in importance now that it has been established that some virus infections can be transmitted by otherwise harmless nematodes (*not* the dreaded "bulb" nematode), as well as by adult aphids. Also the root lesion nematode has been reported as causing considerable damage in some areas. The bulb-and-stem nematode is *the* most serious daffodil enemy, and constant vigilance for its symptoms cannot be overemphasized.

12. Care after bloom: Remove old flowers, but leave the stems of uncut flowers. Leave all the foliage alone until it begins to yellow, or it can be easily plucked from bulbs. In tests conducted at Cornell removal of foliage *one month after blooming* resulted in 50% weight loss of bulbs. After the foliage dies down or is removed cultivate to fill in holes left by foliage. These holes can serve as a funnel for water to go directly down around bulbs. The daffodil bulb loses weight from the time it is planted until after it blooms. Aside from next year's bloom being formed within the bulb after this season's flowering, the bulb must regain all lost weight and gain more if it is to obtain good increase and vigorous bulbs.

13. Plant early. September planting is urged for the Middle Atlantic area, and Halloween should be the absolute deadline. Daffodil bulbs should be in the ground about the time dogwood foliage turns red. Early planting gives daffodil bulbs advanced root system before heavy frost. The rigorous 1962-63 winter proved conclusively the value of early planting, for November-planted bulbs suffered considerably and September-planted bulbs suffered little, if any. Early planting also gives earlier and better bloom and growth, especially in relation to stem length. Most daffodil bulbs will not root well until the soil temperature drops below 50°F (10°C). (Exception: many poets and tazettas tend to have roots almost the year round when left down, and they do not like to be out of the soil for long periods.) It is better to store bulbs and replant in early fall than to replant in our warm, or often quite hot, soil of June, July, and August.

14. Planting depth and distance between bulbs depends on heaviness of soil, how long bulbs are to be left down, and for what purpose they are grown. For exhibition bloom quality I prefer a depth of six inches to the base of bulbs. If soil has not been prepared well in advance to give time to settle, or has not been tamped down, bulbs will settle deeper than intended. Bulbs may be planted 5-6 inches apart if not to be left down any longer than two years, but should be probably a foot apart if to be left down for longer periods. Deeper planting slows down increase or splitting, and shallow planting speeds increase. Deeper planting is therefore advisable in perennial borders, in lawns

for naturalizing, etc., if the soil is not too heavy. In well prepared soil bulbs can easily pull themselves down to a greater depth if they desire, but they have difficulty pulling themselves up until they become so crowded that their mass forces them nearer the soil surface.

15. Religiously rogue! Dig and destroy any sickly, weak, or suspicious looking plants. Ship bulb, with roots and foliage attached, to Beltsville for diagnosis if ailment is unknown. Remove some soil from under and around diseased bulbs and discard. Do not add bulbs or soil to your compost pile! Burn, put in garbage can, haul off, or bury deeply the discarded soil and plants. Be on the alert for "yellow stripe" virus. Symptoms of "yellow stripe" are vertical yellowish stripes, with leaf color gray green, and a slight roughening of discolored areas that can be felt between the fingers. In some varieties the color of flowers "breaks." Yellow stripe is noticeable from the time foliage appears until blooming, and is more easily found in early morning or late afternoon sunlight, or on overcast days. This is only one of several "stripes" or virus infections found in daffodils, but it is the most serious here because it eventually causes flower "breaking" and decline in weight and vigor of bulbs. For especially valuable bulbs, if virus infection is suspected but not certain, send one leaf off for diagnosis, and dig the bulbs with a ball of soil and isolate it a good distance from other daffodils and observe carefully again for a couple of seasons. Virus symptoms are sometimes masked when bulbs are transplanted or moved to different soil or locations, and often symptoms are best observed on second year down bulbs.

16. Water!! Soak soil with water as soon as bulbs are planted. This assists rapid development of root system and firms the soil around bulbs. Water from early spring until the foliage begins to ripen at any period you do not have at least one inch of rainfall in any week. Keep the soil moist at all times the daffodil plant is actively growing. Watering results in amazing increase in bloom size and substance, in length and strength of stems, and in substantial gains in number and weight of bulbs. Water when the temperature is cool, for watering in temperatures in the 80's which we regrettably have at times, will result in lush, weak growth. Use a canvas soil soaking hose — the 10 or 12 ft. length does a better job and is much easier to move about. A "water-wand," watering can, or other methods of soaking the soil without getting foliage wet serve equally as well. Overhead sprinkling which wets foliage is not advisable. We do not have the rainfall or humidity of the Pacific Northwest, the British Isles, or Holland, and as a result we do not experience often the fungus infections (fire, smoulder, botrysis, etc.) that require treatment by spraying. At least 90% of a well grown daffodil bulb is water by weight, and probably more than 90% of a blue ribbon flower is water!

An attempt has been made to cover many facets and variables in daffodil culture, and if recommendations do not agree with others' experiences it should be emphasized that every garden, as well as every gardener, fortunately differs! The success or failure of any plant is largely dependent upon each garden's micro-climate, a combination of soil and atmospheric environment, exposure, and cultural practices. If you succeed with using bonemeal, just as Grandma did, and you have no basal rot problem, then there is no need to change. Nothing beats success in growing a plant well, whether the rules are followed or not!

WORLD DAFFODIL CONVENTION/TOUR APRIL 17 - MAY 2, 1979

The Royal Horticultural Society, the Northern Ireland Daffodil Group, and the Dutch Bulb Growers Association are organizing a convention and tour for daffodil enthusiasts between April 17 and May 1, 1979. It is expected that the convention members will assemble from various parts of the world in London on the evening of Tuesday, April 17, to take part in activities in England. Some members will then have the opportunity to travel to Holland for three days, followed by a week in Northern Ireland.

Wednesday, April 18, sees the opening of the RHS Daffodil Show, with the possibility that some members may wish to exhibit if the time of flowering is suitable. Arrangements are being made for a series of lectures during the afternoon, to be followed by a cocktail party when all members will be the guests of the RHS, and a gala dinner in the evening at the RHS Hall. Next day a visit to the RHS Gardens at Wisley in the morning, lunch, and a visit in the afternoon to the Savill Gardens, Windsor Great Park. Friday, April 20, visits to Lincolnshire bulb fields, lunch, and visit to Kirton Experimental Horticultural Research Station. Dinner and night at hotel in Lincoln. Saturday, visit to Dudley Hall, with tea, and to Birmingham for dinner and the night. Sunday morning, visit to Daffodil Society show at Solihull, lunch, and return to London in time for flight to Holland.

The English part of the program will cost £138.00 per person and will include three nights hotel accommodation in London (with continental breakfast), and travel by deluxe motorcoach with trained guide for the program outlined above.

The Dutch program (limited to 80 participants) will cost £189.50 and includes flights to Amsterdam and return, three nights accommodation with breakfast and dinner at the Hotel Bel Air in The Hague, and deluxe motorcoach transportation with services of a trained guide throughout. On Monday, April 23, visits in the bulb district touring bulb fields, and to Keukenhof Garden. On Tuesday, touring the country: Peace Palace, The Hague; Delft; Rotterdam; the windmills of Kinderdijk; Gouda; and Avifauna (bird sanctuary). Wednesday, Aalsmeer Flower Market and Amsterdam, followed by return to London for flight to Northern Ireland.

The Northern Ireland program (limited to 80 participants) will cost £189.50 and includes flights to Belfast and return to London, five nights accommodation in Larne with Ulster breakfast; deluxe motorcoach service and full-time tour guide, all meals, and the following program: Wednesday evening, buffet supper; Thursday afternoon, visit to Carncairn Lodge, with afternoon tea; reception and dinner as guests of Larne District Council. Friday, visits to Guy L. Wilson Memorial Garden, Giants Causeway, Old Bushmills Distillery, return along Antrim Coast Road. Saturday, visit to a modern milk powder and cheese factory en route to Omagh for the local society's show, civic luncheon, and annual Daffodil Dinner. Saturday and Sunday nights the visitors will be guests of members of the Omagh and District Horticultural Society. Sunday, morning coffee at the Ulster/American Folk Park, barn lunch at Rathowen Daffodils, free evening with local hosts. Monday, visit to gardens at Government House, visit to Ballydorn Bulb Farm,

return to Larne. Tuesday, Greenmount College of Agriculture and Horticulture, Ballymena Daffodil Show, farewell dinner. Wednesday, May 2, return to London for return trip to U.S. in time for ADS Convention in Boston.

The travel arrangements for the Convention and tours have been made by Supertravel (London), with McAleer Travel and DeGraaff's Travel responsible for arrangements in Northern Ireland and Holland respectively. All further details, together with an application form, can be obtained by writing to Mr. William O. Ticknor, Tyner, North Carolina 27980. Completed applications should then be sent direct to Miss N. B. Wilson, Supertravel Limited, 22 Hans Place, London SW1X OEP. Space will be limited, so an early application is advisable.

INCREASING BULBS BY CUTTING

By the late SERENA S. BRIDGES

In view of the recent interest in twin scaling, it is interesting to note an item in the 1955 Washington Daffodil Society Yearbook, which I believe was distributed to members of the then young American Daffodil Society. Mrs. Bridges was active in the early years of ADS, and served as Treasurer and in other capacities.

—R.C.W.

Another experiment with narcissi that has been carried on for many, many years is the cutting up of the bulbs. This procedure started by way of an accident more than ten years ago. While planting some bulbs of Silver Chimes one was accidentally cut into many pieces. Remembering that scales from lilies rooted readily when planted in a suitable medium, I decided to try this with these pieces of Silver Chimes. A few of the pieces were planted in sand; a few more in vermiculite, and then the telephone rang. The remaining pieces were tossed into a clay flower pot, and a handful of oak leaves thrown over them. The telephone call was a long one, and put the bulb pieces completely out of my mind. Several weeks later I noticed the flower pot still standing, and decided to put it in place with other pots of the same size. Turning the pot over and spilling the pieces out, I was amazed to find that many small bulblets had formed along the pieces. I immediately dug the ones that had been planted, and found that the pieces that had not been planted had produced many more small bulblets than those that had been planted in soil or vermiculite.

Since that time I have cut up many bulbs, with a most pleasing result as to increase. Now all pieces are put in clay pots and covered with excelsior or some light covering to shade the scales. They are allowed to remain approximately six weeks, and then planted. As a usual thing about 90 percent of these bulbs bloom in the second year.

Occasionally a cone-shaped scoop is taken from the base of a bulb, and the space usually is filled with small bulblets in a relatively short time, but this is not as satisfactory as cutting up the bulbs, although it has been most successful with hyacinths.

BULLETIN BOARD

FROM THE NEW PRESIDENT

Greetings:

As I assumed the responsibility of the office of President of your Society, I asked all those present at the very well run and extremely instructive Convention, to consider themselves extensions of the Membership and Classification Committees.

Let us work together to bring into active association with us more members, especially younger ones upon whom our continuing strength depends. Get applications from our new Executive Director, Bill Ticknor.

In the monumental task of setting up the Data Bank, and especially the new color coding now accepted world-wide, it was inevitable that Dr. Throckmorton and his co-workers could not eliminate all errors. To bring about the significant reduction thereof, the new Classification Chairman, my wife, Amy, asks each of you to bring errors you detect or suspect to her attention in writing. Although color at the place of origin may differ from the performance of some cultivars in your garden, the difference may be so nearly universal as to warrant a change in the Data Bank and therefore in its junior child, "Daffodils to Show and Grow."

I welcome all suggestions that may strengthen the Society and assure you that your Board of Directors, upon whom I depend, is both capable and dedicated.

I hope to see new, as well as old, faces at the 1979 Convention in Boston.

Sincerely,

CHUCK ANTHONY

EDITOR'S SWAN SONG

The question I have been asked most frequently of late is "What will you do when you stop being editor?" By the time I mention the many things I need to catch up on after having neglected them so long my questioners probably wish they had not asked the question, so I shall not answer it again here, except to say that I do hope to write from time to time on daffodil matters that interest me most.

It has been a very satisfying — although at times frustrating — job. I am not by nature a worrier, but there were times when deadline time found almost nothing at hand, and I wondered how I could make up an issue. Somehow, material has accumulated, often at the last possible minute and sometimes more than I could use, but welcome as a nest-egg for the next issue. The most gratifying thing has been the many surprise offerings that have come from all directions; how could I have known about the Chambersburg Bulb Show to ask for an account of it? Some contributors who demurred when first asked to write something have found that they could write, after all, and have become frequent contributors. I suspect there are many more who might find that they would enjoy writing about daffodils, once they made a start.

In their various positions as Chairman of Publications, Vice President, President, and friends, the Ticknors, Laura Lee and Bill, have contributed

enormously to the success of the Journal during these ten years. Not only have they supplied much material from their experiences and wide correspondence, but they have read most of the Journal copy before it was sent to the typesetters and again in proof, to catch errors that my eyes had missed. In recent years Lettie Hanson has done the same, and her eagle eye and impeccable taste have been most helpful, even if not always acted on. Anne Sangree had contributed expert copy editing when her busy schedule allowed, and Willis Wheeler has been our official arbiter on scientific matters. Nell Smallwood has patiently typed, double space, articles from printed or mimeographed sources, and recently Susan Ticknor has also contributed expert typing.

To all who have helped in any way, my heartfelt thanks!

—ROBERTA C. WATROUS

SYMPOSIUM 1978

Symposium Chairman Jane Moore reminds all judges to send their reports to her at 96 Sandy Bay Drive, Poquoson, Va. 23662. Comments on newer varieties will be appreciated. (See March Journal, page 73, for instructions.)



ADS MEMBERSHIP PINS

The ADS membership pins which were available at the convention were quickly sold out, but they have been reordered and will be ready at the end of June. They can be ordered from the Executive Director, and the price is \$7.50. They will be available with the clutch back, as seen at the convention, as well as a regular pin back or with a ring for use on a charm bracelet or chain.

—MARIE BOZIEVICH

UPDATE ON THE MINIATURE SCENE

It has been a year since we promised new miniature ground rules. At the Columbus convention this spring the picture became clearer, so look for the final report in the September Journal. Meanwhile, if you have any comments, either let me hear from you, or tell one of the committee members. Those

who have agreed to help me are: Mrs. Charles H. Anthony, Mrs. R. L. Armstrong, Mrs. William Baird, Mrs. W. R. Mackinney, Mrs. Joe H. Talbot, III, Mrs. Robert C. Robinson, Mrs. Victor M. Watts, and Mrs. James R. Wilson. All of these are vitally interested in growing miniatures, and since they live in various parts of the country, their knowledge and experience should give our committee the authority necessary to come up with regulations that will satisfy all miniature daffodil enthusiasts. We will continue to seek the valued advice of Roberta Watrous, Helen Link, and Brent Heath, to say nothing of the new editor of the Journal, Mary Lou Gripshover.

Meanwhile, we have had good reports of Atom, Fairy Chimes, Yimkin, Sir Echo, and Pledge. We would like more comments from those who grow these.

—PEGGY MACNEALE, *Chairman,
Miniatures Committee*

CHANGES IN THE BOARD OF DIRECTORS

(A complete list of current officers and directors will be published in the Roster, to be issued in September.)

The following elections or appointments were made or announced at the convention in Columbus:

Charles H. Anthony, Connecticut, President.

Mrs. John Bozievich, Maryland, First Vice President.

Mrs. Ernest K. Hardison, Jr., Tennessee, Second Vice President.

William O. Ticknor, North Carolina, Executive Director.

The Treasurer and Secretary were reappointed.

Regional Vice Presidents: Northeast, Richard T. Ezell, Pennsylvania; Midwest, Mrs. Wyman C. Rutledge, Ohio; Southern, Richard H. Frank, Jr., Tennessee; Pacific, Ms. Marilyn J. Howe, California.

Directors at Large: Mrs. Goethe Link, Indiana; William H. Roese, California.

Regional Directors: New England, Mrs. William R. Taylor, Connecticut; Northeast, Mrs. James J. Tracey, Pennsylvania; Middle Atlantic, Miss Bonnie Hohn, Virginia; Southeast, Mrs. William O. Ticknor, North Carolina; Midwest, Mrs. William C. Baird, Ohio; Southern, Mrs. Morris Lee Scott, Mississippi; Central, David E. Karnstedt, Minnesota; Southwest, Mrs. C. R. Biven; Pacific, Mrs. Christine Kemp, California.

Committee Chairmen: Classification, Mrs. Charles H. Anthony, Connecticut; Editor of Journal (to take effect after publication of June issue), Mrs. Paul J. Gripshover, Ohio; Publications, Mrs. William M. Pardue, Ohio; Public Relations, Mrs. W. J. Perry, Virginia; Schools, Mrs. Merton S. Yerger, Maryland.

Executive Committee: the President, Treasurer, and Secretary, plus Wm. H. Roese, Mrs. John Bozievich, Mrs. Ernest K. Hardison, Jr., Mrs. James W. Riley.

Nominating Committee for 1979: Dr. Wm. A. Bender, Mrs. Charles H. Anthony, Mrs. P. R. Moore, Jr., Mrs. Hubert Bourne, Jack S. Romine.

A NOTE OF APPRECIATION FROM AN AUSSIE

To all you kind and generous people who have made my stay in your country a very memorable and interesting occasion, which I shall never forget, please accept my sincere thanks for your welcome, generosity, taking me to interesting places and properties, offering me your homes, and arranging my itinerary, and answering my questions. There are far too many to list in this short note and so for all my thanks again. Perhaps you may come over to my country some day. If so, I shall do my level best to provide the same hospitality as you have so graciously given me.

—LINDSAY DETTMAN

One of our Australian members, Mr. C. G. Temple-Smith, is anxious to obtain pollen of *N. elegans*, *N. serotinus*, and *N. viridiflorus*. He would have to have it in late August or early September to coincide with his flowering season. Any of our growers of those temperamental species who might have pollen at that time should get in touch with him at 18 Josephine Ave., Mount Waverley, Vic. 3149, Australia.

"WHERE CAN I GET . . . ?"

Anyone who can spare a bulb of the following (or who knows where they may be purchased) please write directly to the person seeking it. Send requests for future listings to Mrs. Paul Gripshover, 2917 North Star Road, Columbus, Ohio 43221.

Cultivar		Desired by
2 Y-R	Red Rum	Mrs. Hubert Bourne, 1052 Shady Hill Drive Columbus, Ohio 43221
2 W-W	Slemish	John Reed, 1712 Dixie Highway, Lot 20, Crete, Ill. 60417
2 W-O	Penwith	Mrs. Orville Nichols, 11119 College Rd., Olive Branch, Miss. 38654
2 W-P	Stray Pink	
2 W-W	White Nile	
3 W-GWW	Polar Sea	
3 W-GWW	Silver Coin	
5 W-W	Silver Fleece	
7 W-W	White Wedgwood	
1 W-W	White Label	Hugh McKay, 240 Kennedy Rd., Napier, New Zealand
2 W-W	Homestead	
2 W-W	White Magnolia	
3 W-YYO	Bee Mabley	
5 Y-Y	Ruth Haller	
6 W-W	Cheyenne	
7 W-W	White Wedgwood	

FIND IT HERE

5 Y-Y Ruth Haller Gene and Gerry's Nursery, 39 E. Patrick St.,
Frederick, Md. 21701

TIPS TO FUTURE JOURNAL CONTRIBUTORS

To those of you who will want to make the new Editor's job as easy as possible, may I make a few suggestions? A few minutes given by you to such details will materially ease the work of preparing copy for printing, sometimes making retyping unnecessary.

Space: please do not crowd your material in any way; allow at least an inch at the top of the first page; leave margins on both sides; typing should be double-spaced, of course.

Supply title and by-line of your choice; notice how we do it.

Check spelling of daffodil names; it is surprising how easy it is to overlook misspellings in one's own writing. Do not underscore or use all capitals in writing cultivar names.

Notice how we indicate classification, i.e. 2 W-WWY (not 2W-WWY or 2 w-wwy, etc.) For botanical names, capitalize the N. (for *Narcissus*, the genus name), but not the other elements indicating species, subspecies, etc. At times the N. can be omitted as understood, but it is safer to include it. Even when it is omitted the other parts of the name are not capitalized. The Latin parts of the name will be printed in italics, but this will be indicated in the editing.

In general, avoid over-capitalization, over-punctuation, dashes, strikeovers, underscoring, crowding of any kind!

Please do not be put off by these suggestions. The new Editor did not know they were coming. Send your contributions for the September issue, preferably well before July 15, to Mrs. Paul J. Gripshover, 2917 North Star Road, Columbus, Ohio 43221. After about September 1 her address will be Rt. 3, Natchez Rd., Franklin, Tenn. 37064.

—ROBERTA C. WATROUS

HYBRIDIZERS' FORUM

Inter-Generic Crosses?

In the December issue we asked if anyone knew of successful or attempted crosses between *Narcissus* and any other member of the Amaryllis family. Two responses have been received.

Meg Yerger wrote that she had once tried pollen of forced Lights Out 9 on an unidentified Amaryllis species blooming at the same time on her porch. "Nothing came of it."

Dorothy Allen sent a letter from Jack Gerritsen, from which the following excerpts are taken:

"As a (good) son of a bulb grower, when I was still very young I had my own small garden where I planted all kinds of bulbs I had found as lost ones on the fields of my father. In the beginning I thought to know better than he and I started crossing red tulips with white and yellow daffodils." Later he tried crossing daffodils with hippeastrums, vallotas, clivias, "even *Sprekelia*. I must say without any results."

"Twenty years ago a Dutch grower told me he had made crossings between a hippeastrum and daffodil with good results. I asked him to bring them to the weekly show of our Dutch Bulbgrowers Association, which never

happened. Another Dutch daffodil breeder has a 13-year-old son following his father's footsteps and was very proud of having obtained good seed on daffodils crossed with hippeastrum. A few weeks ago I had a talk with his older brother and he told me that there still remained two weak plants.

"Twenty years ago I collaborated with the well-known Dutch biologist, the late Dr. de Mol. He was very interested in my new collars and advised me which crossings to make after research of chromosomes and pollen. He never advised me to make crossings with other flowers \times daffodils. At this time, the possibility of changing the number of chromosomes scientifically gives more possibility for crossings.

"You must always try. I never got seeds on my After All, and there was never pollen on the stamen. This spring I got good seeds with a crossing with a good pink collar. So I hope to get a posterity of After All, large, very late collars. Once I hope to get really true collar miniatures. Frileuse is a medium, but seems to be sterile, no pollen and never seeds. I am sure that other hybridizers, of big firms, do make strange crossings, hoping to win a prize, and sometimes they succeed."

From the Hybridizers' Robin

I've had some seedlings bloom for the first time, miniatures. One cross was recorded as Bagatelle \times *asturiensis*; another as Bagatelle \times Quince. The seedlings were so similar (all 1 Y-Y) that I wonder if they weren't both Bagatelle o.p. They were the first things to bloom here, ahead of Bagatelle. Several looked like sturdier *asturiensis*, and several were small pale yellow. Another cross, Bagatelle \times Mustard Seed, gave a 2 Y-Y. The cup deepens at the rim, barely orange. The flower is well formed, with overlapping perianth, but the stem was quite short on opening. It has since grown, and is quite sturdy. We have had rain and hail which had Mustard Seed on the ground, but this seedling held up.

—MARY LOU GRIPSHOVER

THE COLUMBUS DAFFODIL DISPLAY GARDEN

By P. PHILLIPS, Otorohanga, New Zealand

One of the highlights of the Columbus convention was a tour of the Daffodil Display Garden in the Park of Roses, Whetstone Park. This beautiful garden was commenced in 1974 by an enthusiastic group of daffodil growers and is maintained by them in conjunction with the Park authority. Bulbs for the garden were provided by ADS members in several different states and include many of the latest introductions, as well as older cultivars from all divisions. Every endeavor is being made to see that all of the cultivars grown are correctly named, and the writer was pleased to be able to assist in correcting a few errors, and to the best of his belief all are now true to name.

At the time of our visit there were some wonderful blooms, and it would have been simple to select a Quinn entry that could have won at the Convention show. The size and smoothness of the blooms was exceptional, and they had stood unprotected in the beds and still maintained the lovely quality that we all look for in show blooms. In the writer's opinion this is the finest display of daffodils in a public park anywhere in the world, even better than the Wisley Trials. With further assistance from daffodil lovers it could become

one of the outstanding daffodil plantings of all time. It certainly gave the writer much pleasure to see growing there bulbs from stocks that he had sent to the States from New Zealand. Cave and Judea were of wonderful quality and smoothness, and further stocks will be sent to join those already there.

The efforts of that dedicated band of ladies who tend the garden should be supported by all daffodil lovers, and contributions of from one to three bulbs should be sent to Mrs. William M. Pardue by September 30. Only healthy true to name stocks should be sent, and it may be well to write in advance giving the names of cultivars available as a surplus is not required.

The Central Ohio Daffodil Society is to be congratulated on their outstanding contribution to the promotion of daffodil culture, and the work involved in planting and tending nearly a thousand different cultivars can be fully appreciated by those who have a small plot of their own. May this wonderful venture long continue.

N. viridiflorus THRIVES ON NEGLECT

By BILL ROESE, *Santa Maria, California*

(From the *Pacific Region Newsletter*)

After several attempts to coax the fall blooming *N. viridiflorus* to bloom, it finally dawned on me that coaxing was not what was required, but rather neglect. So in that vein I strove to recreate a more natural environment for the plant. Using a mix of $\frac{2}{3}$ hard adobe clay and $\frac{1}{3}$ builders sand, I placed six bulbs in each of two 8-inch clay pots. Since the bulbs arrived in September, I watered at once and kept the pots in full sun, but damp, until I was rewarded with several blooming stalks. Several had two florets per stem. After blooming the pots were gradually dried off and left in full sun to bake. A few weeds came up in the pots, but they merely removed any moisture that the baking had left. The pots were kept hot and dry until early the next September, when the process was repeated. The bulbs were never removed from the pots, and have been blooming successfully for several years. In the past three years they have bloomed consistently and have become increasingly more floriferous.

For those who have never tried this species, it grows in a different manner than the more so-called orthodox daffodils. It is fall blooming (generally mid-to-late October here in California). It has no leaves. The flower stem does double duty, acting as a leaf to furnish nourishment for next year's bloom. Usually it has two or three flowers per stem, and it is difficult to differentiate the bloom from the stem, both being so similar in color. It is slow to multiply but it seeds freely, and I would suspect that it multiplies more freely from seed than it does from bulb division, as it normally blooms from seed in about three years here. Green may not be everyone's idea of the ideal daffodil, and the form of *N. viridiflorus* is less than the exhibitor would desire. However, it is a charming, delicate-appearing plant and the flower has a delightful fragrance. It blooms in the fall to warn us that its larger and more abundant cousins are not far behind.

Having been crossed with early tazettas, it should bear some interesting children.

YOU CAN FOOL MOTHER NATURE!*

By DAVID E. KARNSTEDT, West St. Paul, Minnesota

There have been few winters that I cannot remember having at least one pot of Grand Soleil d'Or or Paper White blooming indoors to brighten the wintry days of January. Since I had never been able to bring myself to throw the bulbs out after they bloomed, I grew the plants on to maturity and saved the bulbs. Flowers in subsequent years were, of course, smaller and fewer but, nonetheless, rewarding.

One fall, I decided that I had many more bulbs than I really cared to pot up. Thinking that here would be a good chance to experiment, I planted out some 40 Grand Soleil d'Or and over a hundred Paper White into several locations about the garden.

The following spring none of those plantings bloomed and, not surprisingly, only those planted in a microclimate created by nearness to the foundation of the house survived. Although the leaves of Grand Soleil d'Or stayed tall and green until cut down by the freezes of late October, there were no flowers the following spring either. There might have been some, though, because the several stems pushing upward bore dried buds in the brown sheaths. The same pattern continued for a season longer until it was broken by my need to renovate the beds for new planting space. The bulbs were dug in July, even though the foliage was still lush and green. Because of the press of activities, the bulbs were not replanted until late in October.

Those of you living in warmer climes, where Paper Whites are traditionally picked for Christmas decoration, couldn't imagine my delight when I discovered that most of the bulbs that spring were going to bloom! A little reflection, I thought, was necessary to account for such success where previously had been only failure.

Each year, in the past, the bulbs had been left in the ground year round. With no interruption (save winter!) in the growing cycle, they sent up a new set of leaves in late summer. By the time freezing weather killed those leaves to the soil surface in late October or early November, the buds had emerged from the ground nestled in the leaves or were just beneath the surface. It immediately became obvious why there had been no flowers, even though the buds had formed; they had been killed by low temperatures at some time long before the application of winter mulch or the accumulation of snow for insulation. But when planted late, the energy of the bulb was directed toward establishing itself by forming a root system and not to top growth that would be killed by the arrival of the Minnesota winter.

Since accidentally discovering the method by which one could fool Mother Nature, I have tried several other tazetta varieties, e.g., *N. tazetta pachybolbus*, *N. tazetta compressus*, and tenderer hybrids, e.g., White Pearl and Silver Chimes, with equal success.

To insure annual bloom from tazettas in this climate, three factors must be observed: 1) a warm microclimate, 2) annual lifting and late planting

* This article was inspired by "Report of a Committee of One," a piece written by Tom Throckmorton and appearing on pages 22-28 of *The 1963 American Daffodil Yearbook*. Aside from their value as a progenitor of ideas, Throckmorton's observations are as valid today as when written and eminently worthy of repetition as counterfoils to the very misconceptions he had taken time to point out to us 15 years ago.



(but not later than October 15), and 3) the prudent use of a hay mulch as insurance against the penetration of low temperatures early in the season and in the occasional winter of inadequate snow cover.

The microclimate that has worked best for me is a series of beds along the east foundation of the house. It is sheltered from the wind and during our cold, but bright and sunny, winter days is apparently able to moderate ambient temperatures with heat gain from the sun. The most important factor, though, has to be the leakage of heat from the interior through the cement floor and cinder blocks into the soil. Under a mulch of hay and snow, the heat appears to be retained, resulting in soil that probably never freezes within a certain distance out from the foundation.

Although even the bulbs planted at the edge of the bed, some 40 inches out, will usually survive and bloom, these are markedly retarded in spring when compared to their more fortunately sited brethren nearer the foundation. The photograph clearly shows the decreasing effect of the microclimate

at increasing distances from the foundation. An obvious advantage is the considerably lengthened blooming season from a small planting. Occasionally I will lose some of the bulbs beyond an undefined point from the foundation toward the outer edge of the bed. Such an event occurred after last winter. Far from being a disaster, such a loss tends to be a blessing in disguise as it cuts down excess population, as well as identifying the tenderer types. In retrospect, I feel these losses are related not so much to temperatures of -30° F. in January, as to the effect of late planting. The cold soil of late October is not conducive to rooting, and the bulbs at the outer reaches of the microclimate die as its marginal effect at that distance is overwhelmed by the lethal temperatures of midwinter.

An additional observation of value is that, even though I've been successful by using the microclimate created along the west foundation of the house, it presents some additional problems. The increased warmth from the sun, particularly in late February and March, will force the leaves to grow under the mulch. Such forced growth results in frost tender and crippled foliage and increased possibility of frost damage to the emerged buds. Two things can be done to retard growth.

As the strength of the sun increases in late winter, some form of shading should be used to decrease solar heat gain. I have used sheets of $\frac{3}{8}$ -inch peg-board painted white and leaned up against the house—not particularly attractive, but effective. If the weather warms enough to melt away the snow, it is wise to remove most of the mulch, leaving a portion fluffed up over the plantings. Keep the hay handy to protect things, though, if the temperature is predicted to drop into the 'teens.

In this climate, much of the joy of gardening stems from the occasional success one achieves with plant material not considered hardy. I feel the most important factor of these successes, however, is due to the identification and judicious use of microclimates. In this way, one *can* (just about always) fool Mother Nature!

HERE AND THERE

Since the March issue went to press we have received newsletters (all dated February) from two regions and a local society. All were looking forward to shows and other activities of the daffodil season. The Southeast Region's publication included an excellent article by Dr. Frederick N. Rhines, on his experiences growing daffodils in Gainesville, Florida, and several shorter articles, including one on "How to Get New Members" by Willard King. The Middle Atlantic letter gives hints to new exhibitors from Frances Armstrong, reports on a planting of daffodils by the horticulture class at Mary Baldwin College, and quotes from a letter of Betty Darden describing a daffodil-associated experience in England last fall. The February number of the Washington Daffodil Society Newsletter is concerned chiefly with Society activities.

A Newsletter of the Tasmanian Daffodil Society included a brief summary of 1977 show results. Seven of the eight Grand Champions, and the largest percentage of class champions were Tasmanian-raised cultivars, the chief exception being in classes for doubles. Difficulties connected with the importation of daffodil bulbs into Australia (see Journal, March 1975, p. 116, and

June 1975, p. 152) must reduce the importation of new cultivars from overseas, and at the same time encourage the production of home-grown flowers.

Daffodils adorn the cover of the Spring 1978 issue of *The Iowan*, and lead readers to the article "The Doctor's Daffodils," about Dr. Tom D. Throckmorton, with five more illustrations in color.

BAMBI

By POLLY BROOKS, *Richmond, Virginia*

As I look out my kitchen window on this cold windy but sunny day of February 27, I see Bambi holding its head up and dancing in the breeze proud to be called Bambi. In 1975 Bambi first opened on January 28—a month earlier. It was January 25 in 1974 and February 15 in 1977. Much depends on the weather. So far this winter there has been no letup in the continuous cold freezing weather.

In a short time, weather permitting, there will be masses of Bambi in bloom under dogwood trees where it is naturalized. What other daffodil comes so early in quantity? Not any to speak of in this garden. There are other daffodils that bloom very early, such as *N. asturiensis*, *N. calcicola*, *N. bulbocodium romeuxii*, etc. that I'd like to have in masses if they came that way. But they don't. So I grow Bambi. It is not a show flower by any means, but it is the earliest of the early ones, hardier than most, and prolific. This is the reason I grow it—to enjoy it and to share it with friends.

While look through a bulb catalog many years ago, the name Bambi caught my eye. The description was intriguing also. I ordered it. Needless to say, I was very disappointed when it bloomed, thinking that I was sent another daffodil by mistake. After that, I did not bother about Bambi. As years went by, the reason for growing any particular daffodil, or any other plant for that matter, changed. During the last 10 or so years I have been growing lots of this very early, slightly fragrant bicolor trumpet daffodil because it is so very early and withstands the worst weather. It gives me much pleasure to look outside on these cold days and see a bit of that live color or to bring a few inside to enjoy or to take a few to a friend. Of course, one can get from the florist a nice large yellow trumpet at this time of the year, but as for me, give me my small homegrown Bambi, which outlasts any florist daffodil.

The new "Daffodils to Show and Grow" lists Bambi as of Dutch Origin, early, short, 1 W-Y, registered in 1948. It seems to me that I read somewhere that it was a "selected clone" from the wild. Somewhere else I read or heard that it is a sort of *N. pseudo-narcissus*.

The one fault I find in Bambi is that it multiplies too rapidly, resulting in clusters of small crowded bulbs on top of each other and decreasing drastically in bloom after the third year or so. If not lifted and separated, it will cease to bloom. I find this to be true also, but to a lesser degree, of Little Beauty. Perhaps somewhere in the background they have the same "roots."

Today I brought in three blooms of Bambi, one of *N. asturiensis*, lots of eranthis, snowdrops (the old fashioned kind), yellow ancyrensis, and white Snow Bunting winter crocus, a bit of blue *Scilla siberica*, and made a lovely "early spring garden" to take to a sick friend. That, for me, is reason enough to grow Bambi.

Postscript: Two inches of snow fell that night.

GERMINATION OF DAFFODIL SEED

By DR. M. G. TEMPLE-SMITH, Tasmania, Australia

After moving house in early May last year I found among my papers about 120 daffodil seeds, harvested in spring 1976, which had not been sown. These were subsequently planted in seed boxes in June 1977. Since it is widely stated in most books and writings on daffodils that narcissus seed has a low temperature requirement for germination. I anticipated that these seeds would germinate in spring 1977 after obtaining their low temperature requirement during the preceding winter months. However, to date, 10 months later, only two seedlings have emerged.

Some new research findings recently published in England may help to explain this germination failure. In addition this new information should be of interest to all daffodil growers and breeders. Writing in the New Phytologist (Vol. 79, 1977, pages 287-290) P. A. Thompson of the Royal Botanic Gardens, Ardingly, Sussex, has found that seeds of *Narcissus bulbocodium* var. *conspicuus* which are initially dormant and fail to germinate at any temperature are conditioned by exposure to high temperature (26°C) so that they become capable of rapid and complete germination (80-100%) within one month of transfer to lower temperatures $5\text{-}16^{\circ}\text{C}$). Moderate conditioning temperatures (16°C) resulted in some loss of dormancy and led to germination, but the effect was less complete, with a maximum germination percentage of only about 40%. Low temperature conditioning treatment (6°C), however, completely failed to produce seed capable of germinating at any subsequent temperature.

These results mean that for this species of *Narcissus* there is no low temperature requirement for germination. In fact quite the opposite is true and *Narcissus bulbocodium* requires a period of high temperature to break dormancy. In practical terms *bulbocodium* seed should be sown soon after harvest and kept at high temperatures throughout the summer in a sunny spot or perhaps a glasshouse, but not in heavily shaded or north facing situations. After two months or more the high temperature conditioned seed should be moved to cooler conditions ($5\text{-}16^{\circ}\text{C}$) to permit rapid germination and emergence of young seedlings.

At the present time these findings apply only to *Narcissus bulbocodium* but it is tempting to extrapolate them to explain the failure of my daffodil seed (from large flowered garden cultivars) to germinate following the winter low temperature conditioning. Obviously further research of this kind is needed, using other *Narcissus* species and cultivars and in the light of the above new information I would be pleased to hear from anyone who may be able to explain their seed germination failures on the basis of an absence of high temperature conditioning. In the meantime anyone with highly prized daffodil seed they wish to germinate would be well advised to sow in early summer so that any high temperature conditioning that may be required can be achieved naturally.

In his letter of transmittal Dr. Temple-Smith wrote: "You may be interested to hear that I received some daffodil seed from America via the ADS and got better than 80% germination from an early summer sowing. These seedlings will be 2-year-olds this season."

ERLICHEER LIKES FLORIDA

This is March 5 as I write and before me is a vase of New Zealander *Narcissus* Erlicheer with 18-inch stems and 12 or 13 florets each. Of course that is not the 16 florets reported in New Zealand, but who would expect any Florida gardener and his coral sand to equal the results achieved by Phil Phillips in his wonderfully fertile and friable volcanic soil?

The half dozen bulbs that came with me to Florida in the summer of 1974 have now increased to 23 plants of all sizes, about half of them now in flower. The foliage is a fine green with no evidence of a virus infection. Winter temperatures of 1977-1978, as low as -3.89°C . (25°F .) in my garden did no damage to foliage or flower buds, but it was a different story in 1976-1977 when the temperature dropped to -8.33°C . (17°F .) on more than one night. Those temperatures killed almost all the buds and all the tazettas showed cold injury in the foliage. The leaves were covered with a fine white speckling and had the appearance of being virus-infected.

It should be noted here that Erlicheer has performed better in Gainesville than it did in Arlington, Virginia, although cold in Virginia was not a problem. It usually did not come into active growth until danger of severe frost was over.

For other Floridians, at least those in the north central part of the state, who want to grow at least one member of the genus *Narcissus*, I would suggest they try Erlicheer. In this region it has performed well. A vase of it in the narthex of our church this morning created much interest and a lot of comment on its fragrance. It surely has that.

—WILLIS H. WHEELER

FLIGHT OF THE ROBINS

By DR. GLENN DOOLEY, *Bowling Green, Ky.*

Catherine Madsen, Waterford, California, gave a rather unusual report on her experiences with various flowers used for indoor observations. Regardless of the nature of the plant, they would get sick and perish in a matter of a few days unless they were removed. She took a 10-bulb planting of Mite which had just started to bloom to the public library. After four days the leaves and stems were beginning to wilt. It was discovered that the spray the janitor was using in cleaning the furniture was the cause of the deterioration of these plants and blooms. Just what do these fumes do to the humans?

There is a perennial problem of holding over the bulbs from Down Under. Apparently there is no set method. Peggy Macneale found that some of her bulbs were deteriorating during the summer. She sectioned some of them and was able to start growth of small bulbs. Delay in obtaining bloom from these bulbs was expected, but at least the daffodil was saved. It would be interesting to have a symposium on this problem some time.

Accumulation of knowledge on the culture and performance of the various cyclamineus daffodils is under way. Early reports are showing a great deal of promise. For me, Tête-a-Tête, Jumblie, and Mite are the finest among the miniatures. Just recently I found that Cornet set seed. I hope that eventually there will be seedlings of promise from it. There should be much promise in the future for this class of daffodil.

It is a delight to have Gary Schwartz, of Burlington, Wisconsin, in a robin. Gary is a youthful grower and he is very much interested in hybridizing. I have often thought that I would like to direct a robin consisting of youngsters. Gary is correct in being interested in hybridizing at an early age. I have often wondered if the general public is aware of the time lapse between when a cross is made and when the bulbs are available to the public. I have seedlings of Quick Step \times *N. triandrus albus*. This is the seventh year that I have grown them, and I have yet to see the first bloom. Assuming that one of them is a very superior daffodil, it would be 20 years before I accumulated sufficient stock for listing in a catalog. On the other hand, I have a clump of seedlings from Lebanon \times Polindra that are about 12 years old. Some seedlings do increase at a much faster rate than others.

A youthful daffodil fancier will have a much greater opportunity to prepare a pattern for hybridizing and to live and see his results. Some of us purchasing bulbs each year can appreciate the great efforts in developing a new daffodil. We wish Gary many happy moments with his daffodils and we wish him great luck with his seedlings.

There is an increasing interest in intermediate daffodils. This group is defined as being too large to be considered miniature and too small to compete with standard daffodils. There have been suggestions that a robin dealing with this group be formed. Do contact me in a sufficient number for us to organize a robin. Other robins are: Miniatures, Regional, General, Poeticus, and Hybridizing. The West Regional Robin is being organized and Meta Belle Eames would like to bring it back to full strength.

A BOUQUET FOR BERMA

Berma Abercrombie, a Carey Quinn and Roberta C. Watrous medalist, is THE Daffodil Lady in the southwest part of Georgia's Fulton County, well known by her neighbors for her beautiful garden and for her generosity. Any drive in the spring around her section of the county will show many lovely daffies nodding in the breeze—bulbs that have been shared by Berma.

Berma is one of the most active members of the Georgia Daffodil Society (a charter member of that group in which Carey Quinn assisted in the organization), entering into every phase of its activity. Currently her husband, Maurice, is President of the Georgia Daffodil Society and they make a wonderful working team. Her most recent project has been an ADS Judging school held here in Atlanta, which she initiated, organized, and has now completed the three courses in three successive years. Berma did this in answer to the need for such a school in this area and at the request of numbers of Atlantans who wanted to try for judgeships. None of us had any idea of the enormity of this task, but once begun, Berma continued to its conclusion and thanks to her some of us will attain this position after completing the further qualifications. All of us know much more than we did about daffodils, but we also realize that there is much more to learn and that knowledge is a continuing process. Students in this school series were mostly from the Atlanta and Georgia area, but Pennsylvania, Virginia, and the Carolinas were represented also. Space does not permit the listing and praise of the instructors individually, just let me say they were all excellent dedicated "daffodillers"

and came from near and far even on the Saturday before Easter for the final course. However, we must mention Bill and Laura Lee Ticknor (our ADS President and his wife), who did a team presentation of color coding at Course #3 which was most helpful. We have a number of daffodil luminaries in the southeast and were fortunate to have seedlings from Mildred Simms' fields to judge and point score in this course.

Berma is a former Regional Vice President and a member of the Round Robin group. The number of her awards defies counting, but she is best known in this area for her lovely garden. The Abercrombies live on a working farm (cattle raising) and some spring you must drive southwest of Atlanta to the rural area of Palmetto; you have not seen early spring beauty until you drive down the lane where hundreds of Fortune growing by a weathered rock wall will greet you. A turn around the driveway reveals the myriads of daffies, some growing in ordered precision of exhibition beds, others landscaped and naturalized around the huge old trees, and near the house her beloved miniatures nestle cozily among the rocks.

So, a bouquet for Berma: all 12 divisions and all colors of the code!

—IRIS K. YARBROUGH

ACCLIMATING BULBS

By E. W. COTTER, *Christchurch, New Zealand*

Occasionally members proclaim their difficulties in acclimatizing bulbs from the Southern Hemisphere. As an importer of bulbs from the Northern Hemisphere over the past 30 years I also encountered problems which experience eventually overcame. The following pointers may be helpful to others in avoiding some of the failures.

1. When importing have the more expensive cultivars sent by air and the lower priced ones by surface mail. Stipulate as a condition of your order that air-mailed bulbs be dispatched not later than March 7. Bulbs should probably reach their destination by about March 21 and should be planted without delay. If planted in a cool, moist situation, bulbs will most likely flower within a few months and so follow on the region's normal flowering period.

2. Bulbs received by surface mail should be held in store and planted at the optimum planting time for the area. Ensure that storeroom conditions are ideal, i.e. dry and cool, with no doors or windows open to cold moist draughts. Iron sheds and unlagged iron roofs should be avoided as evenness of temperature is most essential.

3. It is advisable to use a fungicidal dip as soon as the bulbs are received, then they should be thoroughly dried and placed in shallow trays before storage. The protective dip against narcissus fly can be carried out at planting time.

My experience of acclimatizing bulbs from the United States this year will demonstrate that successful results follow correct procedures. My importation from Oregon comprised 26 cultivars. At this date (August 22) last year these bulbs would have been reposing in the Mitsch bulb storeroom, as the health certificate is dated September 7. The bulbs reached me on September

21, were dipped in Benlate solution, thoroughly dried, and stored until October 3, when I found time to plant them. Of the 16 cultivars 24 developed both good foliage and flowers; only two did not show foliage with the others, but are now up and carry flower buds.

Early this year some of these flowers were cross-pollinated and five of them produced excellent seed. As soon as the seed ripened it was sown in open beds; one of these crosses, Mite × Barlow, has already pushed its first leaf above ground.

The foliage of the importation for the second time is lush and abundant after a very short dieback. A number of the cultivars are carrying flower buds well advanced, and Hummingbird has opened two new flowers. Within 12 months of planting this importation they will have made their second flowering and will complete their blooming simultaneously with my established stock. In December and January these bulbs will be lifted, having had their second flowering, and, consistent with their present increase, should show a threefold increase of flowering size bulbs.

Fantastic as these results are, I believe they are due to receiving well matured top quality bulbs, early and rapid dispatch by air, early planting in a moist, shaded, and well drained situation, the most abundant rainfall in this country's 114 years of weather records, and absence of heavy frost.

In this connection attention has been called to some earlier comments on acclimatization.

It is always interesting to reread some of the older daffodil books, and when all our bulbs are safely under, we can do so with that glow of righteousness a gardener so rarely earns. Today, in that momentary glow, I picked up the 1937 RHS Year Book, and my attention was caught by Mr. Guy Wilson's article on acclimatization. It bears rereading. He urged early planting of bulbs from overseas (the Antipodes, in this case), and he warns gardeners that any moving of daffodils—even from one place to another within the British Isles—requires almost as long an adjustment period as is needed by those from across the Equator.

He cited his experience of growing in Broughshane bulbs from The Brodie, north of him, and from P. D. Williams, in the warmest corner of England. In both instances it was not until the fourth or fifth year that quality of bloom was recaptured.

As other careful observers have noted since, and as Mr. Wilson therein quoted Mr. B. Y. Morrison, who stated in the American Daffodil Yearbook of 1936, "judgement of new bulbs should be withheld for three and better four years." One must wait, before evaluating the true worth of any daffodil, until the original bulb has been completely replaced by new tissues, built by the ingredients—soil, water, weather—of its new location.

Our experience here at Springdale reaffirms these statements of these great leaders of our era. To over-generalize, we could say that often: first year, good; second year, mediocre; third year, sometimes better, but often worse. Very often fourth and fifth year down, not replanted, have produced top quality blooms.

—ELIZABETH T. CAPEN

AMERICAN DAFFODIL SOCIETY, INC.
INCOME AND EXPENSES — YEAR ENDED DECEMBER 31, 1977

INCOME:

Dues Paid in 1977	\$ 9,270.48
Life Memberships Paid in 1977	700.00
Sale of Books, Supplies, etc.:	
R.H.S. Yearbooks	\$ 694.32
A.H.S. Daffodil Handbooks	250.40
Classified Lists 1960-1975	98.80
Daffodils to Show and Grow	571.50
Handbook for Judging	408.15
Binders for Journals	80.40
Jefferson—Brown Book	80.00
Allen—E. A. Bowles Book	30.00
Lawrence—Lob's Wood	14.50
A.D.S. Publications	231.97
Out-of-Print Books	272.00
Medals and Ribbons	90.00
Registration Fees	58.50
Data Bank Printouts	397.50
Printout Binders	47.50
Show Entry Cards	308.19
Brief Guide for New Members	13.00
New Zealand Trophy	502.00
Miscellaneous (Barr)	16.00
	\$4,164.73
	\$2,863.07
	1,301.66

Advertising	394.00
Judges' Certificate Fees	30.00
Slide Rentals	70.00
Interest Received	1,570.31
Judging School Surplus	47.07
Convention Surplus	500.00
	\$13,883.52

TOTAL INCOME

EXPENSES:

Daffodil Journal—Printing, Envelopes and Mailing	\$ 7,361.43
Membership Roster	434.72
Office Expenses:	
Printing and Supplies	\$ 442.18
Postage	581.21
Computer Work on Roster	201.97
Executive Director	2,500.00
Bank Service Charges	25.99
Miscellaneous	99.45
	3,850.80
Regional Vice Presidents (Newsletters)	853.00
Secretary	61.64
Committees	21.55
Daffodil Data Bank	485.00
Library	25.00
1978 Convention Advance	400.00
Olive W. Lee Memorial Garden Plaque	290.00
	\$13,783.14

TOTAL EXPENSES



BALANCE SHEET — DECEMBER 31, 1977

ASSETS:

Cash in Bank—Union Trust Co., New Canaan, Conn.	\$ 922.55
Cash in Savings Account—New Canaan Savings Bank	204.79
Savings Certificate, 6½%, expires 5-1-78, New Canaan Savings Bank	2,543.94
Savings Certificate, 6½%, expires 5-1-79, New Canaan Savings Bank	2,086.01
Savings Certificate, 6¾%, expires 5-1-80, New Canaan Savings Bank	2,218.64
Savings Certificate, 6½%, expires 3-1-81, New Canaan Savings Bank	2,747.07
Ford Motor Credit Corp. 8½% Bonds due 3-15-91	10,575.00
Accrued Interest not due	247.90
Advance to 1978 Convention Committee	400.00
Inventory of Publications:	
Royal Horticultural Society Yearbooks (139)	\$ 289.13
A.H.S. Daffodil Handbooks (1095)	356.15
Handbook for Judging (1298)	386.80
Binders for Journals (81)	113.40
Lawrence—Lob's Wood (2)	2.12
Allen—E.A. Bowles Book (4)	31.52
Show Entry Cards (5,900)	77.00
Data Bank Printout Binders (83)	99.60
Daffodils to Show and Grow (1336)	<u>2,859.00</u>
	4,214.72
Inventory of Medals and Trophies:	
Medal Dies	15.60
Gold and Silver Medals	314.56
Maxine M. Lawler Sterling Cups (2)	90.00
Larry M. Mains Sterling Trays, min. replicas (7)	<u>315.00</u>
	735.16
TOTAL ASSETS	<u>\$26,895.78</u>

LIABILITIES

Dues Paid in Advance (in whole or in part)	\$ 7,687.59
Life Memberships	8,800.00
Accounts Payable—1500 Daffodils to Show and Grow	2,007.20
Net Worth	8,400.99
TOTAL LIABILITIES	<u>\$26,895.78</u>

AUDIT STATEMENT

The above balance sheet and income statement for the year 1977 were prepared using the cash receipts and disbursements records maintained by the Executive Director. The cash balances were verified with the bank statements and the pass book and savings certificates of the banks indicated. The inventory of publications is shown at cost except that no value is included for surplus ADS publications. In addition to the assets shown, the Society has a substantial library of books on daffodil culture, many of which are rare and valuable, and several colored slide collections. It also has a number of memorial silver trophies awarded at convention shows. The books, slides and trophies were mostly contributed by members and no value is included.

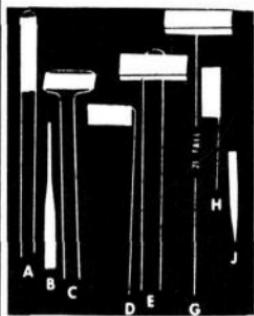
Due received in the current year covering periods beyond the end of the year were prorated and amounts covering such future periods are shown as a liability. Payments for life memberships are also shown as a liability.

The receipts for dues and other income were verified with the deposit slips and the disbursements were verified with the suppliers' invoices and the cancelled checks signed by the Treasurer and Executive Director.

Based on this review, it is my opinion that this balance sheet and income statement present an accurate report of the financial condition of the Society and that the records are being maintained in a sound and orderly manner.

—WELLS KNIERIM

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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

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6. Miniatures
7. Arrangements of Daffodils
8. Daffodils in Britain
9. Species and Wild Forms.

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.

Colored prints of daffodil varieties for lectures. Set of 55 prints, 6 by 8½ inches. For loan, \$1.00.

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.

PUBLICATIONS FOR SALE

Daffodils — To Show and Grow, 1977	\$ 3.50
Handbook for Exhibiting and Judging Daffodils, 1974	2.25
The Daffodil Handbook, 1966	Paper Cover, \$3.40; Cloth 4.90
E. A. Bowles & his Garden, by Mea Allan	12.95
Print-out of Daffodil Data Bank	\$15.00; with binder 17.50
Binder for 12 numbers of Daffodil Journal	3.40
Set of at least 15 numbers of Daffodil Journal	4.00
Single copies of Daffodil Journal	1.00
ADS Yearbooks for 1957/8, 1964	1.50 ea.
ADS Approved List of Miniatures, 1975	two 13-cent stamps ea.
RHS Daffodil and Tulip Year Books (<i>new copies</i>) :	
1961, 1962, 1963, 1964, 1965, 1966	3.00 ea.
1967, 1968, \$3.50 ea.; 1969, 1970, \$4.25 ea.; 1971	5.50
1971 Daffodil Season Report	2.00
Daffodils 1972, 1973, 1974	3.00 ea.
Daffodils 1975, 1976	3.50 ea.
Daffodils 1977	4.25

RHS Daffodil and Tulip Year Book (*used copies, as available*):

Write for years on hand with prices

Show entry cards 500 for \$11.00; 1000 for \$20.00

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.

Daffodil Corner, Rt. 1, Box 93A

Tyner, N.C. 27980