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3. Select your favorites:
   a. introduced, named varities (no seedlings).
   b. observed in your garden or your region.
   c. vote for the varities you like best for your own personal reasons.
   Use this ballot or write on your own paper.

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This survey is made to determine the cultivars best liked by the membership of our Society.

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Your Region _____

Please vote before July 15, 1988

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COVER PHOTO

F. W. Burbidge lithograph of *N. juncifolius*, Plate XXVII

SUNPROOF PROGRESS

or

"WHO EVER HEARD OF HOSPODAR?"

BRIAN S. DUNCAN, *Omagh, Northern Ireland*

Breeders of exhibition daffodils have often been accused of concentrating their efforts on improving the prime exhibition qualities of colour, form, and smoothness of texture to the almost total exclusion of less ephemeral and more important garden display aspects.

There is perhaps some truth in the accusation and indeed I cannot

claim immunity as there is obviously a vast difference in the types of flower which my 'exhibition' eye perceives as beautiful compared to those which catch the eye of visitors to my seedling beds who simply want daffodils to adorn their gardens.

Whilst maintaining loyalty to the refined qualities of exhibition type flowers of my well tutored background I have long been frustrated by red cups which burn with the first blink of sunlight. Such flowers leave uninitiated visitors pondering the sanity of daffodl breeders when asked to admire 'lovely perianths' with limp, frazzled, and desiccated cups of indeterminate colour.

Over the years I have observed some flowers which seemed to be rather more sunproof than most and where appropriate I have used these in crosses with flowers which had other desirable exhibiton characteristics—sort of dual purpose crosses, still primarily looking for exhibition qualities—but with the possible bonus of sunproof cup colour.

On 10 May last year I was able to take a vase of flowers which had been exposed for more than a week to full sunshine (and storms as well) to the Northern Ireland Daffodil Group's late show. Though the perianths of several were limp and dying the cups still retained practically all the brightness of their original red or orange colour.

I do not pretend that these flowers are the ultimate in perfection for either exhibition or garden display purposes but they do provide a varied foundation stock for further breeding of exhibition, garden, or dual purpose flowers. This year pollen from these has been spread around liberally and indeed I now try to include one of these sunproof flowers either as pollen or seed parent in all my Y-R crosses. Now for the five years' wait for the resultant seedlings to flower!

The distinction between exhibition and garden display qualities in daffodils has been casually referred to earlier in these notes. It is a pity that this difference exists though it is perhaps understandable when one considers the different objectives and the personalities of the growers. The exhibitor is likely to be a 'close focus' precise person who prefers and appreciates classic, elegant form, perfection of texture, and purity of colour in flowers which are unblemished by any irregularities, lack of symmetry, or physical damage.

On the other hand, the grower of garden display types of daffodils is likely to be a 'wide angle' landscape enthusiast who appreciates the dramatic splash of colour or subtle shades which create a comfortable blend or contrast with associated plants. With the longer viewing distance other qualities are pre-eminent—pose, flowers above neat straight healthy foliage, size, and of course most important of all—bright stable colours which do not burn or fade.

It is my view that there need not be such a disparity in breeding aims for the future. Each side has something to teach the other—perhaps we exhibition enthusiasts can educate the commercial display orientated people better to appreciate the refined qualities we constantly advocate,

but only if we can add some additional and clearly perceived benefit or improvement which will be obvious and dramatic enought to encourage trial.

I think sunfast colour can be such a benefit— not only for yellow/reds and for white/reds but also for pinks with either yellow or white perianths. And just think of the potential for a fully sunproof and unfading deeply coloured orange-petalled flower with good garden and exhibition character.

Having emphasized, but I hope not over-laboured, the future importance and potential for sunproof flowers it may be of interest to consider the pedigrees of the flowers referred to earlier which seem to have good sunproof qualities. The cross which produced the flowers is shown as first generation and varieties known to be used in the second and third generations are also noted.

STATE EXPRESS 2 Y-GOO and RED SPARTAN 2 Y-R

Generation	
1st	Richhill × Bunclody
2nd	Seedlings. Revelry, Seedling.
3rd	Carbineer, Bahram, Nanking, Ambergate, Rustam Pasha.

PATABUNDY 2 Y-R

1st	Patagonia × Bunclody
2nd	Narvik, Sun Chariot. Revelry, seedling.
3rd	Cabineer (2), Porthilly (2), Rustam Pasha (2), Nanking, Ambergate, Bahram.

D.769 2 Y-R

1st	Bunclody × Barnsdale Wood
2nd	Revelry, seedling. Falstaff, Shining Light.
3rd	Nanking, Ambergate, Carbineer, Ceylon, Dunkeld, Revelry, Bahram, Rustam Pasha.

D.891 3 Y-R or 3 Y-YRR

1st	Sun Magic × D.567.
2nd	Richhill, Doubtful. Montego, Achduart.
3rd	Bahram, Sun Chariot, Rustam Pasha (2), Porthilly (2), Hospodar, Merlin, Vulcan.

D.962 3 Y-GYR

1st	Sunapee × Achduart.
2nd	Carbineer, Ardour. Vulcan, seedling.
3rd	Gulliver, Cheerio, Market Merry, Seraglio, Carbineer, Ceylon.

D.1049 2 Y-R and D.1107 2 O-R

1st	Shining Light × Torridon.
2nd	Dunkeld, Reverly. Vulcan, seedling.
3rd	Seraglio, Killigrew, Carbineer (2) Bahram, Tolosa, Spry, Ceylon.

For the sake of brevity, and because flowers in the pedigrees beyond the third generation are not readily available, I have not shown the complete family trees. Having studied the records in some detail I found much of interest, and perhaps there are some hints to help further progress towards fully sunproof red and yellow flowers.

It seems clear that Hospodar 2 Y-O (J. C. Williams 1914) has been one of the most potent influences. Going back four and five generations it appears in the pedigrees of all eight stocks and 16 times in all. Not only was Hospodar the seed parent of Rustam Pasha 2 Y-R (reputed to be the first sunproof yellow/red) but also of Diolite 2 Y-YYR and Marksman 2 Y-R, which in turn were father and mother of the famed Ceylon 2 Y-R (Richardson 1943). Rustam Pasha, Diolite and Marksman (Miss G. Evelyn 1930) might well have been from the same Hospodar pod—all three were registered in 1930 and the pollen parent was an A. M. Wilson 2 Y-R seedling. Perhaps this unknown seedling should really get the credit, but in the absence of a name it loses out to Hospodar.

But there are two other flowers which also appear in the pedigrees of all eight stocks—Carbineer and Porthilly.

Carbineer 2 Y-O (A.M. Wilson 1927) was used by breeders 22 times from the second to the sixth generation. I used to grow Carbineer when I first started gardening and before the exhibition enthusiasm had begun. I remember it as an attractive broadly round flower of nice quality with slightly shy pose and a short neck. John Lea used it a lot in his early breeding programme and I suspect it has been largely influential in producing healthy bulbs and smooth, good quality show flowers but I doubt if it made much contribution to sun resistance. Carbineer is either seed or pollen parent of such famous flowers as Narvik 2 Y-R (Richardson 1940), Revelry 2 Y-R (Richardson 1948), Sunapee 3 Y-YYR (Evans 1969), Spry 2 Y-R (G. L. Wilson 1950) and Vulcan 2 Y-O (Richardson 1956).

It is tempting to speculate that the A. M. Wilson 2 Y-R seedling which Miss Evelyn so successfully crossed with Hospodar might really have been Carbineer before it was graced with a name! Is it possible that Miss Evelyn, with outstanding foresight, begged an anther or bought an early bulb? If so, then the influence of Carbineer is multiplied to truly immense proportions in the pedigrees of the flowers noted.

Porthilly 2 Y-R (P. D. Williams 1927) appears 18 times in the fourth to sixth generations. The only references I can find to the variety are in the Swains of Bristol catalogues of 1956 and 1957. Seemingly Porthilly had an AM in 1939. It is described as tall, strong, prolific, free flowering and brilliant in colour and was priced at eight pence each—Ceylon was priced at 30 shillings each in the same catalogue. Alas, there was no reference to sunproof qualities in the catalogue description so I can only speculate that Porthilly was of significant breeding value in this respect and that perhaps Bunclody picked up sunproofing genes through this side of its family tree.

So much for the background genealogy, which is of academic, if not much practical value to those who might aspire to breed sunproof flowers.

Sunproof Progress

Where, now, can we find any of these flowers of the earlier generations—even if we wanted them? I think there is a good chance of further success by intercrossing almost any of the first generation crosses which produced the eight stocks listed. In particular I would be happy to use Bunclody, Barnsdale Wood, Sun Magic 3 Y-O (Bloomer) if you can find it, Achduart and Torridon. Some of these are certainly not sunproof themselves but they have proved their potential to breed such flowers in

both large and small cups.

In addition Vulcan and Ceylon should not be ruled out as potential parents but I think they should be crossed with flowers which have Carbineer in their background, if desirable form, texture, and characteristics for exhibition and garden display are to be obtained. If those Carbineer children also happen to have some Rustam Pasha, Ceylon, or Vulcan blood so much the better; the chances are multiplied. The ADS computer-print out holds all the necessary information for planning imaginative crosses to give a better than average chance of success.

It is my hope these notes may stimulate someone, somewhere, to join me in seeking that Utopian sunproof scarlet seedling which will first win myriads of prizes on the showbench and ultimately be grown by the million in gardens throughout the world.

THE 1987 SHOW SEASON IN TASMANIA

HAROLD CROSS, *Geilston Bay, Tasmania*

In the south of the state we began with an unusually early show at graced the 1987 show benches, then we in Tasmania will be delighted. The consensus among experienced exhibitors was that it was the best season overall that we have had despite record low levels of rain in autumn, winter and spring. My comments must be restricted to the shows I attended and that unfortunately did not include shows on our northwest coast.

In the south of the state we began with unusually early show at Claremont (one of the outer suburbs of Hobart) on August 29th. This was ten days before the Hobart Show which is considered an early show. We were very pleased to have Mr. George Tarry from England to help with the judging at Claremont and show slides later.

Claremont Show was unusually interesting for two reasons. The first was not just the number and quality of the flowers benched on such an early date, but also their distribution. In the Open and Seedling classes there were 140 flowers in Divisions 1-4, 79 in Divisions 5-12; and 57 miniatures. It shows clearly the changes that have taken place in the last decade. A few short years ago there would have been no miniatures at all and apart from Division 8 probably not more than 3 or 4 entries in Divisions 5-12.

The second reason was the problem the judges faced in selecting the Grand Champion. In these days when dead heats can occur in major world sporting events timed accurately to one-hundredth part of a second, is it not possible to have a dead heat for the Grand Champion of a Daffodil Show? Has it ever occured? Or do those who judge (and I was one of those involved) fear admitting that they can not separate two blooms?

Whatever the answers to those questions, the judges found themselves trying to choose between two quite different flowers each of fine quality. One was a J. Radcliff seedling No. 4/85; classed Y-Y. The other was a Glenbrook Bulb Farm seedling No. 14/87; classed 6 W-W and bred First Frost × *n. cyclamineus*. Two judges favoured the first; the other two judges favoured the second. Eventually a fifth judge settled on the first.

At Hobart Show the Grand Champion was a fine Jackson 1 Y-Y number 12/87 and bred from seedling 3/74 by Prado. The Reserve Grand Champion was a Glover seedling 2 W-P; unregistered but called Swannie. This flower was first shown at Hobart the previous year when it was also Reserve Grand Champion and Champion pink. What a feat if it should repeat the performance for the third successive year in 1988. The champion for Divisions 5-12 was Mike Temple-Smith's 6 Y-Y named Voodoo—a sibling of his better known Abracadabra. At the dinner following the Hobart Show in 1988 Dr. Mike will be guest speaker and his topic will be the breeding, classification, and judging of Division 6 flowers. That talk will be a highlight.

A feature of the Hobart Show was the competition for the Radcliff Trophy which calls for three stems of each of six cultivars. Four good entries were benched and Jackson's Daffodils won from Glenbrook Bulb Farm. Another item of interest was the unusual sight of Jackson's Daffodils winning entries in the split-corona class (*O tempora! O mores!*) and their first 4 Y-Y.

At Westbury Show we saw a magnificent 1 Y-Y seedling raised by Ross Glover and shown under the name My Dream as a worthy Grand Champion. The Reserve Grand Champion was J. Radcliff's very good 2 Y-R named Redlands Too. There were many good pinks and a superb 3 Y-R raised and shown by D. Tongs and bred Brett × Atro. Another good flower was a Radcliff 2 W-O that was close to being a trumpet.

Launceston Show received its usual strong support from growers in other parts of Tasmania. Ross Glover's, My Dream, repeated its Westbury success as Grand Champion. Reserve Grand Champion was a pink double—a first flower—raised by H. Cross from Tropic Isle by pollen from a seedling that was itself by pollen from Tropic Isle. Also on the show bench were several good orange trumpets from the Radcliff and Temple-Smith stables. Indicative of the increased attention paid to Division 4 by hybridists in the past decade was the class for three distinct seedling doubles where the judges had to select from five entries.

The last major show of the season was, as usual, at the little hamlet of Whitemore. Here the outstanding item was the competition for the Heazlewood Trophy for the best Tasmanian-raised flower in Divisions 5-12. Reinforcing the experience at other shows where Division 5-12 entries were more numerous and of higher quality than in the past, there were 19 entries from six hybridists representing Divisions 5, 6, 7, 8 and 9.

The Grand Champion was another first flower pink double raised and shown by H. Cross but it must have scraped in by a narrow margin from a

(left) Cross Seedling No. 5326 and (right) Swannie, raised by R. Glover.

Glenbrook Bulb Farm flower of the snow-white and orange double Ulster Bride. Glenbrook had the consolation of Reserve Grand Champion with a fine 2 W-W seedling bred Salacia × Mission.

All in all it was a very satisfying season. But, as always, it is now a case of "Ah yes. But wait till next year!" And next year? Yes, it will be 1988 and "Daffodils Down Under". Will *you* be there? There is a place waiting for you that nobody else can possibly fill.

See you then?

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MINIATURE DAFFODILS

QUENTIN E. ERLANDSON, *Baltimore, Maryland*

The amended rules for miniature daffodils as stated on page 48 of the September 1987 *Journal* disturb me. Ever since local shows began providing special classes for small daffodils separate from standard-sized daffodils, there has been a problem defining the terms "small" or "miniature". Gradually, starting with "dwarf" and "small", the definitions and rules evolved to the point where now there is a general consensus as to the proper size and proportion for a miniature daffodil. In my view, the 1987 rules are regressive.

The basic problem has always centered around the question "What is a Miniature Daffodil?".

More than 55 years ago (1931) the Maryland Daffodil Society Show Schedule read: Class 7 Miniature daffodils to include triandrus, cyclamineus, bulbocodium, and dwarf trumpets. This was probably the first time in the United States miniatures were exhibited in a special class.

Later on, Carey E. Quinn referred to miniature daffodils as "little fellows...ranging in height from three (3) to seven (7) inches...of course the true miniature is small—even tiny—in all its parts, not just short of stature". I totally agree! However, that's a personal opinion, not the consensus of a committee.

Thirty years ago Roberta C. Watrous wrote "There is no generally accepted size limit for 'miniature' daffodils...for the present the Washington Daffodil Society considers eight inches the limit in height, and calls for 'flowers in proportion'". This is progress.

In 1963 an American Daffodil Society committee, after years of work, reported that "there was no possibility of writing a satisfactory definition of a miniature daffodil...therefore, it was concluded to compile an arbitrary list of species and garden varieties which, after careful field study, should be classed as miniatures in the opinion of a number of observers". Thus was conceived the American Daffodil Society Approved List of Miniatures. This is progress.

For the past 20 years or more, the Society has gotten along reasonably well using the Miniature List as the official answer to the question "What is a miniature daffodil?". The List has not been ambiguous. If it's on the List, it's a miniature; if it is not on the List, it is not a miniature.

Along with developing the first Approved List of Miniatures, the 1963 committee (and it was a sizeable one) realized that "changes...are inevitable". They felt that the results of their work should "be subjected to the judgment of other members and to the critical eyes of our accredited judges at daffodil shows.". Additionally, the committee recommended that "machinery" be set up to make appropriate deletions from the List as well as to "act upon new introductions which have proved to be of miniature proportions".

Methods were set up to accomodate new introductions using the terms "seedlings" and "miniature daffodil candidates". Voting by the American Daffodil Society Miniature Committee was used both for additions to the List as well as for deletions from the List. All ADS members were urged to express their opinions.

Unfortunately, some discontent began to develop about 10 years ago, perhaps longer, centering around two issues:

1. The qualifications required to have a new introduction added to the List.
2. The length of time it takes to add a new introduction to the List.

As to the first issue, the primary qualification for a miniature daffodil has always been size and proportion. The ADS settled this queston 20 years ago with the Approved List. It would seem to me that the simplest rule to follow would be to compare a new introduction with varieties currently on the Approved List. "Commercially available" has also been a thorny issue for years. The original assumption of the 1963 committee was that miniature daffodils on the Approved List were "widely grown". More recently a new introduction had to be grown by at least a few other growers before approval.

As to issue no. 2, it would appear to me that, using a reasonable set of "qualifications", it should not take an unreasonable time to add a qualified cultivar to the List. To me, for example, five years is unreasonable. After all, the Approved List should be a dynamic list, not one carved in granite. If the consensus is to accept the new cultivar, add it; if later on, for whatever reason, the consensus is that a mistake was made, delete it.

The American Daffodil Society Board of Directors on April 25, 1987, changed ("amended") the rules governing admission of a miniature daffodil to the ADS Approved List. The changes include the following (see page 48 of the September, 1987 *Journal*):

1. Miniature candidate: Any named or numbered "small" daffodil may be considered a "Miniature Candidate".
2. The status, "Miniature Candidate", can exist indefinitely.
3. Such candidates can be shown in A.D.S. shows by the originator and others and are eligible for A.D.S. awards in the miniature section.

Reading the rules carefully, I can only conclude that the ADS Approved List of Miniatures has lost most, if not all, of its authority. So long as the new rules permit a daffodil to stay in the "Miniature Candidate" status "indefinitely" and be "eligible for ADS awards in the miniature section", there is no real incentive to add cultivars to the ADS Approved List. Why bother? These "rules" are in reality no rules at all. Anything goes.

I notice that the motion passed by the Board makes no mention of the American Daffodil Society Miniature Committee as an authority, nor the role the Committee plays in the new rules; nor is there any mention of the ADS Judges and the role they are to play.

Since no attempt was made to define "small" in the amended rules, a

daffodil (seedling or named variety) is "small" if the exhibitor says it is and is a "Miniature Candidate" if the exhibitor says it is. The Judges Handbook (page 33) reads as follows:

> If the consensus of the judges indicates the seedling is of too large scale, or out of proportion in relation to the average miniature cultivar, the seedling should be considered as failing to be a suitable candidate for the Approved List...

Very clear and very well said. What are the judges to do? Do the judges follow the instructions in the Judges Handbook or do they follow the instructions of the more recent action of the Board?

Without clearly defined rules, unnecessary conflicts and subsequent hard feelings are sure to follow. Exhibitors will enter questionable "small" "candidates" and confused judges may do strange things. We know, for example, where a Watrous Award was not given to an exhibitor (an experienced exhibitor and an experienced judge) because the entry had flowers (all from the ADS Approved List) that were considered by the judges to be "too small"!

The American Daffodil Society Approved List of Miniatures is essential. It must be the only authoritive source for both exhibitors as well as judges. Allowing daffodils that are considered "small" by only the exhibitor is unacceptable. Allowing "Miniature Candidates" to stay in that status "indefinitely" is unacceptable. Allowing these same "small candidates" to be eligible for ADS awards *ad infinitum* is unacceptable.

For the long haul, on a permanent basis, the definition of a "Miniature Daffodil" is, by example, the ADS Approved List of Miniatures. On a temporary or interim basis we should consider using the definition in the Judges Handbook for defining "small". (I still like Carey Quinn's reference to "tiny" daffodils.) However, an exhibitor should not be the one to decide whether or not his or her entry is "small" and worthy of being a "Miniature Candidate"—certainly not on an "indefinite" basis. The decision must be one of consensus and I believe the authority for such decisions must remain with the Judges and the ADS Miniature Committee. That's their job.

New rule no. 4. (page 48 of the September, 1987 *Journal*) reads "Increase the required number of recommendations for admission to the A.D.S. Approved List from three to five." Increasing the number of recommendations from three to five (growers?) makes it more difficult, not easier, to have a new cultivar listed. This is not progress.

If the approval process for adding the candidate to the ADS Approved List is too involved, too time-consuming, and if the consensus is that it's not fair, fix it! If that's the real problem, it should not be too difficult to fix, and I, for one, am willing to do all I can to help find the proper method. There must be an equitable solution that relieves that situation without degrading the staus of all miniatures.

If the motive is to add some "intermediates" by relaxing the size requirements, that's wrong and will have no support nor sympathy from me. The "intermediate" advocates have their own problem of definition.

Having spent my entire daffodil career growing and showing miniature daffodils, I will not stand quietly and see these increasingly popular daffodils compromised.

The Approved List of Miniatures is one of the truly significant accomplishments of the American Daffodil Society. We *must* keep it and keep it with full-authority status.

1988 DAFFODIL SHOW DATES

MRS. HUBERT BOURNE, *Awards Chairman*

March 5-6—Fortuna, California. Pacific Regional. The Fortuna Garden Club at the Fortuna Monday Club House, Sixth and Main Streets. Information: Mrs. Christine Kemp, P. O. Box 212, Fortuna, CA 95540.

March 12-13—La Canada, California. Southern California Daffodil Society/Descansco Garden Guild at the Descanso Gardens, 1418 Descanso Drive. Information: Mrs. A. Eugene Cameron, 410 S. Paseo Estrella, Anaheim Hills, CA 92807.

March 12-13—Clinton, Mississippi. Central Mississippi Daffodil Society at the B. C. Rogers Student Center, Mississippi College. Information: Dr. Ted Snazelle, 418 McDonald Drive, Clinton, MS 39056.

March 12-13—Dallas, Texas. Southwest Regional. Texas Daffodil Society at the Dallas Civic Garden Center, Fair Park. Information: Mrs. Frank A. Schultz, Jr., 4644 Park Lane, Dallas, TX 75220.

March 19-20—Atlanta, Georgia. Southeast Regional. Garden Club of Georgia, Inc. at the Atlanta Botanical Garden, Piedmont Park at the Prado. Information: Mrs. Jaydee Ager, 115 Chris Drive, Rt. 1, Hawkinsville, GA 31036.

March 19-20—Conway, Arkansas. State Show. Arkansas Daffodil Society at Hendrix College, Hulen Hall. Information: Mr. & Mrs. Gerald Horton, 100 Smalling Road, North Little Rock, AR 72118.

March 19-20—Walnut Creek, California. Northern California Daffodil Society at the Heather Farm Garden Center, 1540 Marchbanks Drive. Information: Mr. Steve Vinisky, 1134 Bellingham Court, San Jose, CA 95121.

March 19-20—Hernando, Mississippi. State Show. Garden Study Club of Hernando at the National Guard Armory, McCracken Road. Information: Mrs. Sandra Childers, 250 East Northern Street, Hernando, MS 38632.

March 24—Oxford, Mississippi. Oxford Garden Club at the Oxford-University United Methodist Church. Information: Mrs. S. T. Rayburn, 131 Lakeway Gardens, Oxford, MS 38655.

March 26-27—Memphis, Tennessee. Southern Regional. The Mid-South Daffodil Society and the Merry Weeders Garden Club at Goldsmith's Garden Center. Information: Mrs. Jean Sutton, 6114 Belle Forest, Memphis, TN 38115.

April 2-3—Chapel Hill, North Carolina. North Carolina Daffodil Society and the North Carolina Botanical Garden at the Totten Center, North Carolina Botanical Garden. Information: Dr. Elise Olsen Cheesborough, 109 Carolina Forest, Chapel Hill, NC 27514.

April 2-3—Nashville, Tennessee, State Show. Middle Tennessee Daffodil Society at Botanic Hall, Cheekwood Botanical Gardens, Forrest Park Drive. Information: Mrs. Sue Zapp, 6011 Foxland Drive, Brentwood, TN 37027.

April 2-3—Newport News, Virginia. Mid-Atlantic Regional. Tidewater Virginia Daffodil Society at the Student Center, Christopher Newport College, 50 Shoe Lane. Information: Mr. M. Stanley Krause, Jr., 310 Riverside Drive, Newport News, VA 23606.

April 5-6—Louisville, Kentucky. State Show. The Kentucky Daffodil Society at the Oxmoor Center, 7900 Shelbyville Road. Information: Mrs. Wynant Dean, 1629 Cowling Avenue, Louisville, KY 40205.

April 8—Scottsburg, Indiana. Daffodil Growers South, Leota Barn, R.R. 3. Information: Mrs. Verne Trueblood, R.R. 3, Box 187A, Leota, Scottsburg, IN 47170.

April 9-10—Gloucester, Virginia. Garden Club of Gloucester at the Gloucester Intermediate School, Route #17. Information: Mrs. W. John Matheson, Route - Box 1234, Gloucester, VA 23601.

April 9-10—Princess Anne, Maryland. Somerest County Garden Club at the Peninsula Bank of Princess Anne. Information: Mrs. Roy McKissock, 33 North Beckford Avenue, Princess Anne, MD 21853.

April 13—Onley, Virginia. Town and Country Garden Group at the Carrie Watson Memorial Clubhouse. Information: Mrs. A. Preston Wessels, Onley, VA 23418.

April 13—Upperville, Virginia. Upperville Garden Club at the Trinity Parish House. Information: Mrs. Ted Haberland, Route 1, Box 43 B, Upperville, VA 22176.

April 14—Indianapolis, Indiana. State Show. Indiana Daffodil Society at the Meridian St. Methodist Church, 5500 N. Meridan Street. Information: Mrs. Walter G. Vonnegut, 8141 North Illinois Street, Indianapolis, IN 46260.

April 16-17—Columbus, Ohio. Midwest Regional. The Central Ohio Daffodil Society at Franklin Park Conservatory, 1777 East Broad Street. Information: Ms. Phyllis Hess, 3670 East Powell Road, Westerville, OH 43081.

April 16-17—Dayton, Ohio. Southwest Ohio Daffodil Society at the Wegerzyn Garden Center, 1301 East Seibenthaler Avenue. Information: Mr. Harold McConnell, 4075 Danern Drive, Dayton, OH 45430.

April 16-17—Edgewater, Maryland. London Town Publik House and Gardens, 839 Londontown Road. Information: Mrs. Frank Coulter, 342 Prestonfield Lane, Severna Park, MD 21146.

April 16-17—Kennett Square, Pennsylvania. Delaware Valley Daffodil at Longwood Gardens. Information: Mrs. Marvin Andersen, 7 Perth Drive, Wilmington, DE 19803.

THE DAFFODIL MART

Our time seems to be more limited in the Spring because of our lecture, show, and hybridizing schedule. We have set aside four days and will be happy for you to come for a walk in our fields and share light refreshments with us! *Please call* and let us know which day you plan to come!

Friday, March 25th, 10 am - 5 pm
Saturday, March 26th, 10 am - 5 pm
Friday, April 8th, 10 am - 5 pm
Saturday, April 9th, 10 am - 5 pm

*ADS Show date in Gloucester!

EXTRA! EXTRA! *The 2nd Annual Daffodil Festival will be held on Saturday, April 2nd. Horticultural Crafts, Magnificent Mutt Show, Displays, Good Food with an International Theme, tours and much more! Y'all Come!*

We have had many inquiries about the necktie with our logo (Div. 1 - 11) painted on it. We are excited about being able to offer them first to ADS members. They are hand painted by a local artist. Please specify NAVY, GREEN OR BURGANDY. First come, first serve! $25

If you aren't a customer and don't receive our catalogue and would like one, please write or call, letting us know that you are an ADS member, and we'll gladly send you one.

THE DAFFODIL MART
Brent & Becky Heath
Rt. 3, Box 794-DJ
Gloucester, VA 23061
804-693-3966

April 19—Chillicothe, Ohio. The Adena Daffodil Society at the Veteran's Administration Medical Center, Building 9, Recreation Hall. Information: Ms. Mary Rutledge, 704 Ashley Drive, Chillicothe, OH 45601.

April 19—Greenwich, Connecticut. Greenwich Daffodil Society at the Parish Hall, Christ Church, 254 East Putnam Avenue. Information: Mrs. George S. Mott, III, 38 Perkins Road, Greenwich, CT 06830.

April 20-21—Baltimore, Maryland. Maryland Daffodil Society at the Brown Memorial Woodbrook Presbyterian Church, 6200 North Charles at Woodbrook Lane. Information: Ms. Joan M. George, 614 West Timonium Road, Lutherville, MD 21093.

April 22-23—Tyson's Corner, Virginia. National Show. Washington Daffodil Society at the Sheraton Premiere Hotel. Information: Mrs. Joel T. Crenshaw, 1047 Walker Mill Road, Great Falls, VA 22066.

April 23-24—Mansfield, Ohio. Kingwood Daffodil Society at the Exhibit Hall, Kingwood Center, 900 Park Avenue West. Information: Mr. Charles Applegate, Route 2, Box 163, Perrysville, OH 44864.

April 25-26—Nantucket, Massachusetts. The Nantucket Daffodil Society at the "Meeting House", Harbor House, Information: Mrs. Herbert L. Gutterson, Box 106 - Siasconset, Nantucket, MA 02564.

April 27—Cleveland, Ohio. The Western Reserve Daffodil Society at the Garden Center of Greater Cleveland. Information: Mr. Wells Knierim, 31090 Providence Road, Cleveland, OH 44124.

April 27—Middletown, New Jersey. New Jersey Daffodil Society at the Christ Church Episcopal, 92 Kings Highway. Information: Mrs. Jeoffry Courtney-Pratt, Wigwam Road, Locust, NJ 07716.

April 29-30—Chambersburg, Pennsylvania. Northeast Regional. Chambersburg Garden Club at the First Lutheran Church, 43 West Washington Street. Information: Mrs. Owen W. Hartman, 105 Farmington Road, Chambersburg, PA 17201.

April 29-30—Madison, Connecticut. Madison Garden Club at the First Congregational Church. Information: Ms. Cathy Riley, 47 Wilshire Road, Madison, CT 06443.

April 30—Akron, Ohio. Northeast Ohio Daffodil Society. Information: Mr. Daniel Bellinger, 681 Rufener Ext., Rittman, OH 44270.

April 30-May 1—Glencoe, Illinois. Midwest Daffodil Society at the Botanic Garden of the Chicago Horticultural Society, Lake Cook Road. Information: Ms. Jane Meyer, 3403 Brookmeade Dr., Rolling Meadows, IL 60008.

April 30-May 1—Rockford, Illinois. Central Regional. Council of Rockford Gardeners and the Northern Illinois Daffodil Society at the Sinnissippi Gardens, Sea Scout Building, 1700 North 2nd Street. Information: Mrs. H. L. Mercer, 2019 Clinton Street, Rockford, IL 61103.

May 6-7—Dublin, New Hampshire. Regional Show. The Northern New England Daffodil Society at the Dublin Town Hall. Information: Mrs. Philip H. Faulkner, 24 School Street, Keene, NH 03431.

May 7-8—Fairbault, Minnesota. Daffodil Society of Minnesota at the Borbeleta Gardens. Information: Mr. Ben Gowen, 6440 Hazeltine, Excelsior, MN 55331.

BULLETIN BOARD

FROM THE PRESIDENT'S DESK

Well, it doesn't seem possible that nearly two years have passed since I was elected President of the American Daffodil Society. However, I now find myself writing my final column as your president. As you read my last column, it will be only a few weeks until the ADS Convention in Washington, D. C., April 22-24, 1988. As I read Delia Bankhead's article in the December 1987 issue of *The Daffodil Journal,* I really began to get quite excited about coming to Washington, D. C. All the planning for the convention has taken you into consideration with regard to convenience of access and cost. If you travel by air into Dulles International Airport, you will have the advantage of a free shuttle to the convention hotel, the Sheraton Premiere in Tyson's Corner, VA. With a program featuring my 'Down Under' acquaintances, David Jackson, Max Hamilton, and Peter Ramsay, you are in for a real treat. It was my good fortune to get to know these three men when I was a program speaker at Springworld '84 in Hamilton, New Zealand, in September 1984. One of the major attractions for me will be a visit to the National Arboretum. I do hope that you will plan on coming to this year's annual convention. It has the potential of being one of the great daffodil experiences of all time. Be there!

It is New Year's Day as I write this last column. I mention this because it relates to something I have written about before. I wrote about Camelot 2 Y-Y in my column in the September 1987 issue of *The Daffodil Journal.* You will recall that I expressed interest in the fact that the foliage of Camelot was still green in July. Well, guess what? Camelot's foliage is already about three inches tall on New Year's Day! None of the other cultivars in Camelot's bed is up at this time. However, foliage of true tazettas is to be found everywhere. As a matter of fact, I saw *Narcissus tazetta* subsp. *italicus* in bloom in a neighborhood yard the other day. This species daffodil is always one of the first to bloom here in central Mississippi; however, it usually isn't in bloom quite this early. Sometimes you will find Paperwhite blooming outdoors from Thanksgiving on if the weather remains mild and the flower buds don't freeze. The reed-like foliage of *Narcissus jonquilla* is quite prominent now in both my garden and in the Mississippi College Daffodil Garden. Also, the reed-like foliage of *Narcissus* × *odorus* is to be found everywhere. Despite these suggestions of spring, it will be late February before any of the standard cultivars come into bloom.

I guess it is typical for someone about to leave any elective office to recount their successes and disappointments. So, I hope you will indulge me a few lines to express my sentiments. However, I hasten to say that I can't take too much credit for the successes. As far as successes are concerned, I think that the publication of the new membership brochure has to rank right up near the top. This brochure would never had been

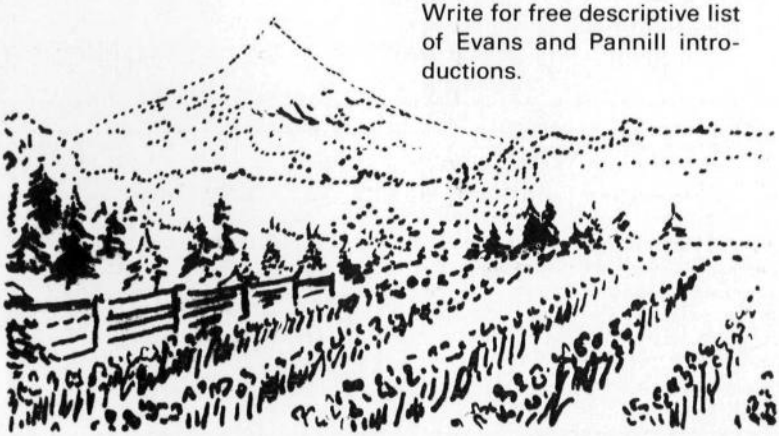
realized had it not been for the work of Charles Wheatley, Dave Karnstedt, and Frances Armstrong. I want this brochure prominently displayed at all our shows in 1988. Another success I am quite happy about is the ADS Challenge Cup for twelve cultivars, one stem each, raised by the exhibitor; this new class will be offered only at national shows. This is an award that I have wanted for the ADS for several years. Much to my surprise, I got more than I had even dreamed possible. In addition to the ADS Challenge Cup, the Murray W. Evans Award (six cultivars, one stem each) and the ADS Hybridizers Medal (three cultivars, one stem each), will be awarded for the first time in Washington, D.C. Hopefully, these new awards for hybridizers will stimulate more hybridizing efforts among the members of ADS. I appreciate very much the excellent work of Tag Bourne (Chairman) and the members of the *ad hoc* Hybridizer's Award Committee. I guess my biggest disappointment has been my inability to sell the idea of a formal endowment campaign to members of the Board of Directors. The financial stability that the American Daffodil Society enjoys today is largely due to several unsolicited gifts which have been invested and to convention surpluses. Convention surpluses are unpredictable and should not be anticipated to be available each year to balance the budget. Thus, it is my hope that in the future ADS will become more active in building a substantial endowment from which the income might be used to subsidize in part, or completely, the Executive Director's salary, salary for the Editor of *The Daffodil Journal*, and costs related to printing *The*

MURRAY W. EVANS

Modern Daffodils-Grower-Hybridizer

3500 S.E. Manthey Road, Corbett, Oregon 97019

Write for free descriptive list of Evans and Pannill introductions.



Daffodil Journal. A minor disappointment to date has been the failure of the Board of Directors to establish a show category for intermediate daffodils. Perhaps when the report of the *ad hoc* Intermediate Study Committee is presented to the Board of Directors, an intermediate category of daffodils will become a reality.

Since the fall board meeting in Cincinnati, ADS has received an invitation from CODS (Central Ohio Daffodil Society) to host the annual convention April 23-25, 1992, in Columbus in conjuction with AmeriFlora '92. Needless to say, the Executive Committee unanimously voted to accept COD's invitation. You will hear more about AmeriFlora '92 and COD's plans in the future.

Thank you for allowing me to have had the priviledge and honor of serving as your president for the last two years.

—TED SNAZELLE

JUDGING SCHOOLS & REFRESHERS

Course I—Mary 1, 1988, Rockford Park District Administration Bldg., Rockford, Illinois. Chairman: Mrs. Melvin Freund, 2426 Devonshire Drive, Rockford, Illinois 61107.

Refresher—March 20, 1988, Atlanta Botanical Garden, Atlanta, Georgia. Chairman: Jaydee Ager, 115 Chris Drive, Hawkinsville, Georgia 31036.

Refresher—April 23, 1988, Washington D.C. Chairman: Donald King. Please pay registration fee when registering for the ADS Convention.

Course III Identification Make-Up—April 2, 1988, Christopher Newport College, Newport News, Virginia. Chairman: Donald King, RW-C, 803 Lancaster Drive, Irvington, Virginia 22480.

Required Reading for all schools: *Handbook for Growing, Exhibiting, and Judging Daffodils.*

Accredited Judges needing a refresher may attend any school for credit. For further information, contact the local chairman.

NAOMI LIGGETT, *Judges & Schools Chairman*

THE AMERICAN PLANT LIFE SOCIETY

P.O. BOX 985, NATIONAL CITY, CA 92050

The American Plant Life Society, publishers of HERBERTIA, international journal of bulbous plants, invites your subscription to the quarterly Newsletter and color-filled journal covering new species, cultivars, culture and natural history of bulbous plants of the world. Published since 1934, the journal, formerly known as *Plant Life*, is the foremost publication on bulbous plants, especially Amaryllidaceae.

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MIDWESTERN ACCLIMATIZED DAFFODILS for EXHIBITION and GARDEN

We are pleased to offer our fifth annual listing of midwestern grown and acclimatized daffodils for both show and garden. Emphasis continues to be on those bulbs that have done well in our harsh climate.

Of special interest this year are many new and old varieties seldom seen or offered. These include selections from Venice Brink, scarce Irish and British varieties, plus many cultivars from divisions 4-7.

The demand for seedlings last year was far greater than anticipated, so every effort will be made to dig the remaining unselected seedlings from 1979-80 to meet this year's demand. Send now for your free descriptive catalogue if you have not ordered in the last two years.

OAKWOOD DAFFODILS

2330 W. Bertrand Rd.

Niles, Michigan 49120

AMERICAN DAFFODIL SOCIETY, INC.
BOARD OF DIRECTORS MEETING

Cincinnati, Ohio, September 12, 1987

(Abridged from the report of the Secretary)

A regular meeting was held at the Civic Garden Center with 41 directors present. Dr. Theodore E. Snazelle, President presided; Ms. Marilynn J. Howe, Secretary recorded.

President Snazelle reported that much of our reserves are restricted and the treasury is experiencing some cash flow problems, however they are not critical.

Ms. Howe moved that the minutes of the Columbus meetings be approved as mailed. Mr. Wheatley, seconded. Motion carried.

Reports were received from seven Regional Vice-Presidents.

Mrs. Liggett reported that there were 200 full and 40 partial registrations at the Columbus Convention. A surplus of $3,115.28 has been turned over to the Executive Secretary.

Miss Anderson, the Executive Director, reported that she has received donations of ADS and Daffodil material from several sources. Much of the material has been sold. She asked if others have old material they no longer want, please consider donating to the ADS. She asked that the Board consider mailing the *Journal* in envelopes. The cost is approximately 8 cents per copy. No action was taken at this time.

REPORTS OF THE STANDING COMMITTEES:

AWARDS: Mrs. Bourne requested Show Chairman to get their schedules in early. She cautioned Show Chairmen not to have their schedules printed until they have been approved. Procedures will be updated after actions by the Board at this meeting. Internationally, she has sent the Red-White-Blue Ribbon to Dr. M. G. Temple-Smith to be used at the Tasvention in 1988. She asked that Show Chairmen fill out their show forms the day of the show and send them in immediately. This enables her to get all the reports to the Show Reporter.

BREEDING AND SELECTION: Dr. Bender reported that the Hybridizers Breakfast at the Columbus Convention was the largest in history.

CLASSIFICATION: Mrs. Thompson reported that Bill Pannill has given permission to change the classification of OZ from 6 Y-Y to 7 Y-Y. She also stated that she has received questions about Pure Joy, Whisper, and several pinks from Ireland.

DATA BANK: Dr. Throckmorton stated that the RHS must know about all classification changes in the Data Bank. Bob Jerrell, Ruth Pardue, and Mr. J. Byrne from New Zealand have been of great help in editing the Data Bank. He reported that Bob Jerrell and Charles Wheatly found a problem in the Stud Book with fertility. The problem has been corrected. He stated that the Data Bank has new capabilities which are:

1. Prints out lists of all fertile daffodils.
2. List of all known chromosome counts.
3. List of all children of Green Island.

He also said that the Stud Book contains 110,000 lines of information which includes more than 13,000 names. The Stud Book will be completely updated by October 1987. He also stated that he needs information on heights of daffodils.

EDITOR OF THE JOURNAL: Mrs. Frank stated that she plans to have articles in each issue about the National Convention and/or Show. She plans to have articles regarding specific growing problems and their solutions, along with Helen Link's "Daffodil Primer". She stated that there has been an increase from 1700 to 1800 in the number of issues printed which will

have an effect on the budget. She asked everyone to please adhere to the deadlines on the inside front cover.
LIBRARY: Mrs. Owen stated that she has received donations of books from Carol Sisson Regehr, *Daffodils in Wales*, and from Dr. Harold Koopowitz, *Herbertia*, Volume 9, 1953. It contains several articles on daffodils and one written by the late Harry Tuggle.
MEMBERSHIP: Miss Faggard's report stated that there has been a net gain of 23 members since last June. She stated that Mr. Stettinius in the Mid-Atlantic, and Mrs. JoAnn Mercer on the Central Region have been responsible for 29 new members.
MINIATURES: Mrs. Mackinney reported 130 members attended the Miniature Daffodil Growers breakfast in Columbus. The original intent of breakfast is to exchange ideas on growing, exhibiting and judging miniature daffodils. She also asked that any member advocating a change in policy first submit such a change to the Board for discussion.
PHOTOGRAPHY: Mrs. Shryoc's report stated that 38 sets have been reserved for programs before April 1, 1988. She has asked for suggestions for types of programs that will be of interest to the Society.
PUBLICATIONS: Mr. Karnstedt stated that he has approached several growers about using color in their advertising.
PUBLIC RELATIONS: Mr. Wheatley stated that the popularity poll is completed and the results will be published in the December *Journal*.
REGISTRATIONS: Mrs. Anderson's report stated that eight hybridizers sent in forty-nine registrations. Her complete report will be in the December *Journal*.
RESEARCH, HEALTH AND CULTURE: Mr. Wadekamper stated that the nutritional studies is continuing. He also stated that the committee has received a proposal from Elton W. Smith of the Department of Horticulture, Ohio State University, to do an Evaluation of Pre-Emergence Herbicides of Weed Control and Phytotoxicity in Narcissus. The research would be conducted with the co-operation of the Central Ohio Daffodil Society.
ROUND ROBIN: Mrs. Krahmer reported that she has received the files of Lucy Christian. She stated that she is contacting all the directors of individual Robins and will have a complete report at our next Board meeting. She commended Loyce McKenzie on her excellent article on Divisions 5-9 Robin. She hopes other Robin Directors will do the same.
SCHOOLS AND JUDGES: Mrs. Liggett reported a surplus of $206.96 since the last meeting. She stated seven judges are due to refresh this year, serve are past due more than one year, and she has granted two extensions.
TEST GARDENS AND WISTER AWARDS: Mrs. Whitlock reported that there are currently twenty-one Display and Test Gardens. Complete list is on file with the Secretary. She asked for bulb donations for the gardens. WISTER AWARD: Mrs. Whitlock stated that Accent would be awarded the Wister Award. Currently the committee is testing Festivity, Foxfire, and Pitta. Mr. Karnstedt suggested that the Wister Award should have publicity. Mrs. Liggett suggested sending the information to the American Horticultural Society.

EXECUTIVE COMMITTEE ACTIONS: President Snazelle announced the following:

1. Approved Mrs. Johannes Krahmer as Round Robins Chairman replacing Mrs. F. C. Christian, deceased.
2. Approved Mrs. John F. Gehret of Delaware as Northeast Regional Director replacing Mrs. Krahmer.
3. Approved Mrs. James C. Wilson as chairman of the *ad hoc* Intermediate Committee, and Mrs. W. D. Owen and Mrs. John Bates as additional members.
4. Approved Mrs. Goethe Link as chairman of the *ad hoc* committee on Judging Criteria with Mrs. Kenneth B. Anderson, Mrs. Quentin Erlandson, and Mrs. Jaydee Ager as members.
5. Approved Mrs. P. R. Moore, Jr., Chairman of the Finance committee with Mrs. Richard M. Turner, Mr. Joseph Stettinius, Mrs. Goethe Link, and Miss Leslie Anderson as members.

EXECUTIVE COMMITTEE RECOMMENDATIONS: President Snazelle asked approval of the following Executive Committee recommendations:

1. [Resolved] that the Executive Director be allowed to sign checks up to $100.00 without

treasurer's co-signature. The Executive Director shall notify the treasurer on a monthly basis of all checks written. Mr. King moved to accept the proposal. Mr. Beach, seconded. Motion carried as ammended.

2. [Resolved] that the ADS cease insuring its trophies. Mrs. Link moved to accept the resolution. Mr. Karnstedt, seconded. Motion carried.

NEW BUSINESS

BUDGET: Mrs. Andersen presented the 1988 budget for approval. Dr. Throckmorton moved to accept the budget as presented. Mr. Wheatly, seconded. Motion carried.

MEMBERSHIP BROCHURE: Mr. Karnstedt presented a mock-up of the membership brochure to the Board. Mr. Stettinius moved to accept the brochure. Miss Bankhead, seconded. Motion carried.

AWARDS COMMITTEE RECOMMENDATIONS: (See *Journal*, Sept. 1987, p. 33.)

ADS HYBRIDIZERS ROSETTE FOR BEST IN SHOW IN THE NEW HYBRIDIZERS SECTION: Mrs. Bourne suggested a Gold and White Rosette, with a daffodil button, and two streamers, printed ADS BEST IN SHOW-SEEDLING. Miss Bankhead moved to accept these awards. Mr. Jerrell, seconded. Motion carried.

NEW BRONZE MEDAL FOR THROCKMORTON AWARD: Mrs. Bourne presented the design for this award to be given at national shows only. The medal may be won only once and former winners will receive the Throckmorton Ribbon. Mrs. John Bozievich is designing the medal. Dr. William Bender, Ms. Howe, and Mrs. Bozievich are donating the dies and five medals. The medals will be awarded retroactively to the previous three winners. Ms. Howe moved to accept the awards. Mr. Wheatley, seconded. Motion carried.

SCHOOLS AND JUDGES COMMITTEE RECOMMENDATIONS:

Mrs. Liggett presented the following recommendations:

1. A committee be appointed to update *Daffodils For Growing, Exhibiting and Judging* since several new awards have been added which are not in the present manual.

Mrs. Moore moved that a committee be appointed to revise the manual. Mrs. Andersen, seconded. Motion carried.

2. Clarification on the rule on selecting the best bloom in the show. (See *Journal*, December 1987, p. 91.)

Mr. King, seconded. Motion carried.

3. Refreshers held at national meeting be open to ADS judges only. (Accredited, Accredited Retired, and Student)
4. Three dollar fee for attending a refresher.

Dr. Throckmorton moved to refer items 3 and 4 to Judges Handbook committee. Mr. Stettinius, seconded. Motion carried.

5. Accredited Judges be required to judge in a least one ADS approved show every three years.
6. Accredited Judges be required to exhibit and win a blue ribbon in the Horticulture Division of an ADS approved show at least once every three years.

Mr. Stettinius moved that items 5 and 6 be referred to the Judges Handbook Committee. Mr. Heath, seconded. Motion carried.

DAVE KARNSTEDT RECOMMENDATIONS:

The following items were presented by Mr. Karnstedt for discussion.

1. To increase single member dues by 25%, the other classes of membership proportionately.
2. To increase life membership for those under 55 years old to 30 times the current single dues rate and for those over 55, 25 times current single dues.

Mr. Wadekamper moved to refer items 1 and 2 to the Finance Committee.

3. Appoint a committee to examine the feasibility of establishing an award for American-raised daffodils that would be analogous to the Dykes for iris or the Stout for daylilies.

Mrs. Krahmer moved to refer this item to an *ad hoc* committee. Mrs. Roof, seconded. Motion carried.

4. To appoint a committee to examine the special needs of the ADS and make recommendations to convert the paperwork processes to a computer.

President Snazelle referred this item to the Finance Committee.

RHS - CHANGING REGISTRATION OF A DAFFODIL CULTIVAR: President Snazelle referred the board to a letter received from Sally Kington, International Narcissus Registrar. Ms. Howe moved adoption of the following RHS form. Mr. Heath, seconded. Motion carried.

NAME OF DAFFODIL _____

REGISTRATION	Original Registration	Proposed Change(s)
Division Number	_____	_____
Colour Code		
Breeder, Registrant or other Introducer circle the one(s) in question	_____	_____
	_____	_____

REASONS FOR PROPOSED CHANGE(S)
These should stem from observations made over not less than two seasons and relate to mature blooms grown in the open. Reasons should be supported where appropiate by measurements, details of local climate and growing conditions and details, if any, of the flower's differing performance at other sites.

REFERENCE
Unless the applicant is both breeder and registrant of the flower, it should be confirmed that the proposal has if possible been put to those concerned, and their opinion should be given.

OTHER REMARKS

Mail to The International Narcissus Registrar, The Royal Horticultural Society, Vincent Square, *London SW1P 2 PE, England*

From Name:

Address:

I APPLY to change the registration of the above cultivar as specified.

SIGNED _____ DATE _____

SPONSORSHIP OF ADS JUDGING SCHOOLS: President Snazelle referred the board to a letter written by Mrs. Marvin Andersen regarding the sponsorship of ADS Judging Schools. The letter stated that she felt that the purpose of judging schools is to train experienced, knowledgeable growers and exhibitors in the art and science of judging. Only those individuals who have exhibited successfully for several years should apply to be trained to judge the flowers which their peers exhibit. When exhibitors work long and hard to grow the best possible daffodils and get them to the show bench in good condition, it is only proper that the ADS should provide the best possible judges to evaluate the entries. Nobody likes having entries judged by non-growing, non-exhibiting, non-participating judges whose only knowledge is derived from the "Schools". The board took no action on this item.

LOCAL OPTIONS FOR ADS SHOWS: Mrs. Andersen moved that Local Show Committees may have the option of deciding whether one and three stem entries be subdivided for judging according to division and color, or according to division, color and cultivar or variety. Mr. Wadekamper, seconded. A great deal of discussion followed. Those in favor of the motion felt it was easier to write a schedule and judge cultivar shows. Those opposed felt it would be more difficult to judge. The judges would have to be familiar with too many cultivars. The hybridizers felt that when they enter a seedling they want to know how it will stand up against others in its class; in a cultivar show this would not be the case. Due to the controversy, President Snazelle asked for a secret ballot. The motion was defeated.

LATVIA TRIP PROPOSAL: President Snazelle asked Mrs. Regehr to bring the board up to date regarding the grant proposal. She stated that the proposal has been sent to the Stanley Smith Horticultural Trust along with an endorsement letter written by President Snazelle. We should have their decision by next spring.

INTERMEDIATE DAFFODIL STUDY COMMITTEE: The secretary read Mrs. Wilson's report. She stated she will take the following steps to develop a proposal for an Intermediate Daffodil Class:

1. A consensus of the committee members will hopefully be reached on the number of divisions to be included with the criteria for specific divisions as necessary. An approved height and diameter of bloom will be set.
2. If no consensus can be reached, it is proposed that an Intermediate Class be added to those shows that wish to include Intermediates. The names of all entries will be submitted to the Intermediate Committee. The data collected will be analyzed to see if a significant body of information can be gathered to form an Intermediate List. In this way all ADS members who are interested in entering an Intermediate Class will participate in it's formation.

The committee will submit a formal report at the 1988 convention. When an Intermediate Class is deemed viable the POLLY ANDERSON RIBBON and/or MEDAL will be formalized and submitted to the Awards Committee for approval.

NEW SHOW ENTRY TAGS: Mrs. Mackinney presented show entry tags, both standard and miniature, used by the Chambersburg Daffodil Show. She moved that we adopt this format when we have another printing of tags. The motion carried.

OVERSEAS DUES: Mrs. Moore moved that the overseas dues be raised from $7.50 to $15.00 per year and from $20.00 to $35.00 for three years. Mr. Stettinius, seconded. Motion carried.

COMPUTER FOR THE EXECUTIVE SECRETARY: Mrs. Moore moved that the president appoint a committee to study the feasibility of a computer for the Executive Secretary. Mrs. Link, seconded. Motion carried.

RESEARCH PROPOSAL: Mr. Wadekamper moved that the ADS grant $300.00 to fund the Evaluation of Pre-Emergence Herbicides for Weed Control and Phytotoxicity in Narcissus by Elton M. Smith of Ohio State University. Mrs. Bourne, seconded. Motion carried.

ADDITIONAL MEMBER TO THE FINANCE COMMITTEE: Mrs. Moore moved that the First Vice-President be added to the Finance Committee. Mr. Stettinius, seconded. Motion carried. There being no other business the meeting was adjourned at 4:50 P.M.

Marilynn J. Howe, Secretary

BOOK REVIEW

DAFFODILS: FOR HOME, GARDEN AND SHOW By Don Barnes. Timber Press: $26.95 inc. shipping. (Available through ADS)
Reviewed By LESLIE ANDERSON

Just how do you go about writing a book on daffodils? What is there to say that will interest the general public? Don Barnes has combined all this information in readable prose with beautiful illustrations and instructive drawings to produce a book that gardeners will find enjoyable and helpful. It is a book to be used to help you know the daffodil, its problems and how to solve them, how to enjoy daffodils. It helps you feel the fascination we all have for our favorite flower, a book you can do a little dreaming over, and still know you are learning. I recommend it, especially to beginners, because it gives you answers to a lot of those questions that all of us have.

I could have wished for a bit more personal feeling. For me the written words do not bring out the feeling of warmth or enthusiasm for growing daffodils I feel the author has. It did make me think I'd like to meet Mr. Barnes, learn a little more of his likes and dislikes in cultivars, maybe a little of his knowledge of the hybridizers he knows and has known. Maybe what I am saying is I'd like a bit more of Mr. Barnes in the book.

A DAFFODIL BY ANY OTHER NAME

JOY MACKINNEY, *West Chester, Pennsylvania*

I have undertaken the writing of this article with much trepidation as my knowledge of botany and taxonomy is very limited. However, because of the controversy concerning the many names attributed to *jonquilla juncifolius* I thought it might be interesting to do a little research on the subject. The research has been interesting, if not particularly enlightening. I am not thoroughly convinced that all the writers, botanists, and plant explorers are describing the same plant, species, or flower.

At the Daffodil Conference of the Royal Horticultural Society held 1st April 1884 the following resolution was adopted: "That, in the opinion of the Conference, uniformity of nomenclature is most desirable, and that garden variety of Narcissi, whether known hybrids or natural seedlings, should be named or numbered in the manner adopted by Florists, and not in the manner adopted by Botanists." (From *Ye Narcissus or Daffodyl Flowre, and hys Roots.*) Could this resolution have been partially responsible for the disorder which exists in daffodil nomenclature today?

According to E.A. Bowles, in *A Handbook of Narcissus*, London 1934, *N. juncifolius* was so named by Requien in Lagasca's Gen. and Spec., November, 1816, and by Loiseleur in Mem. Soc. Linn., Paris, 1827. It is an unfortunate though apt name, as it was used by many early writers for most of the other narrow-leaved species, for which Tabernaemontanus, Lobel, and Clusius used the same woodcuts accredited to differently

named plants.

The only one resembling Lagasca's plant is used by Lobel in the Latin and German Editions of his work and his volume of figures as *juncifolius* flore rotundae circinatis roseo, and in Johnson's Gerard for *juncifolius* Roseoluteus, described there as "yellow or else white". Clusius, Parkinson, and Linnaeus do not mention it.

The following description was taken from *The American Horticultural Magazine Daffodil Handbook, 1966.* "Narcissus juncifolius Lag. (1816): Leaves resembling Juncus, the rush, 3 or 4, round or nearly so, very slender and grasslike, erect; flowers uniformly, bright yellow, fragrant, 2 to 6 on pedicels ½ to 1½ in. long. Cultivated since 1576. The plants are native to the rocky hillsides and meadows of Southern France and Southeastern Spain."

The Royal Horticultural Society Classified List and International Register of Daffodil Names, 1948, lists *juncifolius* Req. F.C.C. 5-2-1865. By 1954 the RHS Register has added *assoanus* Dufour, *assoi* Dufour, juncifolius Lagasca and *requienii* Roemer.

The 1969 Register, the last published by the RHS, lists *assoi* Dufour = juncifolius Lagasca; *juncifolius* Salisbury = jonquilla L.; *juncifolius* Lagasca. Syn. *requienii* Roem.; *juncifolius* subsp. *gaditanus* (Boissier and Reuter) Baker = gaditanus Boissier and Reuter; *juncifolius* subsp. *minutiflorus* (Willkomm) Baker = minutiflorus Willkomm; *juncifolius* subsp. *rupicola* (Dufour) Baker = rupicola Dufour; *juncifolius* var. *gaditanus* (Boissier and Reuter) Ascherson and Graebner = gaditanus Boissier and Reuter; *juncifolius* Lagasca var. juncifolius; juncifolius Lagasca var. pallens (Freyn) Fernandes; *juncifolius* var. *rupicola* (Dufour) Ascherson and Graebner = rupicola Dufour A.M.(a) April 22, 1941; *requienii* Roemer = juncifolius Lagasca; *requienii* Roem. var. *pallens* (Freyn ex Willk.) Fernandes = a variety of juncifolius Lagasca, *requienii*, Roem. var. *requienii* = a variety of juncifolius Lagasca. This reminds me of the old comedy routine of "Who's on first".

The American Daffodil Society Approved List of Miniatures recognizes *gaditanus* and *rupicola* as species, not subspecies.

Reference: *Flora Europaea* 1980, *N. requienii* M.J. Roemer, Syn. Monogr. 4:236 (1847) *N. juncifolius*, flowers solitary or in pairs. Another publication *The European Garden Flora* 1986, *N. assoanus* Dufour (*N. juncifolius* of authors: *N. requienii* Roemer). Illustration Rix & Phillips, *The Bulb Book* 108 (1981), flowers solitary or in pairs, yellow, fragrant. Fernandes (1967) recognized two varieties under *N. requienii* var. *requienii* with yellow flowers and var. pallens (*Willkomm*) Fernandes (*N. pallens Willkomm*) with pale sulphur-yellow flowers.

Fernandes writes in his "Keys to the Identification of Native and Natural Taxa" in the *Daffodil and Tulip Yearbook, 1968*, of the Genus Narcissus L., "Great variability in the phenotype of the individuals of the same species," and Alec Gray, referring to the jonquils, writes, "They are a delightful group, not only on account of their looks, but also because they are almost all scented, but the various species, etc., are not always

easy to distinguish and there is some confusion amongst writers on the subject." Considering the species *juncifolius*, syn. *requienii*, syn. *assoanus*, syn. *assoi* I heartly agree with Dr. Fernandes and Alec Gray.

In the June 1987 *Daffodil Journal*, John Blanchard writes in "Land of the Wild Daffodils", "There are also jonquils in the Pyrenees, represented by *N. requienii*, the name we must now use for the erstwhile *N. juncifolius* (I am not yet convinced that we must accept the further re-naming to *N. assoanus*.)"

Juncifolius so named because of its rush-like foliage, *requienii*, obviously named for Requien, but who or what is *assoanus* or *assoi*?

John Blanchard, John Mather, and James Wells are all in the process of writing, or have written books on Narcissus. It is hoped that when these books are published some of the inconsistencies will be resolved.

Two dedicated horticulturists, Gertrude Wister and the late Guy L. Wilson frequently corresponded regarding plant nomenclature. In one letter to Gertrude, G.L.W. concluded with this observation, "the flowers don't care."

POPULARITY POLL

I hope you enjoyed last year's popularity poll. If you did not agree with the results, now is your chance to register your opinion. Simply clip out the ballot in this issue and vote, or if you prefer not to remove a page from the *Journal*, then write your 25 favorite daffodils on any piece of paper. Your opinion is very important. The more members who vote, the more accurate the results are going to be. Each family member who grows daffodils is eligible to vote. There are two ballots in the *Journal*. Separate sheets of paper may be used for more voters.

The popularity poll is very helpful to new growers, but it is also very helpful to everyone. Won't you help make this year's poll the best possible by voting? Please don't forget and when your season is over be sure to vote.

DAFFODIL PRIMER
AFTER THE SHOW, WHAT NEXT?

HELEN K. LINK, *Brooklyn, Indiana*

When all the shows are over be sure to read in the *Journal* which cultivars have won awards in the spring shows. Now is the time to think about ordering or making a list of bulbs for fall planting. If new cultivars are wanted early ordering is essential as often they sell out early due to rather small stock.

Now is the time to look over the beds, note any virused foliage and remove bulbs. If bulbs are expensive they might be segregated, that is,

moved to a sick-bay away from other bulbs and allowed to grow on for another year or so to see whether they really have a virus infection, if so then they should be destroyed. Do not place on the compost pile.

Foliage should not be removed from beds until it has turned yellow. The foliage must mature in order to nourish the bulbs as the tiny buds within the bulbs form to produce blooms for the next year. As long as there is green foliage there should be sufficient water to enable the roots to take in nourishment from the soil. Any fertilizer applied during early spring is now available to the root system.

Beds should be kept as nearly weed free as possible, especially if the summer is dry, as the weeds will rob the bulbs of moisture needed to ripen the bulbs. If the summer is hot and wet, on the other hand, then weeds may be an asset. They will absorb some of the excess moisture. There are some weed growth inhibitors on the market, but be sure they may be used on daffodil beds safely. Always read the label and follow instructions.

Certain weed killers may also be used, but by the time the daffodil foliage is gone the weeds are quite tall and difficult to kill. I have used Round Up for several years. It kills what it touches and does not damage the soil. Daffodils grown in rows can be weeded by hand and the spray used between the rows; however, one must be careful not to get any spray on the foliage if it is still green.

Mulch is an excellent weed deterrent. Pine needles are light and airy and help keep down the weed growth on the rows. For large plantings a heavy coating of straw between the rows will be helpful. When fall comes it can be cultivated into the soil to form humus which will lighten heavy soil. Pine needles also keep the flowers clean at blooming time. One objection to straw is that if you purchase straw from an unknown source there may be much weed and grain seed in it which adds to the weed problem.

A few years ago I treated my beds with Round Up which worked well, but when fall came the bed was brown and since the label says not to touch treated weeds, I set the bed on fire. It did a good job of cleaning as it burned readily and clean, but the labels suffered. Although they were made from aluminum siding the paint was scortched and in some cases illegible.

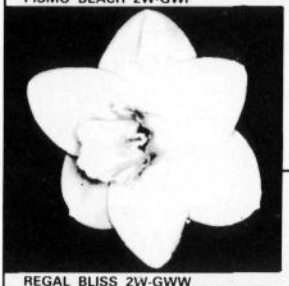
Another summer chore is that of digging any bulbs which are crowded or which should be moved to another place in the garden. If this chore is done as soon as the tops turn yellow it is much easier to find all the bulbs. Bulbs down a couple of years may grow on top of each other; be sure to dig deeply enough to raise all of them.

My choice of a digging tool is a tile spade which is long and narrow but strong enough to get under the clumps. If the spade is too long, some of them are extremely so, take it to the smithy and have the blade cut to fit the arms and height of the digger. Have it sharpened to an oval shape if your soil is of a clay texture.

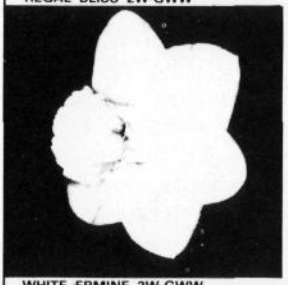
After the bulbs are dug, clean the dirt from them as soon as possible and soak them in Benamyl solution if there is a problem with basal rot. Again, read the instructions and follow them.

Bulbs should be stored in a cool dry place for the summer.

PISMO BEACH 2W-GWP



REGAL BLISS 2W-GWW



WHITE ERMINE 2W-GWW

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DAFFODILS FOR EXHIBITION

GUY WILSON, V.M.H., *Broughshane, Northern Ireland*

(from the New Zealand Daffodil Annual, 1958)

NOTES FOR THE INFORMATION OF MEMBERS

Members will regret to hear that Mr. Wilson for some time has not been well and will wish him a speedy recovery. In this schedule you will find an article on "Daffodils for Exhibition" written at our request by Mr. Wilson at a time when his health was below par and he feels he has not done his subject justice.

I have been asked to set down the desirable characteristics of an exhibition daffodil. To be really good, a flower must give evidence of good breeding: it must have good proportion and balance, clean attractive colouring and refined texture. Judges may differ as to the ideal form; some think that flowers should be as nearly circular as possible; personally I should be sorry to see all our flowers as round as coins or tea plates; I feel that a daffodil, especially if it belongs to division I or II, is more attractive and has more character if the perianth segments are to some extent pointed; the segments should be broad and flat or nearly so; they may be shaped like an ace of spades, with good broad overlapping shoulders, but clearly pointed; they should not droop over the crown, but stand out evenly more or less at right angles to it. In some varieties the inner and outer perianth segments form a fairly definite double triangle which is pleasing to the eye.

Good balance is of major importance: the trumpet, cup, or crown should be of such length and width that it is neither too large nor too small for the perianth, in other words perianth and crown must be in perfect proportion. In the trumpets and larger crowned flowers if the rim of the trumpet or crown is gracefully recurved and frilled it is an added attraction. In division II and III one frequently sees coarse, shallow-crowned flowers whose crowns are much too wide in proportion to their perianths; such should be avoided. Good pose and carriage is also important: in the main, exhibition flowers should be held at right angles to their stems on fairly short necks. Necks that are too long tend to make flowers droop and not display themselves to advantage, while too short a neck can detract from the natural grace of a daffodil and make it too stiff. Stems should be of a length adequately in keeping with the size of the flowers.

In considering colour doubltless tastes will differ, but in exhibition flowers all muddiness must be avoided. I should object to washy or streaky yellow perianths or muddy white ones. Delicacy of tint may be very beautiful so long as the tone is clear and clean. Nowadays we are getting some lovely cool limey-green yellows in such flowers as Spellbinder and Lemnos which are very attractive. Deep yellows are best when they are as nearly selfs as possible, e.g., Kingscourt or Galway. As to whites the purer

they are the better, and they are gems of the first water if the base of the trumpet or crown and the back of the perianth tube is green rather than yellow. Bicolors should have pure white perianths and clearly contrasted trumpets or crowns. In divisions II and III red or orange-red crowned varieties look best if the colour is rich and vivid right to the base of the crown, or else cleanly and sharply rimmed with red or orange rather than gradually shading from one tone to another. Those with yellow perianths are best when the yellow is clear and deep, e.g. in Ceylon, and of course amongst red cupped varieties in divisions IIb and IIIb the perianths should be as nearly poeticus white as possible, e.g. in the well-known variety Mahmoud. Pink-toned trumpets and cups are now appearing in large numbers and are much in favour, indeed many shows run special classes for them. In these the perianth should be really white, and the cleaner and more rosy the pink in the crown the better: one often sees interesting and attractive tones of buff and deep coppery pink, but true pink is more highly esteemed and less frequently found. Some of the most charming and lovely flowers are those whose crowns have delicate frills or rims of gold, orange, cerise, clear greeny-lemon, or pink, etc., on white, cream, or pale citron grounds; a few of such add lightness and distinction to a group.

Flowers for exhibition should, of course, be really well grown and full sized examples. It is essential that they should be in perfectly fresh condition while at the same time being fully developed.

A common fault is evidence of weather damage or sunburning. Nicked petals are often seen, indeed it is surprisingly difficult to find flowers with all their petals quite perfect. Occasionally in a novice class one sees a flower shown that has a misplaced petal, i.e., one with a wrong overlap, or even an incorrect number of petals.

Exhibits often lose points on account of poor arrangement and staging. Groups of flowers should be evenly spaced with sufficient room between the different varieties to allow judges to see them all clearly without difficulty and they should face squarely to the front. Where vases of three blooms are shown they should, in the main, face the judge squarely, but they will look even better if the two lower flowers devite just very slightly from being rigidly "eyes front."

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LABORATORY SEARCH FOR BENZIMIDAZOLE—ALTERNATIVE FUNGICIDES FOR POTENTIAL CONTROL OF THE NARCISSUS BASAL ROT FUNGUS

THEODORE E. SNAZELLE, PH.D., *Mississippi College, Clinton, Mississippi*

Narcissus basal rot is caused by *Fusarium oxysporum* Schl. f.sp. *narcissi* Snyder and Hansen.[6] Since 1970, the benzimidazole fungicides, e.g. benomyl and thiabendazole, have been used in the control of narcissus basal rot.[2] [3] [4] Although resistance to the benzimidazole fungicides by the narcissus basal rot fungus has not been reported, alternation of other fungicides with the benzimidazoles has been recommended to avoid buildup of fungal strains which are resistant to the benzimidazoles.[4] Since the mercurials are no longer used to control the narcissus basal rot fungus, formalin remains the only other proven chemical for control of this fungus. Thus, *in vitro* fungicide research was begun to test fungicides which might be effective in control of the narcissus basal rot fungus. In the course of this research, a fungicide agar gel diffusion technique was developed for *in vitro* testing of fungicides.

MATERIALS AND METHODS

FUNGUS ISOLATION. The narcissus basal rot fungus was isolated from infected bulb scale tissue. Bulb scale pieces, showing both necrotic and healthy tissue, were cut into one square centimeter pieces and washed for 30 minutes in running tap water. After washing, the scale sections were then washed for 1 - 2 minutes in freshly made 1% $NaClO_3$ (1 part bleach to four parts of water). The scale sections were then tranferred to Difco potato dextrose agar (PDA) plates. The PDA had been amended with either lactic acid (0.1 - 0.3 ml 25% [v/v] lactic acid or antibiotics (1 ml pencillin [100 mg/ml] - streptomycin [100 mg/ml]/100 ml PDA) after autocalving for 15 min at 121° C. (The use of antibiotics in the medium is for the purpose of preventing growth of bacterial contaminants.) The plates were incubated at room temperature (20 - 25° C) under constant fluorescent light until abundant pinkish growth of the basal rot

fungus appeared (1 - 2 weeks). The fungus was maintained on PDA for subsequent experimentation.

FUNGICIDE AGAR GEL DIFFUSION (FAGD) PLATE ASSAY TECHNIQUE. Fungicide agar incorporation (FAI) plates were made from Difco PDA. After autoclaving, 100 ml aliquots of the PDA were amended with various fungicides at the following rates: 0.0 mg (milligram) a.i./ml (control), 2.5 mcg (microgram) a.i./ml, 25 mcg a.i./ml, 0.25 mg a.i./m, 2.5 mg a.i./ml. 5.0 mg a.i./ml, and 7.5 mg a.i./ml. (The abreviation "a.i." stands for active ingredient, e.g. Dupont's Benlate contains 50% a.i. [benomyl] and 50% inert ingredients in the wettable powder [WP] formulation.) Preparation of the FAGD plates was accomplished by first asceptically cutting cylinders of the different FAI media with a No. 9 cork borer (12 mm

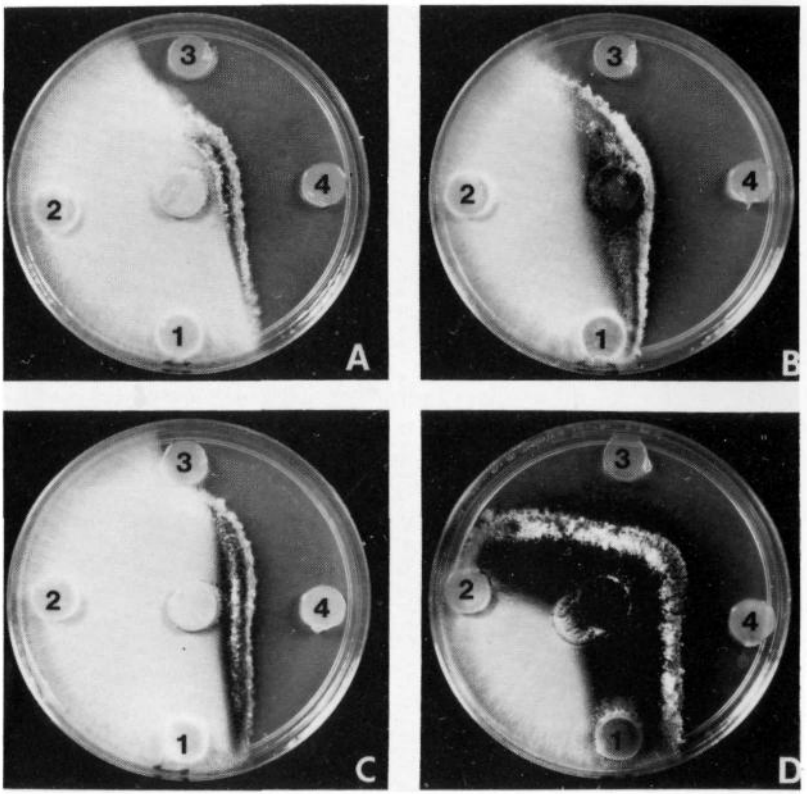

Figure 1 - Minimum Inhibitory Concentration (MIC) Determination of the Benzimidazole Fungicides for the Narcissus Basal Rot Fungus

a - Benlate (benomyl), B - Mertect 340-F (thiabendazole [TBZ]), C - Banrot (etridiazol [terrazole] + thiophanate methyl), and D - 3336 (thiophanate). 1 - 0 mg (miligram) a.i./ml (control), 2 - 2.5 mcg (microgram) a.i./ml, 3 - 25 mcg a.i./ml, and 4 - 0.25 mg a.i./ml.

in diameter). Then, cylinders of the control and three other concentrations FAI media were asceptically transferred to four different equidistant, peripheral points on a Difco PDA plate (25 ml PDA/plate). The process was repeated until all concentrations of each fungicide had been plated. Inoculation of the FAGD plates was made by aseptically transferring a cylinder of sporulating fungus (which had previously been aseptically cut with a No. 9 cork borer) to the center of each plate. Incubation of the FAGD plates was for 2 weeks at 20 - 25° C under constant fluorescent light. After the incubation period, the FAGD plates were read for inhibition of fungal growth by the respective fungicides.

RESULTS AND DISCUSSION

Table 1 lists the twenty two fungicides which were tested for *in vitro* inhibition of the basal rot fungus. Of those fungicides, only the benzimidazoles, e.g. benomyl, thiabendazole, thiophanate, and thiophanate methyl, were inhibitory to the growth of the basal rot fungus (See Figure 1). Thiophanate and thiophanate methyl actually have a different chemical structure than the benzimidazoles; however, when they are applied to plant material they become converted to benzimidazoles[5]. In Figure 1, it can be noted that all four of the benzimidazole fungicides inhibited growth of the basal rot fungus at a concentration of 0.25 mg a.i./ml. Except of Banrot, all benzimidazole fungicides in Figure 1 were also inhibitory to the basal rot fungus at 25 mcg a.i./ml. Of the twenty-two fungicides tested for inhibition of the basal rot fungus, Table 2 summarizes the seven fungicides which demonstrated *in vitro* inhibition of the basal rot fungus. As Table 2 shows, Mertect 340-F and Benlate consist of two different benzimidazoles, thiabendazole (TBZ) and benomyl, respectively. Bromosan, Spectro, and 3336 are all similar in composition in that they each contain thiophanate. Banrot and Zyban are similar fungicides in composition in that they both contain thiophanate methyl.

Table 1 - Fungicides Tested for Activity Against *Fusarium* f. sp. *narcissis*

Trade Name	Chemical Name	Formulation	Corporation
Banner	Propiconazole - a triazole compound	EC [a]	CIBA-GEIGY
Banrot	Etridiazol (terrazole) + Thiophanate methyl	WP [b]	Mallinckrodt
Baycor	Bitertanol - a triazole compound	WP	Mobay Chemical Co.
Bayleton	Triadimefon	WP	Mobay Chemical Co.
Benlate	Benomyl	WP	Dupont

Bromosan	Thiophanate + Thiram	WP, F [c]	W. A. Cleary Co.
Captan	Captan	WP	
Chipco 26019	Glycophene	WP	Rhone-Poulenc Co.
Daconil	Chlorothalonil	EC	
Dithane M-45	Mancozeb (Maneb + Zinc ion)	WP	Rohm & Haas
Funginex	Triforine - a piperazine derivative	EC	Ortho
Kocide 101	Copper hydroxide	WP	Kocide Chemical Co.
Mertect 340-F	Thiabendazole (TBZ)	F	Merck & Co.
Ornalin	Vinclozolin	WP	Mallinckrodt
Prevex	Propamocarb hydrochloride - a carbamate compound	EC	NorAm, Inc.
Spectro	Triazine compound + Thiophanate	WP	W. A. Cleary Co.
Spotrete	Thiram	F	W. A. Cleary Co.
Subdue	Metalaxyl	EC	CIBA-GEIGY
Truban	Etridiazol (terrazole)	F, WP	Mallinckrodt
Zineb	Zineb - a carbamate compound	WP	
Zyban	Thiophante + Zinc ion + Maneb (maneb is a carbamate compound)	WP	Mallinckrodt
3336	Thiophanate	WP	W. A. Cleary Co.

[a] EC - emulsifiable concentrate

[b] WP - wettable powder

[c] F - flowable

Table 2 - Fungicides Demonstrating *in vitro* Inhibition of Narcissus Basal Rot Fungus

Trade Name	Chemical Name	Formulation	Corporation
Banrot	Etridiazol (terrazole) + Thiophanate methyl	WP	Mallinckrodt
Benlate	Benomyl	WP	Dupont
Bromosan	Thiophanate + Thiram	WP, F	W. A. Cleary Co.
Mertect 340-F	Thiabendazole	F	Merck & Co.
Spectro	Triazine compound + Thiophanate	WP	W. A. Cleary Co.
3336	Thiophanate	WP, F	W. A. Cleary Co.
Zyban	Thiophanate methyl + Zinc ion + Maneb	WP	Mallinckrodt

CONCLUSIONS

As mentioned earlier in this paper, benomyl and thiabendazole have been used for control of narcissus basal rot fungus since 1970. From the results of this research, it would appear that fungicides containing thiophanate and thiophanate methyl might be used *in lieu* benomyl and thiabendazole to control the narcissus basal rot fungus. Since Truban (etridiazol) was found to be ineffective in inhibiting the *in vitro* growth of the basal rot fungus, it is likely that it is the thiophanate methyl moiety alone of Banrot which is active against the basal rot fungus, not the etridazol (terrazole)moiety. Likewise, as Dithane M-45 (maneb + zinc ion) was found not to inhibit the basal rot fungus, it is likely again that it is the thiophanate methyl moiety alone of Zyban which is inhibitory to the basal rot fungus. It is discouraging to note that Dupont's Benlate product label reads: "If treatment is ineffective due to the presence of a benomyl resistant strain, then neither Benlate, nor any other benzimidazole or thiophanate type fungicide will effectively control that disease; . . ." Georgopoulos[1] also reports that if a fungus is resistant to one of the benzimidazoles it is probably resistant to all of them. There are two more benzimidazoles which were not given *in vitro* testing against the basal rot fungus: furidazole and carbendazin; neither of these fungicides are available for use in the United States.[7] Thus, the purpose of this research to identify benzimidazole-alternative fungicides for control of the narcissus basal rot fungus was not successful. However, the research did lead to the

identification of several other benzimidazoles, e.g. thiophanate and thiophanate methyl, which might be used *in lieu* benomyl and thiabendazole, depending upon local availability and cost.

ACKNOWLEDGEMENTS

This research was supported in part by a grant form the American Daffodil Society. I wish to thank Carol Williams for technical assistance.

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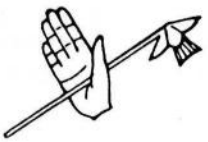

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VIRUS DISEASES IN NARCISSUS

ROBERT J. MCILRAITH, *Victoria, Australia*

Of grave concern by daffodil growers over recent years is the dreaded yellow and white streak virus. It is a disease that attacks the foliage of the plant, descends down to the bulb, and eventually eats away the bulb until it becomes a thin substance of its former size before dying away. It is becoming rampant in every country where narcissus and other types of bulbous plants are grown. There are many types of virus diseases found throughout horticulture. There are instances where the disease can be found in grain crops as well as bulbous farm lands.

What is virus? What is the rudiment nature of the disease? It is an extremely small organism, or spore, hibernating in the bulb cells only visible by eletro-micoroscopicly trained technicians. Up to the present time there is no known cure, only roguing (digging) the plants at first sight of any indication of foliage streaking and destroying the infected stock will protect healthy plants.

The disease is carried from infected plants to healthy plants by the actions of "sucking" garden pests such as ants, aphids, or snails and slugs, and even the white fly will nip the foliage for sap. It only takes one nip of an infected leaf for the virus to be transmitted to healthy plants. Seed from infected plants however are virus free.

To the observant grower the first indication of the virus is the faint yellow and/or white streaks running down the foliage to ground level, later becoming more pronounced as the weather warms. Flower buds will develop and flower for the first two or three years, but eventually the leaves will become stunted and sparse before the plant finally dies away. A well-known grower/exhibitor, when the disease was pointed out to him, stated, "Its a new variegated type of narcissus?" (Ironical).

There are various methods of controlling the disease:

1. Purchase clean, healthy, disease-free bulbs from a reputable bulb nursery or grower. Note: If the virus appears on newly purchased bulbs, the disease was in the bulb prior to planting, and many suppliers will replace the diseased stock.
2. Spraying insecticide at ground surface around plants, containers, paths, and under-growth where garden pests hibernate, before flowering until the die-back of foliage may remove the virus carriers from the beds.
3. Rogue each infected plant as the disease becomes apparent. Pour insecticide solution into ground after plant is removed.
4. Plant newly acquired bulbs in containers or in the garden away from other bulbs for the first year of growth as another precautionary measure to guard against the spread of virus and other types of bulb diseases.

There is no guarantee that imported bulbs entering the country from other countries are virus free. In spite of the requirements of the

Department of Health, rigid inspection of each bulb is practically impossible at the present time. Even with sufficient funding, trained technicians, and much-needed eletro-microscopic instruments for testing prior to transshiping, the disease may still escape detection.

The disease is more prevalent than the average horticulturist and/or qualified officers of the Department of Health are aware. When meandering through parks and gardens even under the control of professionals, farm daffodils and home gardens in Victoria, interstate and overseas, yellow streak and other bulb diseases can be frequently seen without any apparent attempt to control or eradicate such plants. Since wholesale marketing and distribution of bulbs from cut flower growers, bulb farms and nurseries, packed in "glossy" picture packets, sold in stores, supermarkets and nurseries are without any government regulations relative to sales of bulbs, contamination will eventually kill the cut flower trade, garden interests, daffodil shows, and culture of the narcissus.

Pots of flowering daffodils are brought in for sale by small-time growers, frequently seen in nurseries and garden shops with foliage riddled with yellow streak, bulb mite and leaf scorch fungus, and may be purchased by the home gardener who has no knowledge of the various types of narcissus diseases, resulting in the weakening and destruction of other garden plants.

To the home gardener or specialist grower purchasing high priced bulbs to improve the quality of his plants the constant discarding of diseased stock can become both expensive and discouraging.

SOME THOUGHTS ON VIRUS

DAVID E. KARNSTEDT, *St. Paul, Minnesota*

(from Yearbook of the Daffodil Society of Minnesota, Vol. VI)

With rare exceptions, plants in nature do not normally reproduce asexually. Flowering plants, in particular, are designed to fulfill the biological demands of a species by forming and dispersing seeds. Not only do seeds contain the genetic material of a species and, therefore, its chance for survival, but also assist a plant in avoiding some of its non-motile parasites, e.g., virus. Currently available information indicates that seed is free of virus and thus able to escape the disease present in the parent(s).

As a clone, however, the modern hybrid daffodil is asexually propagated to increase its numbers. Thus, any virus present in a given bulb is passed to the offsets and, through subsequent divisons, in an unbroken chain to the entire stock derived from that bulb. It's just a matter of time until the stock of any commercially propagated daffodil clone becomes infected with one, or more, of the viruses to which the genus *Narcissus* is host.

It is my contention that daffodil fanciers (in particular, those who cut a great many flowers for exhibiton), growers of cut flower commercial stocks, and those in the dry bulb business are decimating their stocks by

systematically spreading virus among their plants. Additionally, commercial dry bulb growers, in following the traditional practices of the trade, have been systematically and unwittingly selecting *for* virus in their stocks.

Like many living organisms, a daffodil plant can be infected by a single virus and show no symptoms. Sometimes, the virus remains quiescent, at other times, characteristic symptomology is readily evident and diagnostic, e.g., "yellow stripe." Symptoms of virus infection in daffodils can range from nothing observable to the distinctive necrotic flecking of both leaves and bloom, to, in certain cases of multiple infection with two or more viruses, a phenomenon often called (appropriately enough) "early dieback." A daffodil plant afflicted with "early dieback" begins to senesce (from the leaf tip downward) within three weeks of flowering. Often symptomology characteristic of yellow stripe or mosaic, silver streak, and chocolate spot viruses are all present in the same leaf! In general, diseased bulbs/stocks tend to produce lax unhealthy appearing foliage, smaller and fewer flowers of inferior substance and faded or mottled color, and fewer smaller bulbs at harvest. Although I have no proof to substantiate it, its my belief that virus infected bulbs develop an enhanced susceptibility to basal rot.

That the various viruses can be easily spread by certain insect vectors (aphids and leafhoppers) and lower level animals (nematodes and mites) is an established fact. In normal feeding patterns, these vectors transfer bits of plant sap containing the particles of virus from infected to uninfected plants. I feel that a high incidence of transmission by these vectors is a phenomenon of mild climates, the occurrence of infected host plants other than *Narcissus*, and population levels of potential vectors.

When a given daffodil plant shows evidence of virus infection, we have been told to destroy it to prevent spread of the disease. That is sound advice, of course, but what is the result of such action in the average collection? I think my own experience to be pretty typical and indicative of the problem. I well remember my first big bulb orders and how I looked forward to the beauty they promised the following spring. I was pretty upset that spring when I found myself destroying much of what I had purchased the previous fall because the leaves showed unmistakable evidence of virus infection: yellow stripe, mosaic and, later in the season, silver streak. When notified of the situation, suppliers readily offered refunds, or replaced the affected bulbs. Unfortunately, the replacements were no better than the originals. After a couple of years, several things became rather obvious.

a) The stock of any daffodil grown commercially for any length of time is infected with virus.
b) Daffodil collections, whether private or commercial, contain many plants with obvious symptoms of virus infection.
c) Destroying infected bulbs was, in effect, depriving me of the very thing I wanted most—the daffodil flowers of spring.
d) Replacement bulbs were no better than the originals, leading to the conclusion that the entire stock of the clone was virused.
e) Buying bulbs upon introduction, in an attempt to obtain virus-free

stock, turned out to be not only very expensive, but only partially successful, leading one to much the same conclusion as in (d), above.

f) The "Typhoid Mary" occurs in the daffodil world too: plants which reveal few, if any, of the classic indications of infection, but which are, nonetheless, infected.

Consider, for a moment, some "conventional wisdom." We have always been told by the "experts" to *cut* our daffodil blooms with a sharp knife, never to cut into the white portion of the stem and never to pull the scape from the plant. Now, that part about using a knife is, I feel, unquestionably responsible for much, if not ALL, of the spread of the daffodil viruses. By *cutting* more than one stem with the *same* instrument, a classic mechanical transfer for introduction of virus into the plant tissue is created. An insect may have begun the process, but it is man who is bringing the process to its devasting conclusion.

In my opinion, less than 5% of daffodils are inoculated—at random—with virus by insect vectors. I am convinced the wholesale decimation of stocks—the remaining 95%—is totally the result of man's activities. There is no question that mechanical transfer, in the form of the sharp instrument used to sever the stem and moved at random from plant to plant without being sterilized between cuts, is responsible for the inoculation of uninfected plants with virus. The problem is so severe with several growers that I no longer buy bulbs from them—it's pointless, since the badly infected bulbs must be destroyed the following spring and the replacements are no better.

Here's a non-daffodil example to substantiate my point. Commercial growers of cut flower orchids have long understood the ramifications of mechanical transferance of disease among their stocks. It is now common practice to cut blooms from their virus-free plants with a single edge razor blade, used *one* time only, later sterilized and re-used. Particular care is exercised by the worker to prevent sap from accumulating on the fingers and accidentally inoculating another plant. By the same token, it is not difficult to understand how the stocks of daffodils grown for cut flowers rapidly become totally infected when, each spring, thousands of stems for market are *cut with the same knife.*

Several years ago, in England, the clone Grand Soleil d'Or was freed of its debilitating virus diseases. Multiplied under controlled conditions, quantities of the resulting virus-free bulbs were returned to the Isles of Scilly to be once again grown for cut flowers. It has become apparent that much of that virus-free stock is once again infected with virus. If one accepts standard reasoning—random re-infection by insect vectors—how then has the disease spread so rapidly? The answer, I submit, lies in the fact that these are bulbs grown for production of *cut* flowers for market. Workers, using the *same* knife to cut scapes from hundreds of bulbs, are inoculating the entire stock with virus from the few bulbs randomly infected with virus by insect vectors. This process, obviously, would move with what could be called lightening speed! It would probably take no longer than three to four years to re-infect acres of bulbs.

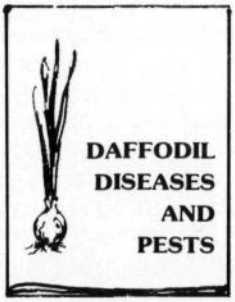
In similar fashion, the serious exhibitor is doing the identical thing to his collection as he *cuts* (with the *same* instrument) promising scapes for the show bench. For even though he may rogue—persistently—all plants showing symptons of virus, he is, nonetheless, passing sap from infected plants showing no symptoms to plants as yet uninfected.

Enter "Typhoid Mary." A classic example of a "Typhoid Mary" is the old cultivar King Alfred. It shows little or no visible manifestation of the disease harbored in its tissue. Still widely available each autumn, it is often purchased by the neophyte as the first daffodil in his garden. Thus is the stage set for future disaster. In my experience, it is the yellow trumpets and the near trumpets of Division 2 which seldom show usual evidence of virus infection, even though the probability is that nearly all are infected. Obviously, then, we have a very dangerous situation and one to which the avid exhibitor seems particularly susceptible, since it is he who will *cut* (with the *same* instrument) all scapes from his collection having merit for the show bench. Each stroke of the knife has the potential for inoculating yet another plant in the collection, as he moves from the old show favorite, to symptomless clone, to the newest of the new!

The commercial daffodil hybridist/grower represents a similar, yet subtly different aspect of the same problem. Like daffodil hobbyists everywhere, these people also *cut* their flowers—whether for their own show bench effort, seasonal displays on site or at shows, or for cut flowers—using the same instrument (unsterilized) and moving from plant to plant within a stock or between stocks. When one begins to consider these facts, as well as examining some traditional practices of the trade, the magnitude of the problem becomes apparent.

First, the probability of a clone becoming partially or totally infected prior to introduction is exceedingly high—for the very reason I've outlined above. I have, for example, seen stocks of really promising seedlings (3-6 bulbs) hopelessly infected. For this to occur, it is obvious that the original bulb had to have been inoculated with the pathogen prior to separation of offsets.

In the instance of the original bulb becoming infected prior to separation of the offset, it's easy to understand how the entire clone



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becomes virused, often prior to introduction. Let's for a moment, however, assume that a 10-15 bulb stock of a named clone prior to introduction is clean and that a few bulbs will become, randomly, infected by insect or mechanical transfer. How does the stock become totally infected so soon thereafter? And how does one account for the early deterioration with virus of many stocks of the newer daffodils prized as show favorites? Inoculation by cutting with the same knife is part of the answer, of course, but the real reason—quite obvious and simple—has been completely overlooked because it is buried in the traditional business practices of the trade.

The conscientious commercial grower (and I do not mean to infer otherwise), when he fills orders for his product, has traditionally selected only the best, healthiest-appearing bulbs to fill those orders. The remaining bulbs—the smaller ones, the chips, the offsets—are retained and replanted to consitute the stock of the clone. Now, one effect of virus infection is that the bulb produced at harvest is *smaller* than an uninfected one. Too, it is my feeling that infected bulbs are weakened and thus more likely to host those fungus conditions of the outer scales that produce a scabrous, i.e., rough, and unhealthy appearing, bulb. That kind of bulb would also most likely not be used to fill an order, but either discarded or replanted. Therefore, by consistently disposing of the largest, healthiest appearing bulbs—in effect, the most likely to be *virus-free*—and planting back the smallest bulbs—in effect, the most likely to be virus *infected*—the commercial grower is creating his own destruction by *systematically selecting for the incidence of virus in a stock*! There is no other logical explanation to account for the rapid deterioration I see in too many of the more recent introductions of show daffodils.

It would be easy, I suppose, to consider the problem hopeless and without solution since (to date) there has appeared no known cure for the daffodil viruses. However, if we are willing to discard "conventional wisdom" and approach the problem from a wholly different perspective, the prognosis becomes quite promising.

By all means, one should continue to rogue virused plants as they appear. If you wish to keep an infected clone, isolate it with others some distance from your "clean" plantings. It's disconcerning, I realize, but it's probably wise to assume *all* daffodil clones currently available are infected with virus and act accordingly.

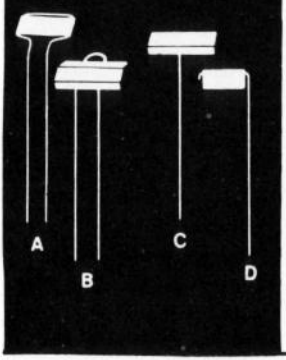
Learn to recognize what I feel to be the most important non-classic symptom of virus infection: lax foliage. Over the years, I have grown and observed many daffodil seedlings and small stocks. In these virus-free daffodils the foliage is *always* stiffly upright throughout the growing season. Lax, i.e., limp, foliage (with or without accompanying foliar mottling or flecking) I have found to be symptomatic of virus infection. If there is any doubt about a given plant, examining a leaf backlighted by the sun will usually reveal the indistinct mottling so characteristic of plant virus disease. While the correlation between lax foliage and the presence of virus is not infallible, and since often yellow trumpets and many jonquils retain a certain clarity and erectness to their foliage in spite of the virus, it

is certainly indicative (I feel) and a useful empirical tool.

Undoubtably, for any grower of daffodils the most important thing to bear in mind, if you wish to restrict the spread of virus disease in your plantings, is to *never cut more than one scape in succession with the same instrument.* For a small collection, use of a spring-loaded device dispensing single-edge razor blades one at a time might be practical. Certainly, one time use and disposal of a razor blade would be much cheaper than assuming the risk of infecting a $100 show daffodil by cutting the scape with the same knife as had been used to cut other scapes from one's collection! Another option might be the use of several knives immersed after one cut in ethanol, flamed and cooled prior to re-use.

There is a simple solution to the problem that I have used over the years and found to be effective and without damaging side effects. It flies in the face of "conventional wisdom," however, since what I usually do is to *pull* the stem from the plant. Sometimes, because the stems are so trugid at flowering time, it's possible to just snap the stem. There is a danger in the latter method as sap may accumulate on the fingers and be transferred to a plant through the surface of the broken stub. One can feel the tissue of the stem stretch as pressure is applied, but it quickly weakens and the stem will snap free, usually in the "white" part. Again, contrary to standard advice, I have found this portion of the stem to take up water just as easily as any other and have exhibited and won blue ribbons, even after lengthy refrigeration, with blooms so "picked." I've encountered only one problem with this method: the stretched tissue at the end of the stem has a tendency to split and curl during or after the flowers are hardened. The stem can be easily cut to eliminate the curl, either before or after hardening.

The rather obvious problem that one would expect using this method, damage to the plant, just has not happened. Indeed, the truncated stem continues to grow after the scape has been removed. It's variable and cultivar dependent, but I've seen the truncated stems of Stratosphere continue growing to the height of the foliage, and beyond. I seldom lose bulbs and certainly none that I can specifically relate to the pulling of scapes, Pulling scapes is most certainly to be recommended and used—



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particularly when one considers the alternative: wholesale decimation of a collection with virus transfer by using the same knife to cut blooms, or the certain degree of cumbersomeness inherent in the use of many instruments to permit one time use and sterilization, or disposal after one use.

I strongly feel the hybridist/grower who sells dry bulbs of his or another's introduction *must* be willing to assume the responsibility for the health of a stock. These growers must remain ever cognizant of the dangers of virus inoculation inherent in cutting more than one stem with the same instrument (unsterilized between cuts). In particular, extreme care must be exercised with a first bloom, i.e., selected, seedling as it is expanded into a stock large enough for naming and introduction. In this instance, a very effective form of insurance is twin scaling. The *first* available round (a round contains the maximum ration of bulb volume to basal plate area) of a selected seedling must be twin scaled. Assuming attentive control of the entire process, it's foolproof. The advantage to twin scaling a seedling so soon is that one will have 20-40 additional virus-free pieces of the clone to work with. Aside from the obvious benefit of having a meaningful stock to evaluate in a much shorter than normal time frame, the really important aspect to be aware of is that one has greatly *reduced* the probability of a clonal stock becoming infected with debilitating virus. An additional form of insurance to be seriously considered in maintaining the health of a stock would be to mark the best looking plants from time to time and to twin scale the bulbs just to maintain the practice of propagaing a stock *only* from the healthiest appearing examples within it. In my view, the ideal situation would be to isolate a bulb or two of each stock under climate controlled, insect-proof conditions and twin scale the rounds as they become available to replenish the field-grown stocks. If these suggestions are accepted and used, I can see no reason why the viable life of a given clone cannot be extended many, many years beyond the few years of what now appears to be the norm.

The first allegiance a commercial grower must have is to himself and the health of his stocks! Without healthy stocks, he is effectively out of business. To that end, then, *he must retain the biggest and healthiest appearing bulbs as propagation stock*, even if that means during the growing season physically marking the best looking plants to reserve them as the mother stock. Obviously, if a given bulb becomes virused and therefore smaller the probability is high that it will be removed from the stock anyway. Should a customer receive a bulb that shows characteristic foliar symptomology the following spring, it will be far better to graciously replace it than to put an entire stock at risk by continuing to operate under the self-defeating, traditional practices of the trade. This suggestion is not as callous as it may appear, but is in reality, in the very best interest of *all* concerned. If a bulb in a customer's garden shows virus symptoms the following spring, it should be replaced without charge with another bulb. Using my recommendations in this case, the probability of the replacement bulb also being virused is rather low and that is certainly not the case now, as there is a very good chance that the replacement will be no healthier than the original.

Growers must understand that that which represents value to the knowledgeable buyer of daffodil bulbs is *the assurance that he will be able to obtain disease-free bulbs*, not only if the original bulb turns out to be unhealthy the following spring but also, if the bulb in his garden later on becomes infected and he chooses to buy it again. In either case, there must exist the clear assurance that the replacement will be with clean stock.

Virus in daffodils is wider spread and more pervasive than people realize. While there is no "cure" for virus in daffodils (as yet), its spread in my opinion, *can* be controlled quite effectively if both the amateur and commercial grower are willing to discard some long standing habits and change growing practices to those I've suggested.

LISTEN TO THE POET DAFFODILS

MEG YERGER, *Princess Anne, Maryland*

If you know how to listen, your daffodils might talk to you. My poeticus children talk to me.

Excitement over an invitation to the U.S. National Arboretum brought an enthusiastic response from my own poets. From six to twelve of them could be included in a special exhibit at the Arboretum featuring Daffodils of The Future during the 1988 ADS Convention in Washington. Conversation in our garden the day the invitation came, went like this—

"Hey kids, we have an invitation to be planted at the National Arboretum. Who wants to go?"

"I do! I do! Take me. Take me."

"Some of you would stay as part of the Arboretum's permanent collection."

"That's all right."

"The rest would come home again in 1989"

"Please take us."

"Your records must be checked to find out if you're likely to bloom at convention time. You must be dug up to be sure the two best bulbs of each of you are selected."

"Please do that right away. The suspense is awful."

Since the poeticus division of daffodils hates to have its roots out of the ground, the bulbs had to be planted in the plastic jugs they were to be shipped in and kept watered through the summer season. At shipping time in the fall healthy roots peeked out from the corners where the bottoms of the jugs had been cut, and the helper on the receiving end was alerted to keep the jugs outdoors and water them until a planting committee was ready to put them in at the Arboretum site.

Plastic jugs have figured in the history of all the poets bred by me. The

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first crosses were made in 1973 and the seeds planted in plastic jugs sunk in the ground under a holly tree. Lights Out × Perdita gave thirty-six shiny round seeds of which twenty-six germinated and twenty-four bulbs remained to be planted out, again segregated in plastic jugs to deter squirrels and cats. Lights Out × Sea Green produced eleven dull round seeds of which five germinated with five bulbs eventually to be planted out.

Several of the Lights Out × Perdita cross have been registered—Green Pond and Greenpool, with very wet looking green centers, Peridita's Pride, Perdita's Prince, and Gold Target with the orange-red corona that harks back to the color in Lights Out which probably came from the Engleheart red-eyed seedling parent. All of them are late bloomers, so pleasant to enjoy from a hammock when the weather is mild enough to permit lazy lingering.

The next year, in a effort to breed for earlier bloom, pollen from the mid-season Milan was used on an early blooming unregistered poet seedling that came from the Maryland hybridizer Edwin Powell. It is not known whether it was of his breeding or his breeding stock. At any rate, much of the progeny is earlier to bloom than most and just unbelievably fragrant. These have been registered as Sweet Delight, Sweet Dream, Sweet Fantasy, Sweet Hope, Sweet Somerset, Sweet Surprise.

In the mid 19th century, William Backhouse who was one of the great daffodil hybridizers of the time grew the flowers for his crosses in pots in a glassed in porch. From that fact I got the idea, in 1975, of forcing Lights Out in my plexiglass enclosed porch so it could be crossed with Praecox Grandiflorus, the earliest poet to bloom. Forty-four seeds were harvested with thirty-eight bulbs surviving to be assigned numbers N, O, P, and Q. The resulting blooms generally have pointed perianth segments, coronas with a special sparkle, sometimes red or orange, and bloom time earlier than Lights Out. Glimmer and Glint have been registered from the series and there will be more to come after further evaluation and competition in shows. Future plans include forcing this series so they may make the acquaintance of the "sweet series" and other earlier blooming poets they might not ordinarily encounter in nature. One of the 75 N 1 seedlings and Glimmer have been planted at the U.S. National Arboretum in the special area to be featured during the 1988 ADS Convention. Secret Circle, Sweet Hope, Sweet Somerset, and Sdlg. 75 E 2 (Mega o.p.) were also included.

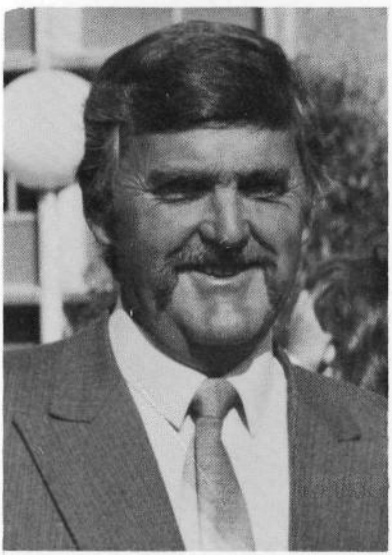
Many more seedlings are coming along for evaluation and possible naming. All crosses are made with poeticus that are as close to "pure" as possible and yet at the same time, might produce some variety in bloomtime and appearance. Search for poets of the past has resulted in acquisition of antique cultivars by Engleheart, Chapman, The brodie, Williams, and Crossfield. Genes from these ancestors that had practically disappeared can now be united with genes from new poet cultivars. These new poets will be used in the hybridizing of the future to create new poets or to influence flowers in other daffodil divisions.

Twenty-four poeticus seedlings in their first year of bloom went to the Columbus ADS Convention Show in 1987. These youngsters could never be more excited than they were when they realized the great John Blanchard of England was to judge them. They spoke of him as the handsome human with two long scapes. He bent both scapes in the middle so as to kneel on the floor and look right in the eye (eyeball to eyeball as it were) of each poet seedling. Four of them won ribbons and the boasting that went on in the presence of the daffodils that had been left behind came through loud and clear even to humans who had not learned how to listen to daffodils.

"I talk with the flowers in moonlight"
from Song of the Narcissus
(In an Arabian Anthology,
The Thousand and One Nights)

DAVID JACKSON

G. C. TEMPLE-SMITH, *Ulverston, Tasmania*



The daffodil calendar is studded with notable years and 1936 is no exception. Those beautiful flowers of Guy L. Wilson's—Cantatrice, Rouge and Truth were registered with the R.H.S., But the registration which may well have an even greater impact on the improvement of daffodils was the 1936 registration of the birth at Dover, Tasmania, of David John Jackson, your principal guest speaker at the forthcoming A.D.S. Convention.

To say "Jackson" is to think daffodils. Not just daffodils but trumpets, cups, and doubles with clean colours, smooth overlapping perianths, and that indefinable aura of quality which bears the stamp of creative daffodil breeding

for three successive generations. It all began with Dr. William Jackson, David's grandfather who emigrated from England to Tasmania in 1898 and started a medical practice at Dover.

He first became interested in daffodils when Engleheart was in full flight and by exchanging bulbs and importing from overseas he soon built up a fine collection. He was a close friend and ardent show competitor of C. E. Radcliff and they both shared in the search for the elusive pink daffodil. They were the pioneers of daffodil breeding in Tasmania.

David's father, William Jackson Jr., known affectionately everywhere as Tim, contracted "yellow fever" from his father and started to grow daffodils in 1932. During the Second World War he served in the Navy on corvettes as a Lieutenant Commander and after the war successfully stood for the Tasmanian Parliament where he made a distinguised contribution for 18 years, six of which as Leader of the Liberal Party. With his dedicated wife Nan, they expanded Dr. Jackson's daffodil breeding programme and the first Jackson's Daffodil Catalogue appeared in 1964.

It was probably Vahu which stimulated David and Robin's interest. They were 'baby sitting' the daffodils in 1970 while Tim and Nan were at the New Zealand Shows when they discovered the superlative flower Vahu in the seedling beds. That would be enough to start a garden gnome

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ALIMONY, 3 W-W

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Australia

hybridizing! Tim and Nan Jackson attended the Annual Convention of the A.D.S. in 1972 and now, 16 years later, David and Robin will be joining you for the 1988 A.D.S. Convention. Tim died in 1975 and will be remembered for many outstanding daffodils including Dimity, Ristin, Mercedes, Verran, and Vahu, as well as for his development of the first pink double after 25 years of patient work.

David's inherent ability to select the finest and most desirable characteristics first became apparent in his early twenties. His first impeccable selection was his wife Robin whom he married in 1961. Now they have two fine grown children—Amanda, a vivacious teacher working in New Guinea, and Timothy, a newly qualified doctor. It is always a pleasure to be with David and Robin—they are so friendly and supportive, kind and generous, and we are proud they are Tasmanian. Soon after they were married David worked at Geeveston as a Supervisor at the Australian Paper Mills. After a few years he was able to fulfill his ambition to go farming and purchased their property at Sturges Bay in 1967. Unfortunately, it was just three days before the disastrous bush fires which took 52 lives, rendered 3000 people homeless, and devasted farms and properties. Although one of the casualties, David continued to live on the property but had to go back to work at A.P.M. for a few more years.

When Tim Jackson died in 1975, David and Robin took over the daffodil business ensuring that the huge potential of Tim's daffodil breeding work was not lost.

Among all this activity and the demands of a growing family and an expanding business, David still found time to serve as an elected councillor for eight years on the Geeveston Council. He accepted the appointment of Justice of the Peace, served on the Hospital Board, and became a member of the Southern Regional Library Board for four years. He is also the Vice-President of the Tasmanian Daffodil Council.

For recreation he is a Fly Fisherman. Can you see him standing knee deep in a fast flowing Tasmanian stream with rod and reel wondering what pollen he should put on Salmon Trout!?

The dominance of Jackson's daffodils is best illustrated by their success in the C.D. Webster Perpetual Challenge Cup for 12 varieties of Tasmanian Seedling Daffodils. Since its inception 60 years ago the Jacksons have won it 39 times and for the last 31 consecutive years this America's Cup of Tasmanian Daffodils has been securely bolted down in the Jackson household. Only time will tell if we have a Tasmanian breeder who will design an entry like a Ben Lexon and display it like an Alan Bond.

As their business continues to expand David is successfully applying his expertise in Divisions 1-4 while Robin has branched out to embrace Divisions 5, 6, 7, 8 and 11.

There are many exciting flowers asleep in the seedling beds at Sturges Bay waiting for future springs to bring forth new beauty to the daffodil world and to enhance the reputation of this island state and the prestige of Jackson's Daffodils.

PROFILE OF KOANGA DAFFODILS: DR. P.D.K. RAMSAY MR. M. HAMILTON

ALFRED W. CHAPPELL, *President, National Daffodil Society, New Zealand*

Many of your readers will now be familiar with the name of Koanga Daffodils. Koanga is the Maori name for daffodil.

Koanga is run by Peter Ramsay and Max Hamilton who are ably assisted by their respective wives, Leslie and Kath, who make up the team.

Max Hamilton is the senior partner (by age) and has been growing daffodils for many years. He may best be described as the "studmaster". Max is a retired farmer, now living on a ten acre block just outside Hamilton.

Previously Max farmed a high country holding at Utiku. Owing to the high altitude and lateness of the season he had not been able to do very much regarding showing, however he has been an astute breeder and has raised some very good varieties. A keen student for quality he has not registered many to date but one, Red Cameo, is a very good 2 Y-R and has won many premiers. Now that he shifted to warmer climes, he has raised some very good seedlings. Doubles are one of his specialities and he has some lovely flowers in the pipeline.

A quietly spoken man, Max is always happy to talk about breeding and will freely give advise to anyone on what are good crosses to make. He believes every flower should be used for breeding and has been known to pull off a petal to prevent Peter from picking one he has hybridized.

I am sure you will find his talk interesting when he presents it in the spring.

Peter comes from a family of daffodil growers and exhibitors, as his parents were very successful many years ago. Peter has don some hybridizing and also has some nice seedlings. However, it is in the bigger classes at shows that he excels.

Peter comes from a family of daffodil growers and exhibitors, and his parents were very successful many years ago. Peter has done some hybridizing and also has some nice seedlings. However, it is in the bigger classes that he excels.

A master at staging, it is always a pleasure to look at their stands and see how every flower or vase is staged to the best advantage. The successes of Koanga in recent years are quite outstanding and they are nearly unbeatable in the major classes.

The help given by the ladies too, must not be overlooked, both being very good stagers and ticket writers.

For all you readers who are attending "Tasvention", I am sure you will enjoy the papers they will be presenting at that time.

I wish you all a Happy New Year and a successful season in your coming spring.

THINK WASHINGTON - APRIL 22-24

DELIA BANKHEAD, *Great Falls, Virginia*

How many times have you heard, "...there is never enough time at conventions!" Here are a few advance preparations to help you make your time in Washington more interesting an enjoyable...

EXHIBITORS—you will receive a show schedule if you checked the appropriate box on your convention registration form. Please read, under Rules, the advance registration requirements, and be sure to register in advance for all the large collection classes. Staging Chairman Chauncey Maher says he can handle last-minute dropouts more easily than last-minute additions, so if you even *think* you want to enter a large collection, please register. ADS entry tags will be used, and may be prepared in advance at home. Exhibitors who arrive by car will find a convenient Receiving Entrance at the rear of the hotel, which opens into a straight passage to the staging room. Maps will be sent to all who indicate they are driving.

We would like to invite all hybridizers from America and abroad to exhibit in the three new hybridizers classes offered for the first time in any show. In addition to the ADS Challenge Trophy for twelve cultivars raised by the exhibitor, there are two other classes! The Murray W. Evans Trophy offered for six cultivars raised by the exhibitor, and the ADS Hybridizers Medal for three cultivars raised by the exhibitor.

JUDGES—the main staging and show areas are off-limits to all who will judge in this show. One area has been set aside for judges to stage entries for the hybridizers' classes.

The Judges Refresher Course will be a discussion of judging problems by a panel of distinguished judges. Moderator Donald King requests judges to write him *now*, with specific questions or topics for discussion.

SPECIAL BREAKFASTS—please register in advance for both.

Instead of a miniature breakfast, this year Nancy Wilson will chair a 6:45 AM Sunday breakfast discussion on the question of creating an Intermediate List and classes for intermediates in shows. She invites all members who have ideas, or input on this subject to write her as soon as possible.

The Hybridizers' Breakfast has been rescheduled to Saturday morning at 6:45 AM to allow time for the Intermediate Committee to meet prior to their Sunday breakfast. Chairman Bill Bender requests subjects for discussion from all interested members. He would also like to hear from anyone who has studied, or collected data on bulb shape and surface appearance and the connection, if any, to the health of bulbs.

AUCTION—begin fattening your piggy banks now, for the great ADS Fundraiser Auction to be held after the Sunday evening banquet. Auction Chairman Joe Stettinius will feature bulbs of some rare new cultivars, still too scarce to be listed in the growers' catalogues. He is also collecting an

array of unique decorative objects with daffodil motifs, including antiques, so bring your checkbooks, greenbacks or gold bullion! Proceeds will go to ADS for planned projects and improved services, so the money you spend will work twice for you. If anyone has something lovely to contribute to the auction, please write to Joe Stettinius.

"DAFFODIL WIDOW(ER)S AND ORPHANS"—For families who come along to see more of Washington than the daffodils, there are attractions to appeal to every interest, and getting around can be easy with a little information. Write the Washington Convention and Visitors Association, 1575 I Street, NW, Washington, D. C. 20036, for a complete tourist package, including maps and transit information, events' calendar, and guides to attractions, shopping, and dining. Many events are free, as is admission to all government operated buildings and museums. For example, The Capitol (Congress is in session—write your congressman for House/Senate gallery passes), Supreme Court, Library of Congress, National Archives, the White House, Bureau of Engraving and Printing, the Kennedy Center for the Performing Arts, U.S. Botanic Garden, and all the monuments.

The Smithsonian Institution complex of 13 museums, including Air and Space, the National Gallery of Art, National Zoo, and the two new underground museums, as well as the many and varied individual museums, including the Corcoran and Phillips Galleries and the fabulous Textile Museum are all in Washington.

Local historic sites include Mount Vernon and Gunston Hall, the Lee Mansion, Sully and Oatlands plantations and the historic sections of Georgetown and Alexandria.

For those who will have or rent a car and want to explore farther afield, Charlottesville, with its great Jeffersonian architecture and nearby Monticello and Ashlawn, is two hours south of Washington, and Colonial Williamsburg is a little over three hours away. An hour to the northeast lies Baltimore with its wonderful new Harbor Complex and National Aquarium and the great art collections of the Walters and Baltimore Museum of Art. Historic Annapolis, also home to the U. S. Naval Academy, is an hour to the east of Washington.

Why not let all the family join the fun in Washington!

Please note the addition of the Intermediate Breakfast on Sunday and the new date of the Hybridizers Breakfast on Saturday. Also, refunds cannot be made for cancellation requests received after April 18. There will be a $5.00 service charge for refunds.

On your way to or from the convention stop by and see the daffodil planting at the Lewis Ginter Botanical Garden at Bloemendaal, 7000 Lakeside Ave., Richmond, Virginia. These 800 cultivars will be at their best from the end of March through April. The Garden is open daily from 9 a.m. to 4:30 p.m.

REGISTRATION FORM

ADS CONVENTION, APRIL 22-24, 1988

SHERATON PREMIERE HOTEL, TYSON'S CORNER, VIRGINIA

Name(s) _____

Address _____

City _____ State _____ Zip _____

Christian or Nickname(s) _____

REGISTRATION FEE: Before March 15 .....$140.00
After March 15 .....$165.00

Registration includes: National Show and Awards Dinner, Friday; Program, Lunch, Dinner, Annual Meeting, Saturday; Tours, Lunch, Banquet, Sunday.

Advance reservations required for: Judges Refresher, $3.00
Hybridizer's Breakfast, 4/23, $7.50; Intermediate Breakfast, 4/24, $7.50

Do you plan to exhibit? Yes _____ No _____. Driving? Yes _____ No _____.
ADS charter member? Yes ___ No ___. At the 1956 convention? Yes ___ No ___.

Make checks payable to: Washington Daffodil Society. Please send registration fee, plus fees for breakfasts and refresher course to: Dr. Adrienne Whyte, 6704 West Falls Way, Falls Church, VA 22046

HOTEL RESERVATION REQUEST

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THE DAFFODIL SOCIETY

was established in Britain in 1898 to cater for the needs of all daffodil enthusiasts and now has members in all the countries where daffodils are grown seriously.

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COLOUR CODING DOUBLE DAFFODILS

THE ROYAL HORTICULTURAL SOCIETY

In June 1987 the Royal Horticultural Society, as International Registration Authority for the genus *Narcissus*, accepted a recommendation of the Narcissus Classification Advisory Committee that the way of colour coding double daffodils should be changed.

Until now the rule has been to record the colours of any extra rows of perianth segments after the hyphen in the code, together with the colour(s) of the corona or segments of the corona. In future the colour of the extra perianth segments will be subsumed under the colour of the perianth and shown before the hyphen while the colour(s) only of the corona will be shown after the hyphen. Petaloid stamens will not be colour coded; they will be noted in the description.

Whether the parts of a double daffodil are extra perianth segments, segments of the corona or petaloid stamens is sometimes difficult to tell. In most cases, however, where a flower contains more than one colour, that of the outermost segments may be given for the perianth and for any extra perianth segments while the other colour may be given for the corona or the segments of the corona. In concolorous flowers the question need not arise, for perianth, corona and extra segments will all call for the same code letter, e.g. W-W.

Multiple letters after the hyphen (e.g. W-WWY) will in doubles as in other daffodils show that there is more than one colour from base to rim of the corona or the segments of the corona.

A number of double daffodils have already been listed in this way by the American Daffodil Society and others—Debenture and Extravaganza, for example, are registered at the RHS as W-PWP but known to the Americans as W-P; Solidarity is registered as W-WY but otherwise known as W-Y.

Registrations will be coded in the new way from 1987/88. Applications to alter existing registrations to bring them into line should be made on forms available from the following sources:

The International Registrar, Mrs. Sally Kington
RHS, Vincent Square, London SW1P 2PE, UK

The National Registrar, Ing. J. R. Stuurman
KAVB, Postbus 175, 2180 Hillegom, Parklaan 5, NETHERLANDS

The National Registra, Mrs. K. B. Anderson
4810 Palm Drive, La Canada, Ca. 91011, USA

The National Registrar, Mr. Max Hamilton
Boyd Road, RD1, Hamilton, NEW ZEALAND

The President, The Australian Daffodil Society, Mr. F. R. Coles
29 Glenburnie Road, Mitcham, Victoria 3132, AUSTRALIA

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13. Mitsch-Havens New Cultivars
14. Today's Seedlings—Tomorrow's Daffodils (Mitsch-Havens)

Slide rental $7.50 per set to ADS members, $15.00, non-members. Confirm dates well in advance. Address all correspondence concerning slides to:
~~Mrs. Kelly Shryoc, 2933 Owenwood Drive, Fort Worth, TX 76109 (Tel. 817-923-2513)~~

Membership application forms. No charge.

ITEMS FOR SALE

Daffodil Pin (tie back, pin back, or ring back)	$10.00
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The Daffodil Handbook, 1966 ..... Paper Cover	4.50
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Dr. Throckmorton's Stud Book	75.00
~~Set of at least 25~~ numbers of Daffodil Journal (no choice)	12.00
Single copies of Daffodil Journal	3.00
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ADS Approved List of Miniatures, 1987	two ~~22~~ 25-cent stamps each.
Show Entry Cards - Large - 500 for $20.00; 1000 for $30.00	
Miniature - 500 for $15.00; 1000 for $20.00	
Daffodils in Ireland	$5.00
RHS Yearbook, Daffodils, 1980-81, 1982-83	5.00
RHS Yearbook, Daffodils, 1986-87	6.00
RHS Yearbook, Daffodils, 1987-88	7.00
Older RHS Yearbooks on Daffodils, 1950, '53, '58, '60, '72-'79	Write for prices.

Prices subject to change without notice.

Add $1.00 for postage. Thanks Wendell

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.

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