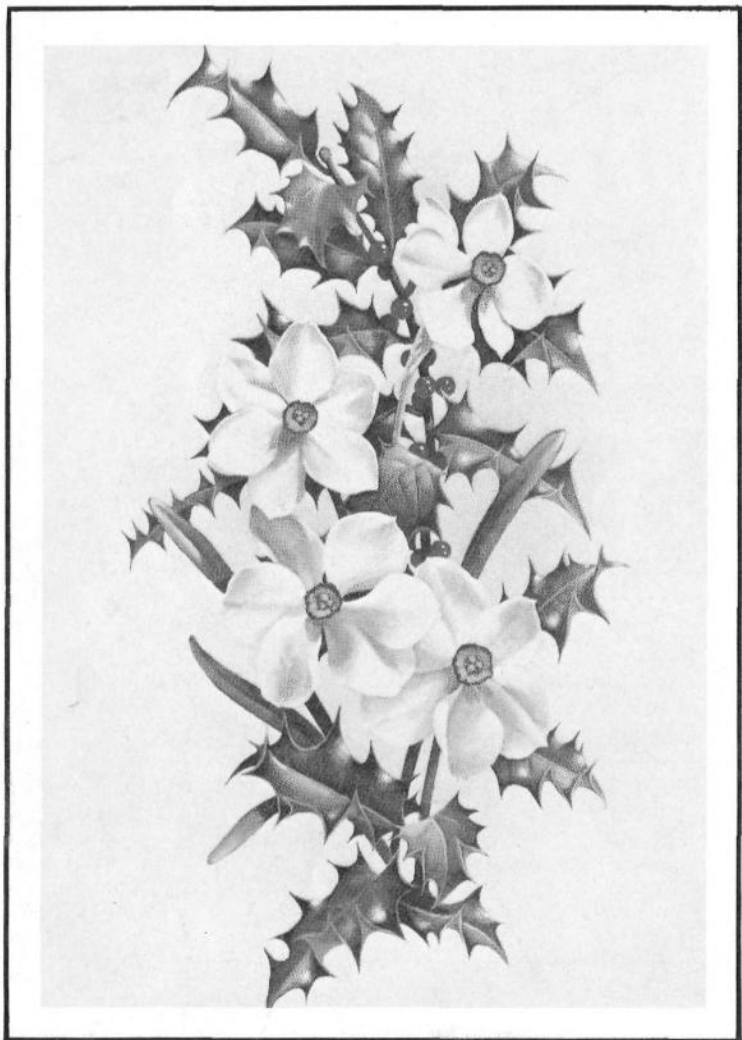


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The

DAFFODIL

JOURNAL



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AMERICAN DAFFODIL SOCIETY, INC.

The Daffodil Journal

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Vol. 17

DECEMBER 1980

Number 2

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

DEADLINE FOR THE NEXT ISSUE IS JANUARY 5, 1981

SCHEDULE OF MEMBERSHIP DUES IN THE AMERICAN DAFFODIL SOCIETY

Individual	\$7.50 a year or \$20.00 for three years
(Juniors, through 18 years of age, \$3.00 a year)	
Family	\$10.00 a year for husband and wife,
with one copy of the Journal, or \$27.50 for three years.	
Individual Sustaining Member	\$10.00 a year
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THE COVER PHOTO

is a reproduction of a Christmas card received several years ago by the editor. The designer is Marian Heath, Sudbury, Massachusetts.

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AMERICAN DAFFODIL SOCIETY SYMPOSIUM FOR 1980

JANE MOORE, *Poquoson, Virginia*

Several members have asked if the symposium is only for show flowers. Theoretically it is not, but actually it is biased since a large percentage of the reporters grow to show. Readers should remember that this is a report of a very small portion of the membership and is not indicative of the garden flowers grown by the membership as a whole. For the 1979 report I asked for eighteen cultivars which performed best for each reporter. I realize now that interpretation of my request may not have been what I intended since, by performance, I meant in the garden rather than on the show bench. However, I think the results are what I intended and we have twenty cultivars which will grow well in the average garden and many of them will produce show flowers. This year I asked reporters for their comments on the 1979 recommendations. The majority of adverse remarks were faulting the flowers as show blooms. There are other comments that substantiate the fact that certain cultivars do not do as well in some localities as in others. There was a comment about the cost of one bulb on the list but in general only one cultivar had enough adverse comments for me to mention it. The disagreement was with *Jetfire* and the comments were that the cup is usually "splotchy" or streaked. Even though I couldn't pinpoint it, it could be a regional thing or a weather fault as again this year there were a number of recommendations for *Jetfire*.

For the 1980 symposium I requested *cultivars which consistently perform well and brought the most pleasure this year*. I hope that next year I can remember to add "in the garden." I do believe, from most of the answers, that the reporters knew what I wanted. I dislike not telling you all of the excellent comments, but if the report is too repetitious it will not serve its purpose; so I shall just list the cultivars that were named anywhere in the report last year and print the comments on some different cultivars. There were a number of positive comments for Festivity, Daydream, Chapeau, Ivy League, Jetfire, Oregon Gold, Bethany, Canisp, Misty Glen, Angel Eyes, Bell Song, Purbeck, Eland, Rameses, Arctic Gold, and Suede all of which were in one of the two lists last year. Additions, with comments, are

Rainbow (Richardson) 2W-WWP 1961 — not as colorful as some of the newer pinks but excellent flower; show flower; excellent color and form; iridescent; uniformity usually prevails on blooms in garden.

Falstaff (Richardson) 2Y-R 1965 — wonderful color; superb constitution.

Gay Song (Richardson) 4W-W 1968 — not everyone's favorite; great for bouquets; huge flowers on tall strong stems and it does win ribbons, too.

Shining Light (Board) 2Y-ORR 1965 — beautiful clean color in both perianth and cup; beautiful contrast, perfect form, healthy and long-lasting; good increaser, strong foliage; always consistent; fairly sunproof; for show and garden.

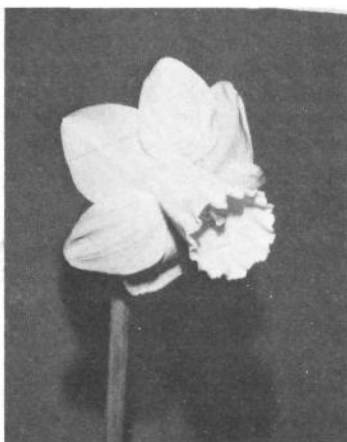
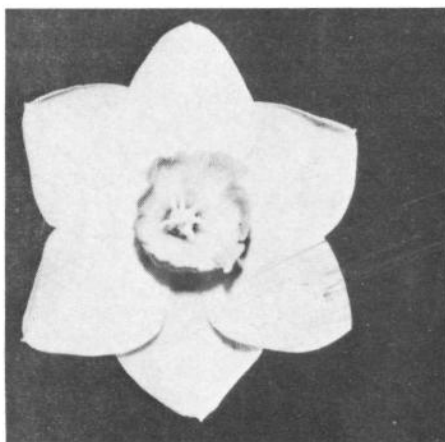
Accent (Mitsch) 2W-P 1960 — good color and lasts a long time; excellent garden flower.

Leonaine (Mitsch) 2W-P 1959 — makes a marvelous clump in garden, giving good, pink color; small flower, lovely shape; good substance; very strong cultivar capable of winning ribbons.

Strines (Board) 2Y-Y 1965 — so very dependable in all respects.

Pipit (Mitsch) 7Y-W 1963 — vigorous, consistent, good color contrast; many scapes with three florets; excellent increaser; for show as well as garden.

Chiloquin (Mitsch) 1Y-W 1968 — beautiful reverse; consistent bloomer, sends up secondary blooms which are prize winning; "if only one reverse in the garden it would have to be Chiloquin."



Left, Shining Light; right, Chiloquin (Gripshover photos)

Precedent (Mitsch) 2W-YPP 1960 — each flower perfect; strong, tall stems; perfect texture; outstanding color, nice size; good show flower, especially for collections.

Peeping Tom (P. D. Williams) 6Y-Y 1948 — always first sign of spring; long-lasting, apparently disease free, multiplies at a reasonable rate; blooms last very long in the garden.

Inverpolly (Lea) 2W-W — strong grower; very white, pure and chaste; great substance and form; blooms late and takes time to fully develop.

Cultivars introduced since 1970 which are doing well for our reporters are listed alphabetically.

Apostle (Pannill) 1W-Y 1978 — beautiful bicolor with excellent show qualities.

Arach Inverse (Mitsch) 2W-GWY 1977 — smooth overlapping perianth; reverses according to color code.

Arndilly (Lea) 2W-R 1972 — a Lea red and white with very white perianth making the crown appear even redder; does well in the garden as well as at the show.

At Dawning (Mitsch) 1W-P 1975 — color is pure pink which doesn't fade in sun; every bloom perfect; healthy and multiplies well.

Avalon (Richardson) 2Y-W 1977 — good size and perfect form; a true reverse bicolor.

Balvenie (Lea) 2W-GPP 1976 — clean, neat white perianth; lovely, delicate pink cup, deeper at the edge with beautiful green eye; slow to increase.

Bee Mabley (Fitzwater) 3W-YYO 1973 — a beautiful flower; tall stems; large, stiff, flat perianth glistens; classic in form and interesting in character; a standout in a crowded class.

Bold Lad (Richardson) 2Y-O 1974 — takes several years to settle then is a sight to behold! Silky smooth, flat perianth; neat crown is virtually sun-proof; bloom takes several days in garden to reach good size.

Bonus (Mitsch) 6Y-Y 1972 — early bloomer with good form and color.

Buckskin (Evans) 2Y-Y 1973 — a later blooming flower with good form and substance; pale lemon color; increases well; excellent garden flower.

Cairngorm (Richardson) 2Y-WPP 1976 — a very lovely flower with a crown that turns rather buffy in color (definitely NOT pink) as it ages; multiplies rapidly and is long-lasting in the garden; most floriferous sending up blooms over a period of time.

Capitol Hill (Lea) 2Y-Y 1980 — good daffodil for collections; great form and substance; rim of cup is orange. (Reporter stated that Lea lists it 2Y-Y and RHS lists it 2Y-R)

Chelan (Evans) 2Y-W 1975 — ideal form, reverses beautifully and increases well; a late blooming show flower.

Coho (Evans) 1W-W 1974 — excellent *white*, *white* trumpet blooming a bit later than Queenscourt.

Cold Overton (Noton) 2W-W 1976 — beautiful white with lovely green eye; good substance.

Como (Gourlay) 9W-GYR 1973 — very round perianth, strong colors in cup, tall stems — everything that's expected of a good poet.

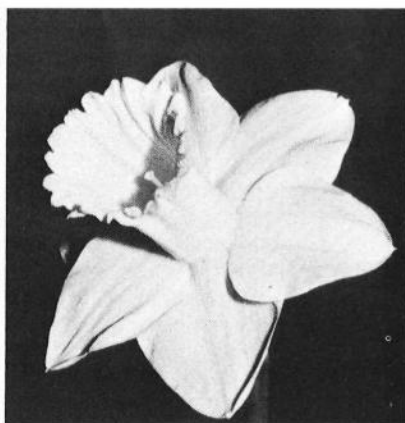
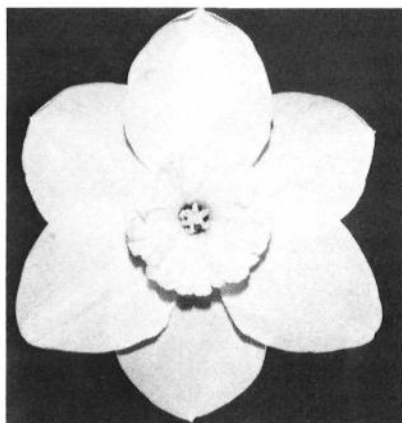
Coral Light (Kanouse) 2W-WWP 1972 — show quality in every respect; *strong* pink edge on cup.



Left, Balvenie; right, Crenelet (Knierim photos)

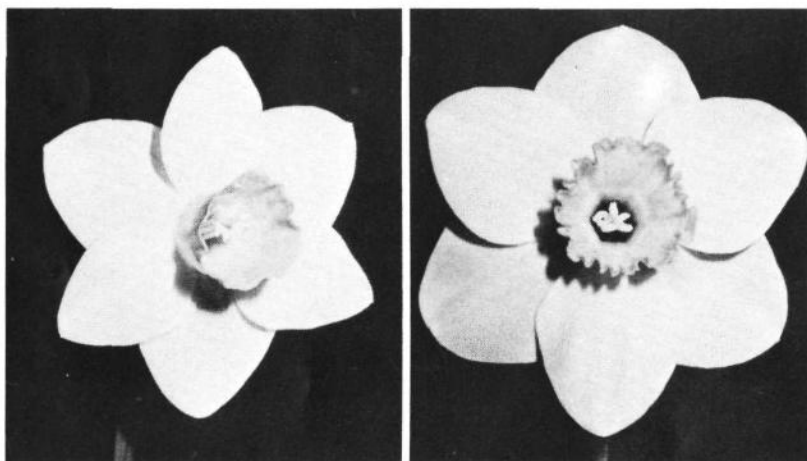
- Crenelet (Duncan) 2W-W 1977 — enormously broad perianth which is flat and requires no grooming; opens without a nick even though cup is cut and fringed; a good increaser which shows no inclination to rot.
- Delegate (Fowlds) 6W-Y 1971 — attractive flower with good form.
- Elegant Lady (Robertson) 1W-Y 1980 — large, classic bicolor that “stops the viewer in his tracks;” strong and apparently healthy; truly elegant.
- Executive (Mitsch) 2Y-Y 1972 — so precise, so straight, such a beautiful “goldy” yellow; very smooth and long lasting.
- Fastidious (Mitsch) 2W-W 1971 — clear white, good form and substance.
- First Formal (Throckmorton) 3W-YWP 1974 — a remarkable, very large bloom, every one seeming to be perfect, quite long lasting and extremely tall; the small, crystalline white cup with greenish eye and pearlescent hues vary through pink and gray, ultimately becoming white.
- Fruit Cup (Morrill) 7W-Y 1977 — it flourishes; three florets to a stem with apricot peachy cups and a most delightful fragrance.
- Gin and Lime (Carncairn) 1Y-GWW 1973 — good form and substance; reverses well.
- Glad Day (Mitsch) 2Y-O 1974 — a standout in the garden because of its attractive color.
- Golden Amber (Ballydorn) 2Y-ORR 1975 — unusual color combination, hot color in the cup with a “buffiness” in the perianth.
- Golden Wings (Ballydorn) 6Y-Y 1977 — large golden flower; late bloomer; good substance; lasts in the garden.
- Heat Haze (Carncairn) 2Y-R 1979 — unbelievable substance even in hot weather; good form.
- High Note (Mitsch) 7Y-W 1974 — good form, texture, and substance and it reverses beautifully.
- High Repute (Mitsch) 2W-P 1975 — a spectacular flower; huge and colorful.

- Ibberton (Blanchard) 3W-YYO 1974 — striking color; show flower in every respect.
- Irish Light (Richardson) 2Y-R 1972 — marvelous color; large flowers with tall strong stems; great substance; healthy.
- Lancaster (Ballydorn) 3W-GYO 1977 — sturdy blooms with much substance; nice round perianth; cup has deep orange rim and deep green eye.
- Limey Circle (Robertson) 3W-WWY 1980 — round overlapping perianth, graceful, not stiff; lots of green in the cup.
- Loch Lundie (Lea) 2Y-R 1978 — thick almost waxy substance; clean, bright glistening sheen.
- Loch Owskeich (Lea) 2Y-O 1971 — superb, smooth flower; good form and nice contrast.
- Lucy Jane (Link) 9W-GYR 1975 — resembles Sea Green but has better form; flat overlapping perianth, thick heavy substance, smooth texture with sheen, rather short neck and strong stiff stem. Very scarce variety; well worth using for hybridizing.
- Lyric (Duncan) 9W-GYR 1977 — elegant, refined flower; spicy sweet fragrance; corona is a flat disc.
- Northern Sceptre (Ballydorn) 2W-YYR 1975 — “eye-stopper” in a show; lasts well in garden and is a good increaser.
- Nutmeg (Evans) 2W-Y 1976 — beautiful in all stages of development, marvelous substance and perfect form.
- Odyssey (Pannill) 4W-WYY 1978 — smooth and petals are not too crowded; soft and pleasing; good double.
- Park Springs (Abel Smith) 3W-WWY 1972 — demure in color it approaches perfection in form; good substance.
- Patrician (Mitsch) 2Y-Y 1974 — very consistent from year to year and multiplies almost out of control; blooms quite early and most of the flowers are perfect.
- Pet Finch (Jefferson-Brown) 7Y-O 1975 — is a “glorious” daffodil; its deep golden perianth sets it apart from others in its class.



Left, First Formal (Gripshover photo); right, Gin and Lime (Knierim photo)

- Phantom (Mitsch) 11W-P 1975 — good quality white perianth; soft clear pink corona splits and lays flat against the perianth segments; attractive flower for arrangements as well as show.
- Phebe (Link) 9W-GYO 1975 — blooms stand above foliage on strong stems; good increaser and sweet scented; has good characteristics of its parents, Sidelight and Sea Green.
- Picnic (Evans) 2W-Y 1976 — is just as nice and reliable as its sister, Nutmeg.
- Pink Flare (Evans) 2W-P 1976 — pure white perianth; smooth heavy texture and good pose; corona retains its pink color many days.
- Pink Wing (Evans) 2W-P 1979 — healthy and lovely.
- Première (Duncan) 2W-GPP 1973 — excellent form; good increaser; pink coloring varies from year to year but is worth growing for its good form.
- Pure Joy (Mitsch) 2W-Y 1971 — lovely smooth bloom with tremendous substance; quite round flowers appear smooth as glass and show table perfect; nice contrast; lasts in garden at least two weeks; slow to multiply.



Left, Première; right, pure Joy (Knierim photos)

- Quail (Mitsch) 7Y-Y 1974 — multiplies rapidly and blooms vigorously; one of the first daffodils to open and among the last to fade.
- Rim Ride (Pannill) 3W-GYO 1976 — a pert Division 3 flower with good cup color that stands out; good form as well as graceful.
- River Queen (Pannill) 2W-W 1977 — beautiful flower in all respects; only fault is that it increases slowly.
- Rufford (Abel Smith) 2W-P 1975 — petals are broad and flat; very large pink cup.
- Safari (Richardson) 2Y-O 1972 — a very consistent cultivar; all blooms are good and quite large; cup is sunproof.

- Seraph (Mitsch) 9W-GYR 1976 — very rounded, perfectly formed, overlapping white perianth; very green eye, yellow band and broad orange/red rim; will be strong competition for Angel Eyes.
- Surtsey (Evans) 2Y-R 1972 — thick substance, brilliant cup color.
- Sweet Prince (Evans) 1YW-WWY 1978 — good gold color; when fully developed it has a white halo at the base of the trumpet; holds up well in rain and wind; increases well.
- Tyneham (Blanchard) 3W-R 1974 — large round flower; good overlap of the petals; thick substance and clear color.
- Valediction (Richardson) 3W-GWW 1976 — pure white flower with a beautiful green eye; a smooth flower with good form; a show winner.
- Vocation (Duncan) 2W-P 1976 — valued for its deep pink cup color which it retains until the flower dies, it has breeding possibilities; a sister to Crenelet.
- Water Music (Havens) 2Y-W 1975 — holds its substance very well and still reverses; increases well; lasts in the garden.
- Wedding Band (Throckmorton) 3Y-WWY 1977 — each bloom appears as if mechanically fashioned for perfection; when first open perianth is a glistening crystalline white and the cup has a greenish eye, a pale mid-zone and a golden rim; a perfectly round flower; the perianth gradually tones to yellow and the cup becomes dead white except the rim which remains yellow and appears the same shade as the perianth; a true reverse bicolor Division 3 flower.
- White Charm (O'More) 2W-W 1971 — beautiful white flower with good substance; a show winner.
- White Phantom (Carnairn) 1W-W 1975 — a good white trumpet with a glistening diamond-dust luster.
- Wind Song (Throckmorton) 2Y-YYP 1974 — may be the perfect "toned" daffodil; it begins life with a pure white perianth and golden cup; within a very few days the perianth is a beautiful moonlight-yellow tone and the cup pales somewhat and develops a cinnamon-pink rim; entirely healthy; grows well and multiplies at least at the usual rate.

A GOLDEN ANNIVERSARY EXHIBIT

MARIE BOZIEVICH, *Bethesda, Maryland*

Last spring I received a letter inviting the ADS to place an exhibit in a Golden Anniversary Exhibition of the National Council of State Garden Clubs to be held September 12 in Washington, D.C. The exhibits were to illustrate significant projects. I felt that Dr. Throckmorton's Daffodil Data Bank and Color-Coding were indeed significant projects and started thinking about ways to document them. I could make posters, of course, but I wanted to do something more dramatic, so decided to try to arrange for Phil Phillips to ship some flowers from New Zealand.

When I talked to Phil at Memphis he was enthusiastic about the project and we set to work to try to arrange a foolproof plan. The main obstacle, time-wise, would be the Quarantine Service inspection of the flowers on arrival in the United States. The spokesman for the Quarantine Service here in Washington told me that things would be expedited if I had an agent in Los

Angeles handle it there. So I called Marilyn Howe and asked her to act as my agent. (In addition to the fact that she is a very competent and devoted ADS member, I didn't see how any cargo agent or inspector could resist her smile.) She generously accepted the assignment to alert the Quarantine Service there, to see that the package went through Quarantine and Customs without undue delay, and to be sure they were placed on the continuing flight from Los Angeles to Washington, D. C. We knew we would have to arrange for an inspector to stay overtime, because all flights from New Zealand arrived after normal working hours.

Phil and I had letters flying back and forth and thought we had everything under control, when on September 1st, the flight we were planning to use from New Zealand was cancelled. Finally, after more letters and plan adjustments, all was arranged.

In the meantime, I had prepared three illustrated posters telling the story of the Data Bank, the RHS Classification System and Color-Coding. To display the flowers I borrowed vases from the Washington Daffodil Society and a set of wooden stepped shelves from the National Arboretum which I covered with pale green cloth.

"D-Day" arrived! Phil had cut, packed, and dispatched the flowers two days before; Marilyn had shepherded them through Los Angeles the evening before, and they were scheduled to arrive at Dulles Airport early in the morning. But— I listened in disbelief as the cargo agent told me that he did not have the package, or even a waybill for it, and it wasn't "on the computer." At my insistence that the flowers had been on the flight, they instituted a search for them and three hours later discovered that they had been put on a truck at plane-side and sent to National Airport. The truck had broken down in between the two airports. I hastened to National to pick them up and at noon the package was finally in my hands.

At home I unpacked the flowers, cut the stems, put them in tepid water with a bit of sugar (as Phil had instructed) and gave them a few hours in a cool, dark room to recover from their ordeal. That evening Mary Pamplin, an ADS member from nearby Virginia, and I staged the daffodils in vases and labeled them. I sprayed their faces and put the vases on wet newspapers in our cool garage for the night.

Next morning my daughter and I set up the exhibit in the ballroom of the Pan-American (O.A.S.) Building. It is an elegant room with white paneling and gold and crystal chandeliers. As we worked, people were crowding around, asking questions about the flowers and even reading the posters! I placed a *Data Bank Print-Out* and a copy of *Daffodils to Show and Grow* on the table and there was real interest in them. That evening, at the Champagne Reception, our exhibit was the conversation piece, and I felt that everything had been worth-while!

ADVERTISING RATES

Advertising rates for the *Journal* are as follows: full inside page, \$75.00; one-half page, \$45.00; one-quarter page, \$30.00. For additional information, write the Chairman of Publications, Mrs. Robert Cartwright.

BULLETIN BOARD

CALL OF THE ANNUAL MEETING

The annual meeting of the American Daffodil Society, Incorporated, will be held on Friday, March 27, 1981, at Del Webb's Newporter Inn, Newport Beach, California, for the following purposes:

- 1) for the election of officers and directors as provided by the By-Laws
- 2) to take action and transact any other business which may properly and lawfully come before the meeting.

By order of the Board of Directors
Kathryn S. Andersen, Secretary

ADS GOLD AND SILVER MEDALS

Members are reminded that nominations—in triplicate—for the ADS Gold and Silver Medals may be made by any member of the Society, and seconded by another member. All nominations should be submitted to the president, who serves as chairman without vote of the Honors Committee, not less than thirty days before the annual meeting at which it is proposed the award be made.

The Gold Medal is for "recognition of creative work of a pre-eminent nature in the understanding and advancement of daffodils," while the Silver Medal is "to recognize outstanding service to the Society."

The three immediate past presidents, Charles Anthony, William O. Ticknor, and William Roesé, make up the Honors Committee.

Previous winners of the medals are:

DATE	GOLD MEDAL	SILVER MEDAL
1959	Dr. E. van Slogteren, Holland	—
1960	B. Y. Morrison	—
1961	Dr. John C. Wister	—
1962	Judge Carey Quinn	Mrs. Lawrence R. Wharton
1963	Dr. Abilio Fernandes, Portugal	Mrs. Goethe Link
1964	—	George Lee
1965	Grant E. Mitsch	Willis Wheeler
1966	Alec Gray, England	Laura Lee Cox
1967	—	Kitty Bloomer
1968	—	Harry Tuggle
1969	—	—
1970	—	Wells Knierim
1971	—	—
1972	Matthew Fowlds	Roberta Watrous
1973	—	John Larus
1974	—	—
1975	Murray Evans	Polly Anderson
1976	Matthew Zandbergen, Holland	Bill Pannill
1977	Helen Richardson, Ireland	Tom Throckmorton
1978	—	—
1979	—	—
1980	Tom Throckmorton	Marie Bozievich

ATTENTION, BOARD MEMBERS

Board members are reminded to submit their comments on the proposed handbook revisions without delay to Chuck Anthony or Marie Bozievich so that action may be taken at the March Board Meeting.

ATTENTION, JUDGES

As discussed at the fall Board meeting, judges are reminded that candidates for the Rose and Miniature Rose Ribbons may be brought up from any class in the show, whether the bloom was recipient of a ribbon or not. All that is required is that the bloom score 90 points on the ADS scale. It is possible for a bloom to score 90 and still not win a ribbon in classes where the competition is extremely stiff. Be aware of good seedlings as you judge the various classes.

WHERE CAN I GET . . . ?

CULTIVAR:

Perky 6 W-Y

Cristobal 1 W-Y

DESIRED BY:

Malcolm Bradbury

The Wall House, 38 Powers Hall End
Witham, Sussex, England

COLOR CODE CHANGES — 1980

Foxfire	from 2 W-GWP	to 2 W-GWO
Fiery Flame	from 2 Y-R	to 2 O-R
Exalted	from 2 Y-R	to 2 O-R
Rio Rouge	from 2 Y-R	to 2 O-R
Altruist	from 3 Y-R	to 3 O-R
Coppertone	from 3 Y-R	to 3 O-R
Cool Flame	from 2 W-R	to 2 W-P
Rubythroat	from 2 W-R	to 2 W-P
Magician	from 2 W-R	to 2 W-P
Cairngorm	from 2 Y-WWP	to 2 Y-W
Matador	from 8 Y-R	to 8 Y-GWO
Almira	from 9 W-YYR	to 9 W-YOR
Starfire	from 7 Y-R	to 7 Y-Y

Pidget should be 9 W-GYR.

Flower Drift is Division 4.

Miniature Changes are Flomay to 7 W-WPP and Gipsy Queen to 1 Y-WWY.

Bill Roesé says that the color code for La Paloma should be 3 W-GYR and not 3 W-GYP as given in his list.

Park Springs was coded 3 W-YYO. Should it be a 3 W-Y or 3 W-WWY? Revelation is coded 2 W-O but those in the East report it as 2 W-Y. Will those who grow these two cultivars please let me know how they grow for them as soon as possible after the 1981 season.

Again, may I express my thanks to all ADS members who write me regarding suggested color code changes. It is only with your help that I can do my job effectively.

—AMY COLE ANTHONY, *Classification Chairman*

JUDGING SCHOOLS

The Board of the American Daffodil Society has voted to require a refresher course for accredited judges every three years. No examinations will be required. This is effective with publication in the *Journal*. Some regional vice-presidents requested approval for courses immediately. Attendance at any one of the three courses in an approved judging school is acceptable. Courses may be held at national, regional, or state meetings of ADS and at some other society or club meetings with approval of the ADS Judging Schools Chairman. Requests for such approval and for approval of instructors should be received by the Judging Schools Chairman in time for publication in the *Journal* so that all ADS accredited judges may avail themselves of the opportunity for the refresher.

Student judges are reminded that Course III will be held in Richmond, Virginia, April 13, 1981, Mrs. Lester Belter, Chairman. Course II will be held in Chaska, Minnesota, in mid-May, 1981, Julius Wadekamper, Chairman. Course I will be held in Conway, Arkansas, on March 7, 1981, Mrs. Volta Anders, 1628 Maul Rd., N.W., Camden, Arkansas 71701, Chairman.

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

MINIATURE MATHEMATICS

Addition and subtraction: this is the time of year that the Approved List of Miniatures officially adds a few new names, and this year, one is subtracted. First, the subtraction. In the June issue of the *Journal* we gave notice that The Little Gentleman, 6 Y-Y, was being seriously considered for de-listing as an Approved Miniature. This is now a fact, which the new issue of *Daffodils to Show and Grow* will indicate. In other words, the H figure (height) for The Little Gentlemen, has been changed from 1 to 2.

To make up for this reduction in the list of miniatures, we are adding four new ones. Actually, one of these is really an old one, a Division 10 jonquil: *N. jonquilla henriquesii*. Why it hasn't been included on the Approved List before this is a mystery.

The other three additions are: Junior Miss, 6 W-W, introduced by Bill Pannill in 1977; Laura, 5 W-W, introduced by Lindsey Dettman in 1979; and Sir Echo, 1 Y-W, offered by Michael Jefferson-Brown. Although none of these is widely grown, all have been seen by a number of ADS members who recommend their addition to the Approved List.

We know that other candidates are in the offing, so we hope that miniature enthusiasts will be quick to acquire any small daffodils that are available, and try them out. The next step is to let the committee know the results of your testing. It would be helpful if you were to take pictures (slides, if possible), which should include some object to give an idea of the scale of the stem and the flower.

PEGGY MACNEALE, *Chairman, Committee on Miniatures*

Is your Post Office loafing on the job? Put 'em to work. Write to the Round Robin Chairman.

DAFFODIL HYBRIDIZERS: FALL IN! COUNT OFF!

A request has been submitted to the Chairman of Breeding & Selection ADS to compile a list of daffodil growers whose primary interest is in hybridizing together with their chief goals. The Hybridizers Round Robin serves very well as a forum for exchange of ideas but that often is more than six months in flight. Only a small percentage of hybridizers are served by the Robin so that compilation of a list of members who are growing daffodils from seed together with their degree of interest and field of interest may be a useful tool to facilitate exchange of ideas.

Strict interpretation of primary interest might almost limit the list to commercial growers. Also how many hybridizers start out with one specific goal and don't exploit serendipitous breaks?

To simplify organization the following level-of-interest categories are suggested:

1. Primary interest is hybridizing—do not show.
2. Primary interest is hybridizing—use 50% seedlings for breeding and show only to have flowers evaluated in competition.
3. Primary interest is big show competition—hybridize only to exploit best named varieties.
4. "Drunken bumble bee" still evaluating seedlings.

If you are a hybridizer and are interested in having such a list please send your name & address, level-of-interest category, fields of interest (standard and/or miniature) and goals toward which you are working to: Dr. W. A. Bender, 533 South 7th St., Chambersburg, PA 17201.

A "Dutch Treat" Hybridizers Breakfast has been planned for Friday morning of the California Convention, 1981. Subjects for discussion as time permits are listed: (1) Use and dissemination of list of hybridizers. (2) Establishment of Pollen Bank. (3) What can be done to salvage a hybridizer's life work after his or her death? Check the Hotel Bulletin Board for time and meeting room.

—W. A. BENDER

STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION

(Act of August 12, 1970; Section 3685, Title 39, United States Code.)

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—Mary Louise Gripshover

Like to increase your daffodil collection? Round Robin friends often share bulbs as well as thoughts. Join a Robin by writing to Richard Ezell, 1341 Lincoln Way East, Chambersburg PA 17201.

DAFFODILS — 1980

Copies of the Royal Horticultural Society's time-honored Yearbook, *Daffodils — 1980*, is on the high seas at the time of this writing. Like everything else from abroad its price has jumped and this year's edition sells for \$5.00. There will NOT be an automatic distribution and billing this year. When it arrives orders will promptly be filled. If you want it, send in your order now.

RHS Editor Elspeth Napier has produced a gem-packed edition. *Daffodils 1980* includes reports on shows in various countries and on the trials at Wisley. Plus: "Fifty Years of Split Corona" by J. P. Gerritsen, "Early Forcing of Narcissus Bulbs" by R. M. Millar, "Not According to Schedule" (points on why flowers are disqualified) by John Blanchard, "Endomycorrhizas and Root Hairs" by M. T. Chilvers and M. J. Daft, "Present-day Mass Production of Bulbs" by P. J. Wallace, "Murray Evans' Daffodils in the Oregon Hills" by Fr. A. Bucholz, "Daffodils at Barnard Castle" (north of England) by Wilson Stewart, a final report on the Wisley trial timing of cutting daffodils, and lots more.

—William O. Ticknor

DAFFODILS TO SHOW AND GROW — 1980

Our new "List" is waiting impatiently to be born and will be available at \$4.00 a copy to members sometime this fall. *Daffodils To Show and Grow*, 1980 edition, is similar in content to the first edition, but it will have a somewhat changed name, a new shape and size, a green cover, it will include all newly registered daffodils from 1977 to 1980, it will have a list of daffodil breeders and their country of origin, contributed by Mary Lou Gripshover, and a foreward written by H. A. (Tony) Kingdom, Chairman of the RHS Narcissus and Tulip Committee. Furthermore, it will be a joint publication of The American Daffodil Society and the Royal Horticultural Society.

For those of you who are not familiar with the first edition, *Daffodils to Show and Grow 1980* is a pocket sized, classified, descriptive list of over 5,000 daffodils. No daffodil judge can afford to be without it. Every daffodil exhibitor should have it, and it will be of value to every lover of daffodils. It is the result of the brilliance and energy of Dr. Tom Throckmorton of Des Moines, Iowa, combined with a great computer.

Orders and checks have been already received for more than 150 of these books. The books will be mailed out as soon as they are received from the printer in rotation to the receipt of order. The price is \$4.00 and checks should be made out to the American Daffodil Society and orders sent to the American Daffodil Society at Tyner, NC 27980.

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ROBIN FEATHERS

In several Robins there is concern about the increasing problem of the daffodil fly. With granular Chlordane gone and confusion over Dylox R (although recommended by the Department of Agriculture, no supplier seems ever to have heard of it, and regular Dylox—without the "R"—is mighty expensive) control of this pest may come down to chasing about one's planting with a butterfly net, as Phil Phillips recommends, or zapping the adult flies with wasp and hornet spray as Peggy Macneale does.

1981 SHOW DATES

The following are incomplete listings of the 1981 Daffodil Show Dates. If you desire your show listed in the March *Journal*, please forward the information needed to the Awards Chairman by January 1, 1981.

- March 14-15 - Fortuna, CA - Fortuna Garden Club at the Fortuna Monday Club, 610 Main St.; information: Mrs. Mary Lou Van Deventer, 366 Garland Ave., Fortuna, CA 95540.
- March 19-20 - Dallas, TX-Southwest Regional show by the Texas Daffodil Society at the Dallas Garden Center; information: Mrs. Royal A. Ferris, Jr., 4125 Turtle Creek, Dallas, TX 75219.
- March 26 - Newport Beach, CA - National Show at Del Webb's Newporter Inn, Newport Beach, CA; information: Jay Pengra, 954 St. Katherine Dr., Flintridge, CA 91011.
- March 28 - Mount Sequoia, AR - By the Arkansas Daffodil Society at the Methodist Assembly Grounds on Mount Sequoia, Arkansas; information: Mrs. Victor M. Watts, 1619 West Maple, Fayetteville, AR 72701
- April 4 - Paducah, KY - by the Kentucky Daffodil Society at the Paducah Open Air Market, 2nd and Washington Streets, Paducah, KY; information: Mrs. Richard Roof, 249 Cardinal Lane, Paducah, KY 42001.
- April 4-5 - Nashville, TN - by the Middle Tennessee Daffodil Society at Botanic Hall, Cheekwood, Nashville, TN; information: Mrs. Joe Talbot III, 6117 Bresslyn Rd., Nashville, TN 37205.
- April 4-5 - Hampton, VA - by the Tidewater Virginia Daffodil Society at the Holiday Inn (Coliseum) in Hampton, VA; information: Mr. H. A. Rountree, Jr., 276 Harris Creek Rd., Hampton, VA 23669.
- April 8-9 - Chapel Hill, NC - State Daffodil Show by the Chapel Hill Daffodil Society in the Totten Center, North Carolina Botanical Garden, Chapel Hill, NC; information: Mrs. W. C. Wiley, 412 Cameron Ave., Chapel Hill, NC 27514.
- April 10 - Scottsburg, IN - by the Indiana Daffodil Growers-South at the Presbyterian Church, Highway 56 & Washington Sts., information: Mrs. Verne Trueblood, RFD 3, Box 187-A, Scottsburg, IN 47170.
- April 11 - Princess Anne, MD - by the Somerset County Garden Club at the Peninsula Bank; information: Mrs. H. Parker Tull, Jr., 11 E. Main Street, Crisfield, MD 21817.
- April 18 - Carbondale, IL - Illinois State Show by the Southern Illinois Daffodil Society at Southern Illinois University; information: Mrs. Glen Sands, RR 2, Box 341, Lake Rd., Murphysboro, IL 62966.
- April 21-22 - Chambersburg, PA - Northeast Regional Show by the Chambersburg Daffodil Society at the Chambersburg Recreation Center, South Third St.; information: Mrs. William A. Nelling, 657 Philadelphia Ave., Chambersburg, PA 17201.
- April 22-23 - Downingtown, PA - by the Woman's Club of Downingtown at the Woman's Club Clubhouse, Manor Ave.; information: Mrs. James C. Patterson, 130 Woodland Circle, Downingtown, PA 19335.

- April 22-23 - Baltimore, MD - by the Maryland Daffodil Society at the Brown Memorial Church, North Charles St.; information: Mrs. Frederick Viele, 237 Cooley Mill Rd., Havre de Grace, MD 21078.
- April 23 - Indianapolis, IN - State Show by the Indiana Daffodil Society at the Meridian Street United Methodist Church, 5500 North Meridian St.; information: Mrs. Robert H. Brunner, 610 College Lane, Indianapolis, IN 46240.
- April 24 - Wilmington Del. - by the Delaware Daffodil Society at the St. Albans Episcopal Church, 913 Wilson Rd.; information: W. R. MacKinney, 553 Woodhaven Rd., West Chester PA 19380.
- April 25-26 - Columbus, Ohio - State Show by the Central Ohio Daffodil Society at Upper Arlington Municipal Services Bldg., 3200 Tremont Rd.; information: Mrs. Hubert Bourne, 1052 Shadyhill, Columbus, Ohio 43221.
- May 9-10 - Chaska, MN - Daffodil Society of Minnesota at the Minnesota Landscape Arboretum, 3675 Arboretum Dr., Chaska, MN; information: Michael L. Heger, Route 1, Box 64, Waconia, MN 55387.

OTHER 1981 SHOW DATES

- April 11 - 12 - Gloucester, Virginia
- April 1-2 - Suffolk, VA - by the Garden Club of Virginia at the Nansemond River Academy; information: Mrs. Thomas J. O'Connor, 1020 Maryland Ave., Suffolk, VA 23434. (Not an ADS show.)

Matthew Zandbergen wrote on September 9, 1980: "By the way, Suzy produced another 'gel,' Marlot, the other day. So she made me Granddad once again!" We all know Suzy, for whom he named the red/yellow jonquil hybrid, and are awaiting the miniature Little Suzy he plans to introduce when there is sufficient stock. That one will be named for Suzy's first daughter. Now perhaps we can look forward to introduction of a daffodil Marlot!

—MEG YERGER, *Princess Anne, Maryland*

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How do others do it? Find out. Join a Round Robin.

SPRING SHOW IN BRADNER—BULB GROWING CAPITAL OF CANADA

DIANA R. SHEPPARD, *Mt. Lehman, British Columbia*

There is a treat in store for those who will visit the Spring Flower Show of the Bradner and District Horticultural and Bulb Growers Association to be held on Saturday, April 27, in the community hall, Bradner. . . .Come and see for yourselves that Solomon in all his glory could not be arrayed like one of these. . . .Come and see the many sterling varieties that you will like to deck your garden with, not to replace existing old varieties, but to give them better companions. . . .Come and see what we are striving to accomplish in the way of building up a new industry for this section of the Fraser Valley. We believe that our land is second to none for the production of first class bulbs. . . .This exhibition is one way in which the eyes of those interested can be focused on our district.

Fenwick Fatkin

Abbotsford, Sumas and Matsqui News

April 17, 1929

This was the vision of a few pioneers of the flower growing industry at Bradner, a rural community, 38 miles east of Vancouver, British Columbia, Canada. Bradner consisted of little more than a general store, post office, school, a few ambitious farmers and a railroad station (the main link with the city). The store and post office remain, the school has grown, the area is less rural, but the ambitious farmers remain, linked to the city not by rail but by first quality roads. About 150 acres in the community are devoted to narcissus culture today.

Beginning in 1928 as a small one-day parlor show, the Bradner Flower Show has been staged ever since, except for a few "war years," growing to today's major three day attraction. In recent years people from many parts of Canada, U.S.A., and Europe have been known to attend. Many drive from Vancouver solely to see the show. As many as thirteen tour buses may arrive each day.

In early years judging of entries was held and prizes were awarded, but was discontinued in the early 1940s. Today all entries are exhibition, in a spirit of friendship, with no single exhibitor receiving special recognition for his blooms. This unique show is believed to be the only noncompetitive exposition of narcissus in the world. As in the beginning, members of the community unite to organize the best show possible.

From the beginning floral art exhibits have been encouraged. Some of the community's talented Japanese ladies present the beautiful traditional designs of their ancestors. Even bonsai trees have been worked into these exhibits. Some have arranged house plants and spring shrubbery. At times school children have been asked to participate. Each year's show presents a theme featuring a large central production and supporting exhibits. A few past themes have been "Year of the Child" (1979), "U.S.A. Independence Bicentennial" (1976), "Canada Confederation Centennial" (1967). Other national and local anniversaries and celebrations as well as Easter have been presented. Although exhibits of the many cultivars and floral arts are presented by individuals, the central theme is a joint community effort.

"Spring Glory" filled the hall April 11, 12, 13, 1980, when some 400 cultivars of narcissus—some unnamed seedlings of local hybridizers—beckoned 8,200 people (about average attendance) in for a little visit. A large sign made of daffodil heads welcomed the visitor as he approached the front door. Upon entering he saw to his right a lovely display of dried floral art. Some flowers in these center pieces and framed works were last year's daffodils and Pacific dogwood. Before him Snow White's dwarf friends lazed beside their cabin on a large central revolving carousel. To his left an Indian family camped in a field of miniature daffodils, while in a third corner elves skipped among azaleas beside a waterfall and babbling brook. He saw the tiered shelves around the outside walls and the few tiered tables on the floor. These held the familiar old-timers and exotic newcomers. On the ends of these tables and on the walls, art works of the school children portrayed their conceptions of narcissus, hyacinths, and tulips.

The show, being a community effort, helps support many community projects. A small door admission is charged, cut blooms are sold, and a tea room is operated. All labor is voluntarily donated. Today the show is staged by the Bradner Community Club in the "new" hall they built in 1960. This building is used by Girl Guides and Boy Scouts, and the Bradner Parent Teachers Association. It is also used for political rallies, wedding receptions, Victoria Day, and other community celebrations. The community club maintains an adjacent four acre sports field and supports lacrosse, soccer, and softball teams. Proceeds from flowers sold at the show are used by the ladies auxilliary for buying of much needed equipment for our municipal general hospital.



A display of dried floral art, incorporating daffodils (Sheppard photo)

THE TAZETTAS

HELEN K. LINK, *Brooklyn, Indiana*

As an introduction I would like to point out that I am going to deal with the tazetta species first, then the wild hybrids, tazetta hybrids, and lastly the poetaz. Our tazettas of garden origin are mostly poetaz, although they have tazetta characteristics.

HISTORY

The species tazetta is the widest spread and most variable of all daffodil species. They extend from Spain and France in an almost unbroken line through Portugal and the Mediterranean regions of Southern Europe and North Africa, to Syria, Asia Minor, Persia and Kashmir, and even as far as China and Japan. Naturally with such a range local varieties occur, differing in size and shape. (1)

In 1753 Linnaeus described the species tazetta as a "spatha multiflora, nectario campanulato, foliis planis" meaning multiflowered spathe, campanulate nectary (cup), foliage flat. (2) This terse description was sufficient for his purpose of pointing out the distinctions between the six plants which he considered the only species of the genus. The many flowered spathe divided tazetta and jonquilla from the others, because Linnaeus was unaware of the occasional occurrence of more than one flower in *N. serotinus* while the flat leaves of the tazetta contrasted with the awl-shaped leaves of jonquilla. This is characteristic of Linnaeus's methods as a lumper, and did not arise from a lack of knowledge of the many forms cultivated in Holland. In botanical terms the lumpers were those botanists who placed plants with the same general characteristics together in a group while splitters were very picky and went almost to extremes to divide plants of like kind into separate divisions because of some very small color or form difference. This brings to mind our modern day controversy over our present classification, which is the result of the work of both splitters and lumpers. The splitters are determined that color which is very unstable is of utmost importance while various length of cups are lumped together in some divisions. In another hundred years perhaps there will be other problems, all brought about by the whims of some well-intentioned daffodil buffs.

In 1753 Linnaeus was working in Dr. Georg Clifford's garden near Haarlem when he wrote of *N. tazetta*: "It varies in the size of flowers, in color, being white or yellow of nectary (cup) or petals or both, in varying doubleness, the size or shape of the cup and the number of flowers from each spathe."

In contrast to the thoughts of Linnaeus, let's look at what Burbidge said: "This plant has been irreverently styled the 'dustbin' or 'scapegoat' of the genus on account of its variability." (2)

In 1812 Salisbury invented the genus *Hermione* without distinguishing characters. He made it include as species *N. jonquilla*, *juncifolius*, *intermedius*, *schizanthus*, \times *tenuior*, and six others which are the only ones we now class as tazetta forms. These are Scilly White, *italicus*, *papyraceus*, Soleil d'Or, Grand Monarque, and Bazelman Major. (2)

Then Haworth came along and adopted the name *Hermione* and supplied generic characters, but of such a nature that Herbert declared they were founded on trivial features in some cases unfit even to support a specific

distinction. Since Haworth was a splitter he furnished the genus with fifty-four species, many of which were no more than garden forms. He did a good service in spite of the splitting for he arranged them into three sections according to their coloring. Herbert placed more stress on the length of the tube (cup) in relation to the perianth segments. That brought together plants too divergent in color and general appearance to seem naturally grouped. (2)

In 1875 J. G. Baker came up with a classification which was published in the *Handbook of Amaryllideae*; it was simple and convenient. He gave three series according to coloration (2):

Series I: Tazettinae bicolores, perianth white, corona yellow. The series was further divided into Section a, corona orange, and Section b, corona pale yellow.

Examples: Section a. *N. tazetta*, *N. Orientalis*, wild form
Section b. Grand Primo, quite variable.

Series II: Tazettinae albae, perianth and corona both white.

Examples: Baker lists *papyraceus* as the typical flower of this series. It is larger and possesses more vigor than any other of this class. The common name is Paper White, and it is extensively used for the cutting market. Since it is early it is usually the first to reach the cutting market. It is characterized by thin substance, and long narrow petals which form a starry perianth. In the wild it may be found growing at the base of Mt. Vesuvius.

N. pachybolbus, which grows in North Africa, is characterized by large bulbs and small flowers. It is not very elegant and is of more botanical interest than horticultural value. I first grew it for several years in the open ground with heavy mulch, but as Baker states, it comes up in early autumn and freezes back, thus no bloom. The past three years I have bloomed it beautifully in a cold greenhouse getting as many as six scapes from a bulb. The flowers are truly miniature, but foliage and height prevent it from being classified as a miniature. The form of the individual flowers is very good.

N. × dubius has refined small flowers, but is hard to grow. According to Jefferson-Brown (3) it is a hybrid between *N. tazetta* and *N. juncifolius*. The parentage of *dubius* is in accord with the natural distribution of *N. tazetta*, *N. juncifolius*, and *N. dubius*.

N. elegans: It is an autumn bloomer and found in Sardinia.

N. broussonetii: Characterized by its conspicuous yellow anthers. This is an autumn flowering species and is thought by some to be a cross with some other amaryllid, perhaps *Cooperia*. Some botanists place it with the tazettas while others separate it from the genus narcissus because of its absence of corona, or having only remnants of one. It grows only on the west coast of Morocco. It is said to be difficult to bring into bloom and the bulbs are very difficult to obtain. I have never seen it in bloom, but did order bulbs of what was to have been *broussonetii* but when they bloomed they were *papyraceus*.

N. canariensis: This is the smallest flowered white species known, very refined and occurs only in the Canaries.

N. panizzianus: Native of Spain, and in the blooming season the crown of the rock of Gibraltar is literally white with its bloom.

Series III. Tazettinae lutea, perianth and corona both yellow.

Most of the yellow petalled tazettas are of garden origin. Subspecies *italicus* resembles *N. papyraceus* in form with creamy yellow perianth and lemon colored cup. It is scarcely worth growing.

N. bertolonii, a North African species is thought to be the parent of Soleil d'Or. Moggridge called it *N. aureus* Lois. and thought its size and beauty were due to cultivation. Soleil d'Or has a very heavy scent similar to the tang of leather. It is known to have been grown in English gardens as early as 1732. (2)

In 1844 Mrs. Loudon came out with a book called *Ornamental Bulbous Plants*. She states that the word tazetta means small deep vessel, like a tea cup. At that time there were about 300 kinds grown and named and the best ones came from Holland. They were often flowered in glasses with the same treatment as hyacinths. She advocated planting in a rich, loamy soil, protecting in winter and digging only every three years and not then if doing well and not too crowded. (4)

It should be understood that the series classified by Baker were all species and wild hybrids. Later in areas where both *N. tazetta* and *N. poeticus* grew side by side in the wild they produced hybrids, one of which is *N. × biflorus*. This is a late blooming plant. I have never observed it with more than two blooms to the scape. It is sterile and will not set seed. The pollen is scarce and is not viable when tested on a gelatin sugar medium. Salisbury regarded it as "One of Nature's Mules" having carefully dissected more than a thousand specimens without finding even the rudiment of a seed, though they bore perfect pollen. Burbidge declared that the anthers seldom develop perfect pollen and its ovules are often abortive, but if fertilized with pollen from another species it can bear seed. (2)

By 1800 there were between 200 and 300 garden forms cultivated by the Dutch florists. The Van der Schoots did much breeding with the tazettas. Of the 120 registered in the 1969 *RHS Classified List*, twenty-four were originated by the Van der Schoots. During this period the tazettas were very popular because they were bunch-flowered and very sweet scented. The Japanese grew many. The Chinese Sacred Lily which is thought to be Grand Emperor is still popular for the Chinese New Year. It is grown in water. (See article in December, 1971, *ADS Journal* which gives its history and culture.) Kirby gives explicit directions for water culture for the tazettas. (5)

According to Jefferson-Brown (3) many of the tazettas in Series I will not grow outside in Great Britain, or will grow, but not flower satisfactorily because they start their foliage in early fall and try to bloom in December and January. Baker (6) listed twenty-nine forms of those with white perianths and yellow coronas. *Lacticolor* is probably the best known; however, it is believed that many of the old bicolor tazettas were raised in Holland. French Monarch, Scilly White, and Grand Primo Citroniere are plants of this type and are still grown in Cornwall and the Scilly Isles of Great Britain. I grow them in a cold greenhouse with a thermostat set at 40 degrees at night and they grow and bloom beautifully.

Burbidge and Baker list two pages of individual flowers of the tazetta. (6) The two plates show twenty-four different flowers which vary in form, color, size, etc. It is interesting to note that many of these are wildlings. Two are outstanding in form and color: namely *Hermione aurea* which is listed as the finest of all the yellow section and *Hermione Trewiana*, which is pictured as a very showy plant and was largely grown in the Dutch nurseries where it was

grown under the name of "Bazelman Major." It is very similar to *N. Orientalis*. It is doubtful that many of these varieties are available on the market today. Many are so much alike in various ways that it would take an expert to classify them correctly.

POETAZ CULTIVARS

Poetaz cultivars are a hybrid race and are the tazettas of our modern classification. The parents of the first cultivars were: seed parent *N. poeticus exertus ornatus* crossed with Grand Monarch, Glorious, and Grand Primo as pollen parents. One of the resulting cultivars was Elvira, Van der Schoot, 1904. Elvira later gave rise to Cheerfulness and Yellow Cheerfulness, a further sport. (3)

In the 1913 *RHS Year Book*, (7) the first to be printed, Peter Barr states in notes on hybridizing that there was a new useful race of hybrids raised by Messrs. Van der Schoot. These were the poetaz and were the result of crossing pollen of the best forms of old polyanthus with *poeticus ornatus* as seed parent. This same *Year Book* reported on daffodil shows (7), and it is interesting to note the large number of new cultivars which were placed in commercial hands. In a class for three stems each of nine different tazettas-poetaz the first award was given to the following collection: Klondyke, Elvira, Jaune a'Merveille, Ideal, Orient, Alsace, Aspasia, Scarlet Gem, and Irene. Second award went to Lucia, Grand Monarque, President Harrison, Klondyke, Maestro, Irene, Elvira, Jaune a'Merveille, and Orient. In all sixteen different cultivars were shown in the class. Poetaz Albert Vis, with a white perianth and orange cup (King Edward VII x Polyanthus Staten General), received an Award of Merit. Could we come up with sixteen different poetaz in a modern day show? In all there were twenty-six different cultivars mentioned in the 1913 *Year Book*. Rarely do we have more than a half dozen different cultivars in present day shows.

The 1914 *RHS Year Book* (8) had an article on "Daffodil Shows in America." There were two mentioned that year, one in Detroit, Michigan, and the other in San Rafael, California. Tazettas mentioned were Sunset, Klondyke, Towan, Grand Monarque, and Paper White Grandiflora.

In the 1934 *RHS Year Book* there is an article on "Narcissus in Holland" by J.F.C. Dix in which he states: "A very important part of the narcissus culture in Holland is taken by poetaz varieties; an area of nearly 100 acres is planted with them. Half of this is taken up by Laurens Koster, then followed by extent successively: Early Perfection, L'Innocence, white hybrid, etc." (9)

The 1940 *Year Book* (10) listed Cragford as one of the most popular. It was named after a prize-winning race horse which always came in a winner. It was originated by P. D. Williams in 1930 and won four awards including the Award of Merit and First Class Certificate. Since it was early flowering and could be forced very successfully for Christmas, it was very popular. Its texture is very crinkly and thus not of present day show quality, although it is an excellent, sturdy, and floriferous plant for the garden. It also naturalizes well in the sod.

In 1950 the RHS show winners were Martha Washington, raised by Frylink, 1948; Geranium, Van der Schoot, 1930; St. Agnes, Glorious, and Halvose, P. D. Williams, 1926; and Chinita, Chapman, 1922. (11)

Ten years later in 1960 Geranium and Martha Washington won the awards. (12) In 1969 Silver Chimes, Scarlet Gem, Geranium, Martha Washington, and Compressus won the awards. (13) In 1975 the winners were Geranium and Orange Wonder. (14) In 1976 the only tazetta mentioned in the RHS competition was Soleil d'Or. (15) It is hard to believe that after 248 years we have not made much progress with the tazettas.

It is too bad that the tazettas lost favor with the growers. As a result there have been few new hybrids. In recent years we have seen a little flicker of light of promise. Several new hybrids have been introduced. Hybridization has given us a certain amount of hardiness with the poeticus blood. One of the more recent introductions is Highfield Beauty of Mott origin, 1964, Australia. Poeticus blood has given us larger flowers, flatter cups, and fewer flowers, usually 2-6.



Left, Compressus; right, Matador (Link photos)

Americans who have introduced tazettas are Oregon Bulb Farms with Fame, Golden Dawn, and Matador. These were all from open pollinated Admiration. Powell introduced Hiawassee from Cassandra \times Paper White. This is one of the few all whites; it has a beautiful sheen. It is on the tender side in our area and also is subject to basal rot. Venice Brink registered Scented April in 1973 from an open pollinated Richard Tauber. It has scapes

of very good form, but only two blooms per scape so far in my garden (8W-YRR). Grant Mitsch has blessed us with some new poetaz; namely, Falconet, Hoopoe, and Motmot, all from Matador by *jonquilla*. Work is also being done on the poetaz at Rosewarne in Cornwall, Great Britain, with some good results. Some breeders on the west coast are also working on the tazettas-poetaz.

CULTURE

Some of the cultivars are hard to grow and it is not very easy to satisfy their demands. It seems the less they are lifted, the better. I have found they like a dry soil. In wet areas they will bloom the first year, then go downhill, while when planted in the sod they will bloom for many years. I have some that have been blooming in the sod for thirty-five years. Examples are *Aspasia*, *Silver Chimes*, *Orange Prince*, *Laurens Koster*, and *Abundance* (*Helios*) the first to bloom in the sod. *Matador* also has done well in the sod.

The species tazettas will not bloom for me out-of-doors. They are potted and grown in the cold house. As soon as the pots begin to show leaves emerging I give a light dressing of potash and phosphorus (0-20-20). After blooming the pots are watered and kept weeded in order to keep the bulbs growing as long as they will. Then the pots are placed under the bench and allowed to dry off until August when they are repotted if needed and watering begins. Once after blooming I give each pot a good watering with a liquid fertilizer with a low nitrogen content.

I have mulched all of the poetaz grown out of doors with heavy coating of pine needles for years, but this year I am trying some ground oak leaves as Mrs. Loudon suggests. (4)

I do not dig the bulbs any more often than necessary. On the whole most of the poetaz are slow to divide and can be left down three or four years without becoming overcrowded.

Although the tazettas are not as subject to basal rot as some other divisions, losses do occur, and it seems the more hybrid blood, the more susceptible the cultivars are to the rot. Rev. Bourne mentioned that susceptibility in a book written in 1907. (1) I have lost both *Highfield Beauty* and *Laetitia* over the years to the disease.

MINIATURES

There are a number of tazettas which are miniatures and are very helpful in forming miniature collections, namely, *Halingy*, *Minnow*, *Cyclataz*, *Angie*, *Hors d'Oeuvre*, *Shrew*, *Pango*, and the species *Canaliculatus*. Alec Gray has been the originator of most of the miniature tazettas.

WHAT OF THE FUTURE

The future of the tazettas is not very promising as there are no new tazettas and few improved poets that can be used as parents. Gray has suggested using some very good forms of *triandrus* with yellow tazettas or using *cyclamineus*. (16) Gray's *Cyclataz* came from *cyclamineus* x *Grand Soleil d'Or*, but perhaps the resulting forms would have to be placed in Division 6. He also suggests the use of chemicals and says if we can make a drug which increases fertility in humans surely it is not beyond the wit of man to manufacture one for daffodils. There is a chemical being used now to improve germination of seeds which I have tried, but do not have enough data at the

present time to make a worthwhile report. I think our problem is not so much with the germination of the seed, but getting seed to set on the plant in the first place. So many of the cultivars are sterile.

Gray also calls Division 8 the Cinderella of the divisions and said, "When it comes to the number of registrations even the odd-man out Division 11 far outstrips it with the production of ever more "splits." In the past thirteen years only seven cultivars have been registered in Division 8. This is a great pity as, ignoring the true tazettas which are not entirely hardy, poetaz are one of the most useful sections for garden decoration, cutting and pot culture." He gave two and one-half reasons for this failure in the daffodil world. Number one, raisers have concentrated on show daffodils with perfect symmetry and bunch-flowered sorts are not ideal; number two, almost all hybrids with tazetta blood in them are sterile. The one-half reason is that tazetta crosses take longer to flower and are slower to increase. He also said that he could not remember when Divisions 5, 7, or 8 had appeared in an Engleheart collection. (16)

The RHS *Classified List* contains some 10,000 names and about 100 of them are poetaz and tazettas (120 to be exact). Gray's statistics show the number registered up to 1900 to be 2, from 1900 to 1910 there were 16, from 1910 to 1920—11, 1920 to 1930—23, 1930 to 1940 the peak was reached with 28 registrations, 1940 to 1950—10, 1950 to 1960—5, 1960 to 1970—3. The *1978 Data Print-Out* lists 75. These statistics show that from 1930 to 1940 the largest number ever was registered, then there was a sharp decline. This is a personal statement, but I believe there has been no incentive for breeders to work with the tazettas because the sights of the exhibitors and judges are on a big, bold, colorful, perfectly formed flower. In the U.S.A. I have never known the judges to give a scape from Division 8 a second look. Has one ever appeared in a Quinn collection? Do we ever read about them winning awards in the *Journal*? Naturally growers and exhibitors are going to grow what the judges will look at. In my opinion they spend very little time on the tazettas, and until they do receive some recognition there is no incentive for more breeding.

We have all kinds of awards set up by the ADS for collections, best of section, etc., but does a tazetta ever receive any recognition? I think not. They really are the "dustbin," "scapegoats," "Cinderellas," or what have you of the daffodil world.

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SOME NEW ZEALAND SHOW RESULTS.

P. PHILLIPS, *Otorohanga, New Zealand*

The North Island National Show was held at Pukekohe on September 11-12th. There were four entries for the British Raisers Gold Cup, requiring eighteen British raised cultivars, three of each. This was won by Peter Ramsay with Jim O'More second and Mavis Verry third. The American Silver Salver for nine blooms, not more than three of one cultivar, was won by Peter Ramsay who showed three Daydream, two Replete, Caro Nome, Precedent, and Amberglow. Second was R. Cull with three Audubon, three Honeybird, and three Daydream; and third was J. O'More with three Evans L43, two Chemawa, Scio, Cool Crystal, Daydream, and Rima. Also showing were P. & G. Phillips with two Precedent, two Festivity, Audubon, Resplendent, Daydream, Kingbird, and Pinafore.

Best in Show at the North Island was Anitra 1 W-W shown by Peter Ramsay and raised by Jackson of Tasmania. This is a lovely flower and is earlier and probably better than most of the British whites.

There were five entries for the "Bozievich Bowl" requiring nine American-bred cultivars, not more than three of one cultivar, at the South Island National Show held in Dunedin on September 26-27th. First was D. S. Bell with three Beige Beauty, two Daydream, Tangent, Opalescent, Limpkin, and Partridge. This was a very spectacular entry. In second place was Len Chambers with two Velvet Robe, two Chemawa, Coral Ribbon, Pearl Pastel, Tangent, Teal, and Paradox. Third place went to P. & G. Phillips who exhibited three Crystal River, three Sunapee, and three Top Notch. J. O'More with three Eclat, three Blushing Beauty, Urbane, Milestone, and Sunapee, and D. Hayes with three April Clouds, three Bethany and three Pinafore also exhibited in this class.

Owing to increased air fares there were fewer exhibitors from the North Island this year and competition was not so intense. Darwin Hayes won the principal class for eighteen cultivars, three of each, and the Best in Show was Purbeck, shown by Len Chambers.

The season was one of the worst experienced for many years with rain, wind, and hail on several occasions, but there always seem to be good flowers in spite of the elements.

PLAYING BY THE RULES

TOM D. THROCKMORTON, M. D., *Des Moines, Iowa*
(from *The Daffodil Society of Minnesota 1980 Yearbook*)

Hybridizing daffodils has much in common with almost any creative project. The equation is: Time \times Effort = Work! It also demands a great deal of patience — beginning with the first five years from seed to maiden bloom. Other factors are intellectual curiosity, knowledgeable research, ingenuity, and unquestionable optimism. For me, these latter factors have been the real fun of the whole deal.

The miracle of the Virgin Birth has never bothered me very much, when I consider the multiple miracles that surround me daily: the circulation of blood, the healing of wounds; the body defenses against bacterial invaders, etc., etc., Or, the placing of a grain of viable daffodil pollen upon a moist daffodil stigma. The grain germinates in a few hours and makes its way down the pistil, like an eager spermatozoa, to the plant ovary. Here, it finds an unwed ovule and joins it to make a fertilized egg — later to be a daffodil seed. The ovary swells with its pregnant burden, matures, ripens, and in six weeks bursts to cast the fertile seed upon the earth. The rains of late summer drive it into the soil; autumn's leaves cover it, winter snows blanket it with a soft mulch, and the warming moisture of spring-thaws arouse the slumbering embryo. The seed swells; a tiny tactile rootlet thrusts forth into the earth — and a single thin leaf struggles from beneath a pebble or twig upward into the light.

Miracle enough for anyone; but these events are not just haphazard happenings. They serve but to illustrate many of the hybridizers' "rules" — known and unknown. You see, hybridizers don't really learn more about plants, nor do they discover new lines of breeding which lead to fascinating cultivars as yet undreamed of. Not at all! All plant life (and other life) is governed by an enormously complicated set of rules. As we dig deeper into the secrets of a plant, we merely discover new rules that have been there all the time. Thus, the plant breeder must learn the rules, use the rules, and be especially aware when a new rule or set of rules is discovered by him. Let's briefly outline some of these rules that have governed my own efforts to hybridize daffodils.

(1) The time to make a "cross" is on a warm spring morning when the bees are working in the garden. They know! If it is cold and chilly, the stigma remains dry, the pollen indolent.

(2) The pollen is at its best just after the anthers dehisce, turning inside out to a covering of golden powder. (Some pollen may be gray.) If the pollen granules are hard and "sandy," they may be either too old or from an infertile variety.

(3) The stigma, that little three-lobed tip of the pistil, is most receptive when it appears moist. If hard and dry, you may well be going against the rules.

(4) The actual fertilization of the flowers is the easiest part. All that stuff about camel's hair brushes is outside the rules. The rule demands fresh pollen on the receptive stigma in the greatest possible amount. A pair of eyebrow tweezers will pluck a likely anther free from the male parent. (I usually bring an intact bloom to the flower to be crossed.) Then wipe, or actually "pat," the

pollen into the shallow, three-lobed cup of the stigma until it is *full*! If the corona of either bloom is in the way, I cut it away with scissors. Thus, the wedding is accomplished.

(5) I do not bother to de-anther the fertilized bloom. In the first place, the majority of modern daffodils are self-sterile. Secondly, the fresh pollen will soon germinate and get in its licks long before any adventitious bee-shed pollen can make the grade.

(6) Pollen may be preserved almost indefinitely. I often pick just-opening blooms, of the male parent desired, and put them in the refrigerator. When the day of the wedding arrives, I fresh-cut the stem, place it in warm water, and within a few hours the anthers are covered with their coatings of fresh pollen, eager to go to work. I don't bother with dessicators or gelatin capsules — too much work.

(7) Have a goal: Red rims, pink cups on yellow perianths, green eyes, standard type daffodil in miniature form, longer lasting foliage, etc., etc. I hope someone, someday, will hybridize extensively for increased perfume. Many daffodils have lovely and yet quite variable scents.

(8) Don't make your crosses too wide; i.e., a white trumpet on a golden Division 3 variety is not apt to produce a white petaled, golden cupped Division 2 bloom. Such a cross is more apt to produce considerable washed-out junk.

(9) Use the best and most "modern" parents possible, unless it is necessary to go back to older flowers as may be required in certain programs of line-breeding. Beautiful, healthy parents are most apt to beget beautiful healthy children.

(10) It has been my experience that desirable characteristics often skip a generation. Know the grandparents because they may well indicate the path to your goal.

(11) Don't make an important daffodil cross if rain is expected within six hours. A few drops of water, before the pollen germinates, can undo all your plans.

(12) It's well to know something about hormones! When a pollen grain germinates, beginning its trip down the maternal style, a hormone substance is formed which makes the ovary begin to swell — and the bloom probably becomes indifferent to subsequent attempts at pollination. By the same token, the fat, swollen green ovary does not mean fertilization has taken place. It is only a sign that satisfactory pollination has occurred. The actual fertilization of the ovules by the germinated pollen is completely independent of the swollen ovary, that may appear so blatantly pregnant. We've all seen daffodil seed pods the size of ping-pong balls suddenly collapse and not contain a single viable seed.

(13) Use lots of labels. My daffodil clumps are labeled. When a cross is made, I have some markers I obtained from my nurseryman. They are brightly colored (yellow, of course) plastic flags on a three foot stiff wire stem. The name of the pollen parent is printed on the plastic flag with a marking pen, and it is thrust into the ground alongside the pollinated plant. Thus, the crosses are simply marked in a few seconds, and the waving flags are markers that lead to the fertilized blooms weeks later.

(14) I can't spend all of my time in the garden waiting for mature daffodil seed pods to rattle at a touch and give up their burden of seeds. Jean and I "make rounds" some weeks later and encase every swelling seed pod in a little

stockinette chemise. Your local hospital emergency room has rolls of woven tube-gauze: the stuff used to bandage sore fingers. Cut this in eight inch lengths and tie a knot in one end. Pull this over the fat, pregnant bloom and tie it (not too tightly) just below the ovary with a bit of fish line. I carry hip pockets filled with these little woven caps, and carry a spool of fish line in a side pants pocket. (Ladies, of course, can wear slacks.) I slip the gauze caps over the seed pod, pull the end of the string around it, tie it, cut, and presto — the seeds are encased until I am ready to fool with them.

(15) About the first week in July (in my geographical location, where major bloom is in the last of April), I harvest the seed pods. My plastic flags are waving me to the site of the seed pods, which are probably lying on the ground among the supine foliage. The pods from each cross are placed in a plain envelope and the parentage noted on the outside with a marking pen — the seed parent first: Canisp \times Panache. These envelopes are placed in a dry spot until I am ready to confront them.

(16) Some Sunday afternoon, a week or so later, a white cloth is spread on the breakfast room table and the seeds are harvested. Each envelope is opened, and the pod stripped away. The number of pods and the number of seeds obtained is noted on the envelope: the seeds are returned to it and the envelope sealed. Thus, we have seeds from each cross in an envelope with the cross noted, the number of pods, and number of seeds recorded. My average over a number of years has been about 18 seeds per pod. This has varied from well over 60 seeds per pod to the solitary shining black result of perhaps half a dozen crosses.

(17) It's probably best to plant the seeds as soon as possible after harvest. Germination is best with immediate planting. I've often used the plastic trays, used by restaurant bus boys, as seed boxes: a few holes in the bottom with a simple drill. The soil: about equal parts peat, sand, and perlite. Sow the seeds, rather thickly, in rows about one inch deep, each cross marked with a heavy aluminum foil folded as a marker and labeled. Water, put in semi-shade under the deck, and sort of forget. When autumn comes, bury the boxes up to the rim; cover with a piece of old carpet, a few stones, and some leaves. Forget for the winter, except for dreaming up some new crosses.

(18) After the frost is gone and daffodil tips are showing, uncover. You may find a little grass-like foliage here and there. Put the seed box in a quiet corner of the garden; water with a little dilute fertilizer; tend the labels, and watch the single leaf of each fertile seed line up with its label.

(19) When autumn comes, repeat the covering of Rule 17. In the second spring, repeat Rule 18. Then, at the end of the second summer, after the foliage has died down, harvest your own tiny bulblets — each about the size of a peanut. Line them out in your daffodil patch; make new labels for each cross; and wait another three years. It's really not so bad — after the first five years, you've a new batch coming along each year.

(20) There is probably no genetic advantage to reciprocal crosses; i.e., nature is usually indifferent as to which variety furnishes the pollen or ovules. Nonetheless, there is a little sub-set of rules that may be helpful here.

(A) If one parent is dramatically larger than the other, use it as the seed parent. For example, the standard \times species cross furnishes larger seed with a better chance of survival.

(B) If health or vigor is a factor, let the most vigorous variety be the seed parent. Not necessarily because of Rule #20A, but because the cytoplasm of the seed is furnished *entirely* by the female; the pollen grain carries only its half of the cell nucleus.

(21) Certain cultivars are "shy seeders," as Arbar. Kilworth becomes pregnant just at the thought. Therefore, Kilworth \times Arbar will yield many more seeds than Arbar \times Kilworth — and accomplish the same genetic ends.

(22) Some cultivars are sterile, or almost so, for practical purposes: Scarlet Leader has almost no fertile pollen. Triploid daffodils are usually sterile — fortunately most modern daffodils are tetraploid and most species are diploid; and crosses among these usually work.

I suspect this is more than you really want to know about "hybridizing" — and I haven't even touched on what to expect from and do with the final product. That's another story!

ENGLISH COMMERCIAL DAFFODILS

WILLIAM O. TICKNOR, *Tyner, North Carolina*

It is fairly well-known that more daffodil bulbs are produced in England than in Holland or, for that matter, in all the rest of the world. This is due to an enormous volume of commercial daffodils, as opposed to novelty daffodils, that are grown in England's bulb district around Spalding. Due to a difference of opinion between the English bulb growers and our U. S. Department of Agriculture, almost none of the great quantity of English bulbs came to this country until recently. Some had been "laundered" so to speak by spending a season in Dutch fields. The English bulb hierarchy, led by the Geests, couldn't agree to the American bulb inspection program. The Dutch did.

All things change in time. A group of independent English bulb growers formed a cooperative named Lingarden Limited and hired an able Dutchman, S. B. Out, to be their Managing Director. Lingarden Ltd. sells many bulbs other than daffodils and are approaching fame in their stocks of anemones. They do not sell retail but sell in great quantities to a variety of retail outlets.

Mr. Out is a member of our Society and the following is quoted from a letter from him telling of the business his company does in the United States. Members who are nurserymen and professional bulb sellers might benefit from his letter. The Lingarden Ltd, address is Weston, Spalding, Lincolnshire PE12 6HP England.

"We started out test marketing five years ago, and last year we exported 100 tons of daffodils. This year's orders are for approximately 200 tons, and next year we hope to ship 400 tons. We are the only company in the United Kingdom which holds a license to export to the USA, which means that the USA Inspector, Mr. Santacroce, comes over in the spring to inspect our fields. During the end of July and beginning of August, he is on our premises to inspect each shipment bound for the USA prior to dispatch and issues each consignment with a Certificate of Import."

"We are exporting mainly to the large bulb wholesalers/distributors, that is to say, the type of company who buy 20 tons or more. At present, our customers are spread evenly over the whole of the USA."

"Because we have agreed only to ship to recognized wholesalers, we could not ship smaller quantities to other types of company but if someone in a specific area wanted some of the varieties we deal in we could give them the address of the nearest company to contact."

This actually brings to fruition a program largely started by our own Willis Wheeler. It can have an interesting effect on the daffodil bulb industry.

BEGINNERS CORNER

Winter has arrived, your bulbs are all safely planted, and now you can relax in front of a nice warm fire and dream of all the beautiful daffodils to bloom next spring. This is a good time of year to read—and re-read—old daffodil books. Re-reading something you may have read before is interesting because with your expanded knowledge and interest, you might pay closer attention to something you glossed over before. One of the biggest bargains has to be the offer of 15 numbers of the *Daffodil Journal* for \$5.00. That will keep you in reading material for quite awhile. The *Daffodil Handbook* is well worth having, even though the lists of cultivars may be outdated. *Daffodils in Ireland* is interesting to me because it includes photos of the famous hybridizers as well as articles about them. The *RHS Yearbooks* include daffodil news from around the world. All these books are in the ADS library (for complete list see the June, 1980, *Journal*) or may be purchased from the Executive Director.

While you're sitting in front of the fire, you might think about some "dream" crosses to try next spring. You're not into hybridizing, you say? Why not give it a try? You'll learn to look at your daffodils more closely—noting both good and bad qualities—and you'll develop a better appreciation for some of the new cultivars. You still may not be willing to pay those high prices for new cultivars—but at least you'll have some idea why they're so high! Try breeding your own pink and white triandrus, or cyclamineus, or double! Maybe you'll get lucky! But do follow the advice of experienced hybridizers to use high quality parents. Visualize the perfect—to you—daffodil; then find two parents which have the right qualities, and give it a try. Besides, you'll learn a lot about the development of a daffodil from seed to blooming size—and have a lot of fun in the process.

This is also the time of year to think about attending the ADS convention. You've never been before? Well, there's a first time for everything! Come and meet other people who share your hobby. Some of my best friends are ADS members—from all over the world—whom I met at conventions. There are also workshops and interesting gardens to visit—and when the season is right, there are displays sent from various growers. I'll look for you in California!

Now that your fire's gone out, take those ashes and sprinkle them over the daffodil beds. The daffodils will love the potash!

What do Keats, Otterburn, Green Pearl, and Ireland's Eye have in common? All poeticus hybrids in Division 9, right? Yes, but . . . they also have in common the fact that some members of the Poet Robins feel they don't belong there. We have a reasonably orderly procedure for adding and deleting miniatures from the ADS Approved List (goodbye to The Little Gentleman), but what if a concerned group of careful and experienced Division 9 specialists decide Keats is not really a poet? A thing of beauty perhaps, a joy forever maybe . . . but banished into the utter darkness of Division 12? Keats not a poet!? The mind boggles.

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CALIFORNIA HERE WE COME

MARILYNN J. HOWE, *Culver City, California*

The Southern California Daffodil Society is hosting the ADS Convention at Del Webb's Newporter Inn at 1107 Jamboree Road, Newport Beach, California 92660, on March 26, 27 and 28, 1981.

Newport Beach is located approximately 45 miles south of the Los Angeles International Airport. From the Los Angeles International Airport: the Airport is serviced by all major air carriers. Golden West Airlines offers commuter service to Orange County/Santa Ana Airport from Los Angeles. Ground transportation, including regularly scheduled airport bus service, and rental cars are available from L.A.X. to Orange County/Santa Ana Airport. The hotel offers complimentary limousine service from the Orange County/Santa Ana Airport. Driving time to Newport Beach is approximately 45 minutes on Interstate 405.

Come early and stay late. There is much to see in the many "Countries" of California.

There is the "Mother Lode Country" located in the Central part of the state where such colorful characters as Mark Twain, Black Bart, Horatio Alger, and the infamous bandit Joaquin Murietta roamed during the Gold Rush Days.

The "Wine Country" is situated northeast of San Francisco in Napa and Sonoma Counties. Many wineries offer tours and/or tasting.

See the "Avenue of the Giants" in the Redwood Country—the domain of the world's giant coastal redwood trees located north of Monterey County and extending to the southwestern corner of Oregon.

"Big Sur Country" is the ruggedly beautiful seacoast from Carmel to Lucia. The Santa Lucia Mountains rise abruptly from the ocean, and steep side canyons contain groves of coastal redwoods. Its spectacular scenery has been an inspiration for artists and writers.

The "Desert Country" is in the southeastern part of California and the landscape will be a carpet of wild flowers from late winter to early spring.

The entries for the National Show will be accepted from 4:00 p.m. Wednesday, March 25, until 10:00 a.m., March 26. Jay Pengra, Show Chairman, urges all growers with flowers in bloom to bring them and enter them in the show.

Friday's symposium will cover many current topics of interest for both growers and hybridizers.

On Saturday's bus tour, we will visit Rogers Gardens; this spectacular nursery and Botanical Garden features magnificent hanging baskets of flowering plants, garden planted roof-tops, 7½ acres of colorful blooms and a home accessory shop reflecting California's relaxed lifestyle.

Next stop is a tour of the U.C.I. Arboretum in Irvine. Besides the daffodils, there is a large collection of California native plants and a collection of South African bulbous plants.

We will then travel to San Juan Capistrano, along the route of the Padres for lunch. Following lunch, enjoy a guided tour of the Mission of the Swallows, also known as the "Jewel of the Missions."

We will drive along the scenic coastal route through Dana Point and Laguna Beach to Corona Del Mar for a visit to the beautiful Sherman Foundation Gardens.

Please come west next spring and join us in Newport Beach for the 1981 convention.

DRYING MINIATURE DAFFODILS

QUENTIN E. ERLANDSON, *Baltimore, Maryland*

"It's a long, long time from May to December" is a familiar tune. It is even longer from one daffodil blooming season to the next. There is no need to "wait 'til next year." If you would like to enjoy your favorite daffodils from one season to the next, there is a way I have found to be quite satisfactory—drying.

First a disclaimer— I am not an expert. I have had limited experience drying flowers. I have dried only miniature daffodils and have used only one method, silica gel. However, based on comments made by house guests during a snow storm in January, or on a hot, humid day in August, our dried miniatures displayed on our fireplace mantel have been a huge success. So if I can do it, anyone can.

The miniature daffodil blooming season is quite long — at least it is for me. It was especially long this year. Spring was cool and wet. My first miniature bloomed the 3rd of March and the last flower hung in there until May. It's nice to have a long season except for the disadvantage at "show time." In a long season, the number of miniature species in their prime at the same time is limited; it is therefore difficult to find enough varieties of best quality to enter all the classes in which you hope to be a serious contender. On the other hand, the time periods before and after the show(s) present an opportunity to make good use of your better flowers, possibly blue ribbon specimens. Dry them.

The process I use is simple. I use a FLOWER DRI kit that is made and marketed by Plantabbs Corp., Timonium, Md. The kit includes an airtight metal container, 1½ lbs. of silica gel, green florist wire, green florist tape, and a book of instructions. To complete your needs, have available an air-tight glass container you intend to use for the finished product.

All set:

Step 1. Cut *fresh* flowers that have just opened. This is very important. Flowers must be fresh and not wet with dew. Fresh flowers retain their color and hold up better.

2. Using the air-tight metal container, remove all but a ½ inch or so layer of silica gel from the container.

3. Cut the stems to a length of 2 inches or less.

4. Lay the flowers face up on the silica gel in the air-tight container. Carefully adjust the flowers and the gel so the perianth and corona are not distorted. This is important, for the flower will set in the same shape that it rests in the drying agent. Using a small spoon, add silica gel to the flowers, making sure there are no air spaces. Be sure to add the gel *inside* the corona as in the case of the *triandrus albus*, for example. Continue to add silica gel until all the flowers are completely covered. The mound of silica gel should be stable enough so that small movements of the container will not expose a flower.

5. The kit will hold six to eight miniatures at one time with about ½ inch of drying agent covering all the flowers.

6. Place the cover back on the metal container. Normally the lid is tight enough; however, I add a tape around the lid to insure a good seal.

7. Wait two days. I have found this to be just about the right time for miniatures. Three days, I find, is a bit long; the color is not as good and the flower becomes a little brittle (a perianth segment may break off).

8. Remove the cover and carefully remove the silica gel covering the flowers. Tilting the container is one method; using a brush helps. The flower is now dry and also brittle, so be careful.

Note: Silica gel can be re-used; do not throw it away. The kit has instructions for removing moisture from the agent when necessary.

9. Now comes the hard part, especially for someone like me with ten thumbs. Using three to five inches of the fine florist green wire, thread the wire up through the stem as far as possible. Using the green florist tape (I cut it into thin strips about $\frac{1}{4}$ inch wide for miniatures), wrap the tape in spiral fashion around the wire and stem starting from the bottom and working toward the flower. Continue with this until you reach the base of the flower, or at least as far as you think is necessary to have a stable flower that will not break off with the slightest jar. Some varieties are easier than others. If the stem is very thin, simply tape the wire to the stem, side by side. Either way, the tape and wire give the dried flower a strong and firm stem that will last.

Note: Inserting the wire before drying may or may not be helpful. First the wire should be longer than is convenient in the drying container.

Secondly, the flower after drying may be too brittle and break off at the end of the wire.

10. Using the air-tight glass display container, arrange the miniatures to suit yourself (cut the wire stems that are too long). I suggest you emphasize the flowers in such a way that no one will notice the stems.

11. Add three to five tablespoons of silica gel to the display container before sealing. This will insure a dry atmosphere even on the most humid summer days. Humidity is the worst enemy of dried flowers. In fact it's fatal. The dried flower wilts in just a day or two.

12. Enjoy the finished product.



Left, arranging the dried flowers; right, the finished product (Erlandson photos)

The glass display container may be difficult to find. We happened to have one at the time my daughter gave me the kit for Christmas. It has worked well, having a pin holder attached to the lid. After the miniatures are in place, the added silica gel not only keeps the flowers dry and natural looking, but also hides the pin holder and makes a fine white base for the arrangement.

The whole process is really quite simple. I know there are other drying agents and other drying procedures that are said to be quite satisfactory, but I have not used them. I also know there are other flowers that dry successfully, but I have not yet tried them. I have yet to dry a standard-size daffodil although I intended to do so this past season. Maybe next year.

I can say without reservation, however, that miniature daffodils can be dried with great success! Get the materials, follow the directions, pick your miniatures at the right time, and have fun. I have yet to find a miniature that does not dry well.

U. S. REGISTRATIONS IN 1980

Reported by MRS. KENNETH B. ANDERSON, Registration Chairman

American registrants of new daffodils and their registrations:

Evans, Murray W.; Corbett, Oregon: Barbie Doll, Dreamboat, Evergold, Porcelain, Sugar Loaf, Unity.

Gould, William, Jr.; Laurel, Maryland: Watercolor.

Grier, Helen; Yorba Linda, California: Merry Child.

Mitsch, Grant; Canby, Oregon: Autumn Gold, Wind Chimes.

Pannill, William; Martinsville, Virginia: Accord, Century, Crystal Blanc, Demitasse, Diablo, Free Spirit, Gallery, Keepsake, Key Largo, Newport, Our Tempie, Oz, Party Doll, Portfolio, Sailboat, Snow Drift, Taco, Tuckahoe.

Robertson, Eve; Taylors, South Carolina: Elegant Lady, Limey Circle.

REGISTRATIONS

Measurements and data given are: division; color code; seedling number; seed and pollen parents; diameter of flower (F.); length of perianth segments (P. segs.), color; length of corona (C. lgth.), color; diameter of corona (C. diam.); bloom season; height of flower (H.)



- ACCORD** (Pannill) 2 Y-WWY; PL 66B; (Bethany × Rus Holland) F. 97 mm; P. segs. 40 mm, yellow; C. lgth. 36 mm, white with yellow rim; C. diam. 49 mm; midseason; H. 39 cm.
- AUTUMN GOLD** (Mitsch) 2Y-Y; D 80/13; (Quick Step × Daydream) F. 80 mm; P. segs. 33 mm, deep yellow; C. lgth. 20 mm, deep yellow; C. diam. 28 mm; late; H. 49 cm.
- BARBIE DOLL** (Evans) 2 W-WWP; 0-5; (Kewpie × Chiquita); F. 80 mm; P. segs. 33 mm, white; C. lgth. 13 mm, white with pink margin; C. diam. 30 mm; late midseason; H. 35 cm.
- CENTURY** (Pannill) 2Y-WWY; (Camelot × Daydream); F. 108 mm; P. segs. 41 mm, yellow; C. lgth. 33 mm, white with yellow rim; C. diam. 45 mm; midseason; H. 42 cm.
- CRYSTAL BLANC** (Pannill) 2W-GWW; 66/60/L; (Easter Moon × Pristine) F. 108 mm; P. segs. 38 mm, white; C. lgth. 17 mm, white; C. diam. 34 mm; midseason; H. 41 cm.
- DEMITASSE** (Pannill) 6W-Y; G 20 C; (Jenny × *N. jonquilla*); F. 50 mm; P. segs. 22 mm, white; C. lgth. 10 mm, yellow; C. diam. 9 mm; late midseason; H. 18 cm.
- DIABLO** (Pannill) 2W-GYR; 64/106; (Roimond × Corsair) F. 98 mm; P. segs. 36 mm, white; C. lgth. 15 mm, yellow with green eye and red rim; C. diam. 38 mm; late midseason; H. 38 cm.
- DREAMBOAT** (Evans) 2W-YYO; N-36/3; (Marshfire × Hotspur) F. 95 mm; P. segs. 35 mm, white; C. lgth. 15 mm, yellow with orange bar; C. diam. 40 mm; midseason; H. 39 cm.
- ELEGANT LADY** (Robertson) 1W-Y; 199 #33; [(Corinth × Kanchenjunga) × Empress of Ireland] F. 110 mm; P. segs. 45 mm, white; C. lgth. 46 mm, lemon yellow; C. diam. 44 mm; early midseason; H. 44 cm.
- EVERGOLD** (Evans) 1Y-Y; 0-12; (Enmore × Fiji) F. 100 mm; P. segs. 44 mm, yellow; C. lgth. 47 mm, yellow; C. diam. 40 mm; midseason; H. 40 cm.
- FREE SPIRIT** (Pannill) 2W-W; 66/43; (Verona × Stainless) F. 100 mm; P. segs. 40 mm, white; C. lgth. 16 mm, white; C. diam. 35 mm; late midseason; H. 40 cm.
- GALLERY** (Pannill) 2W-W; 62/31A; (Vigil × Empress of Ireland) F. 120 mm; P. segs. 48 mm, white; C. lgth. 46 mm, white; C. diam. 40 mm; midseason; H. 43 cm.
- KEEPSAKE** (Pannill) 2W-P; PK 9; (Green Island × Leonaine) F. 110 mm; P. segs. 45 mm, white; C. lgth. 29 mm, pink; C. diam. 36 mm; midseason; H. 40 cm.
- KEY LARGO** (Pannill) 2Y-Y; D 23/4; (Kingscourt × Royal Oak) F. 104 mm; P. segs. 41 mm, yellow; C. lgth. 38 mm, yellow; C. diam. 40 mm; midseason; H. 42 cm.
- LIMEY CIRCLE** (Robertson) 3W-WWY; 192A (Carnmoon × Green Island) F. 103 mm; P. segs. 46 mm, white; C. lgth. 15 mm, white with limey yellow frill; C. diam. 40 mm; midseason; H. 48 cm.
- MERRY CHILD** (Grier) 8Y-Y; 63/2/68; (Helios, syn. Abundance, × *N. jonquilla*) F. 45 mm; P. segs. 17 mm; light canary yellow; C. lgth. 7 mm, deep yellow to light orange; C. diam. 16 mm; early midseason; H. 37 cm.
- NEWPORT** (Pannill) 2W-YOY; 65/67; [(Limerick × Broughshane) × Avenger] F. 98 mm; P. segs. 40 mm, white; C. lgth. 20 mm, yellow, orange, yellow; C. diam. 21 mm; late midseason; H. 42 cm.

- OUR TEMPIE (Pannill) 3W-YYO; 64/84/2 (Merlin × Hotspur) F. 90 mm; P. segs. 38 mm, white; C. lgth. 11 mm, yellow with red rim; C. diam. 35 mm; midseason; H. 42 cm.
- OZ (Pannill) 6Y-Y; G 20 A; (Jenny × *N. jonquilla*) F. 50 mm; P. segs. 20 mm, yellow; C. lgth. 15 mm, yellow; C. diam. 10 mm; late midseason; H. 18 cm.
- PARTY DOLL (Pannill) 4W-P; 67/26; [(Wild Rose × Interim) × Magic] F. 80 mm; P. segs. white; corona pink; late midseason.
- PORCELAIN (Evans) 2W-W; 0-20 (Pristine × Moyard) F. 110 mm; P. segs. 45 mm, white; C. lgth. 33 mm, white; C. diam. 50 mm; late midseason; H. 41 cm.
- PORTFOLIO (Pannill) 1W-W; 64/119 U; (Vigil × Empress of Ireland) P. segs. 45 mm, white; C. lgth. 49 mm; white; C. diam. 45 mm; H. 40 cm.
- SAILBOAT (Pannill) 7W-W; G K5A; (Frostkist × *N. jonquilla*) F. 60 mm; P. segs. 28 mm, white; C. lgth. 18 mm, white; C. diam. 18 mm; late midseason; H. 35 cm.
- SNOW DRIFT (Pannill) 2W-W; 62/12; (Arctic Doric × Vigil) F. 110 mm; P. segs. 44 mm, white; C. lgth. 35 mm, white; C. diam. 36 mm; midseason; H. 44 cm.
- SUGAR LOAF (Evans) 4W-P; L-43/5; (Pink Chiffon × Accent) F. 105 mm; P. segs. 44 mm, white; corona, pink and white petals; midseason; H. 42 cm.
- TACO (Pannill) 3W-R; 62/57; (Kilworth × Avenger) F. 110 mm; P. segs. 46 mm, white; C. lgth. 15 mm, red; C. diam. 33 mm; midseason; H. 43 cm.
- TUCKAHOE (Pannill) 3W-GYR; 64/36C; (Corofin × Hotspur) F. 90 mm; P. segs. 40 mm, white; C. lgth. 13 mm, green eye, yellow, red band; C. diam. 32 mm; late midseason; H. 41 cm.
- UNITY (Evans) 1Y-P; N-91 [(Daydream × Lunar Sea) × Rima] F. 105 mm; P. segs. 45 mm, yellow; C. lgth. 47 mm, pink; C. diam. 40 mm; early midseason; H. 38 cm.
- WATERCOLOR (Gould) 2W-P; 69-6-9-1; (Easter Moon × Rose Royale) F. 110 mm; P. segs. 46 mm, white; C. lgth. 29 mm, pink; C. diam. 25 mm; early midseason; H. 41 cm.
- WIND CHIMES (Mitsch) 7YW-P; D 80/17; (Quickstep × Daydream) F. 81 mm; P. segs. 38 mm, lemon yellow with white halo; C. lgth. 24 mm; pinkish buff; C. diam. 31 mm; late; H. 53 cm.

DAFFODIL YEARBOOK 1942

FRANCES ARMSTRONG, Covington, Virginia

(from the Newsletter of the Middle Atlantic Region, February, 1980)

A year or so ago, my mother delved into her crowded bookshelves and presented me with a copy of the *Daffodil Year Book 1942*, a joint issue of the Royal Horticultural Society and the American Horticultural Society.

I was amazed that she had this hidden treasure and she seemed equally amazed that I was so pleased to have it, and so very interested in its contents.

Its 96 pages enclosed in a rather plain board cover was priced \$0.75. There were numerous black and white photographs and four pages of advertisements, over three-fourths of them American, which included one from Edwin C. Powell, Rockville, Maryland, and another from the Hodge Podge Shop in Gloucester, Virginia.

Robert Moncure discussed choice daffodils found in his Virginia garden while S. Stillman Berry, Kenyon L. Reynolds, and Lena M. Lothrop wrote about their experiences growing daffodils in California.

There were articles from William Jackson in Tasmania and C.G. Hayes in New Zealand as well as reports of shows there and in Pasadena.

Guy Wilson contributed three articles: one described a visit with the Richardsons at Prospect House in Waterford, another concerned his own daffodils mentioning a fine newly registered cultivar named Chinese White for which he expressed high hopes, the third was of correspondence from the United States with Professor Sidney B. Mitchell, Eliot Rogers, Joseph Urnston, and Frank Reinelt of California, and with John C. Wister of Philadelphia. D. Blanchard discussed his seedlings in Dorset and A. Cowen instructed on growing daffodils in bowls. But the real highlight of the *Daffodil Year Book 1942* was the account of the Royal Horticultural Society's Show held April 17 and 18, 1941, in Old Horticulture Hall, Vincent Square, London.

Daffodils that cold and frosty spring were a week to ten days later than usual and, in view of that and the reduced traveling facilities due to the war, not many entries were expected. However, weather at the last minute improved and the response exceeded all expectations. There were eight commercial groups and 41 competitors made 484 entries.

Most of the exhibits had been staged on Wednesday, April 16, when "an enemy aircraft made a very heavy and sustained attack on London" lasting the entire night. Fortunately the Old Hall with its glass roof was intact although two incendiary bombs fell on the New Hall just a few yards away. The account comments that "those exhibitors who spent the night in London are not likely to forget the 1941 Daffodil Show."

Messrs. Barr & Sons of London and Mr. J.L. Richardson, Prospect House, Waterford, Eire, were awarded gold medals for their commercial displays. The Barr display included Beersheba, Havelock, Bodilly, John Evelyn, Firetail, Beryl, and Little Witch among others, while Red Goblet in the Richardson display received an Award of Merit. Other of the Richardson outstanding cultivars were Carbineer, Crocus, Porthilly, Rustom Pasha, Coverack Perfection, Blarney, Rose of Tralee, and Pepsy.

For the third year in succession Mr. Richardson won the Engleheart Cup (one stem each of twelve cultivars bred and raised by the exhibitor) with Buncrana, Krakatoa, Kingscourt, Narvik, Glendalough, Bahram, Malta, Greenore, Matapan, Killaloe, and two unnamed seedlings. Mr. Guy L. Wislon was second with a fine bloom of Chinese White, Samite, Overseer, Armada, Rouge, Larne, Slemish, and five seedlings.

The Banksian Medal offered for the best bloom shown in the competition classes was awarded to Mr. Richardson for a flower of Matapan. Other flowers mentioned as competitors were Aranjuez, Leinster, Ludlow, Kingscourt, and Samite. A quick perusal of the open classes finds Mr. Richardson the winner in most of them. All collections called for three stems each of six to twelve cultivars. Class two, for instance, asked three stems each of twelve trumpet varieties. What a tremendous number of daffodils he must have staged!

The amateur classes were not well filled as several well known amateurs were unable to exhibit due to "shortage of staff."

There were also daffodil shows at Spaulding that spring and at Lymington. The British do "carry on" no matter what the circumstances.

ROBIN ROUND-UP

RICHARD EZELL, *Chambersburg, Pennsylvania*

Why in the ever-lovin' blue-eyed world call an exchange of letters a "round robin"? The letters do travel a circular route, so "round" has some sense to it, but "robin"? A reference to air mail? No, the answer (which Bill Ticknor put me onto) predates air mail by several hundred years: to avoid the harsh punishment customarily meted out by ships' captains for even the mildest dissension, French sailors took to writing down their grievances and signing their names to them in the form of a circle, so that the captain couldn't tell who signed first—who might be singled out as *ringleader*. The circular group of signatures was called a "*ruban rond*," in English, "round ribbon." English sailors soon picked up the practice, calling it in mixed French and English, "round *ruban*," which quickly became corrupted to "round robin." The device was adopted by landlubbers and became well known all during the 18th century in both England and her colonies. John Hancock was acclaimed a brave man indeed for *not* insisting on the round robin form in a famous instance where it might have been called for.

When I agreed to take on the task of ADS Round Robin Chairman, I had never so much as laid eyes upon a flight of Robins. I have by this time perused a goodly number of them, and let me assure those of you who may be as unfamiliar with them as I was that they are FUN. I am certain many of you would find participating in one (or more) both enjoyable and informative. To take part will not demand much of you in time or money, or even writing ability. Some of the letters are long, detailed, and filled with the fruits of experience and observation; others are brief, chatty, and altogether lightweight. But all are enjoyed by fellow Robin members. (An enthusiastic account of Robin activity is given by "Tag" Bourne on pages 104-105 of the December 1978 *Journal*.)

The ADS currently has two types of Robins, general ones, and those devoted to special interests, such as poeticus daffodils and hybridizing. The latter type seems to fly faster, get lost least, and to be crammed with the most intriguing information. I would like to begin new specialty Robins. One is in fact being organized at this moment, a Robin that will be devoted to the growing interest in daffodils of the tazetta clan. Bill Welch, whose recent *Journal* articles have indicated his knowledge of and devotion to this group of daffodils, will be sharing his experience and enthusiasm with Robin members anywhere, experienced or not, but joined by an interest in tazettas.

Now, how about a Robin devoted to cyclamineus *tyeps*? jonquils? triandrus? With interest in hybridizing continuing to increase, it may well be time to begin a second hybridizers' Robin. Adding an English member to the Hybridizers' Robin has proved so successful, that an International Robin with correspondents in six or eight corners of the daffodil world might be exciting to try. The extra travel time of the mails would not be a bar, although the postage costs of good, fat Robin packets could prove prohibitive for some of us.

We are, I think, on the brink of takeoff with a new Robin composed of equal numbers of experienced growers with many years of accumulated expertise and of beginners, or at any rate, novice daffodil growers. This one should provide its members with a nice mix of question, answer, and comment, with it not impossible for the veteran growers to learn some things from the newcomers, as well as the other way round.

Interested in one or more of the possibilities I've just outlined? Please write to me at 1341 Lincoln Way East, Chambersburg, PA 17201. Questions? Suggestions for other Robin possibilities or inquiries about the existing Robins? Same address.

HOOP PETTICOATS OUTDOORS IN MINNESOTA

MARYANN COLLINS, *Apple Valley, Minnesota*
(from *Tete-a-Tete, Newsletter of the Daffodil Society of Minnesota,*
September, 1980.)

Narcissus bulbocodium is a species daffodil fondly dubbed the Hoop Petticoat daffodil because of its unusual shape: a wide and flaring corona and narrow, linear perianth segments, which suggest an old-fashioned hoop petticoat.

Rumor has it that Hoop Petticoat Daffodils are not hardy in Minnesota and I was about to believe it after planting the bulbs in fall and having nothing come up in spring. Three years ago, I ordered bulbs of *N. bulbocodium* and some of its varieties from an English firm specializing in small bulbs. The order arrived very late, after the ground was solidly frozen. I potted the bulbs and grew (not forced) them under fluorescent lights in my cold basement. They grew green leaves almost immediately and, when spring was about here, they bloomed.

As spring turned into summer, I transferred all the pots of bulbs outdoors and tried to get the bulbs to ripen their foliage and become dormant. The *N. bulbocodiums* resisted this process, and when all the other bulbs were ripened, the *N. bulbocodiums* still had green leaves.

Not long on patience, I summarily planted each pot of *N. bulbocodium*, as is, into a peaty bed that I kid myself into thinking is acid just because I mulch it with pine needles. The *N. bulbocodium* leaves stayed green until August. After a brief disappearance, they again began to grow in September. After the ground froze, I covered the bed with evergreen boughs (because I grow heaths and heathers in it). After Christmas, I plopped our Christmas tree—whole and not cut into boughs—on top of the bed because I feared the heaths and heathers might not be reliably hardy here.

Come spring, the *N. bulbocodium* foliage was a bit winter burned, but still green. Rather late, after most other species were done, a single bloom showed upon one clump. The next spring, after similar winter covering, that clump put forth two blooms and two other varieties each raised up a single petticoat.

My hypothesis is that these bulbs want to begin growing right away in the fall and our early winter prevents them from doing that. Perhaps they need to grow roots and leaves before winter sets in. Lack of patience and a fortuitous late delivery seem to have resulted in what I had not been able to achieve playing by the rules—Hoop Petticoats blooming outdoors in Minnesota.

Now I want to re-run the whole procedure, but this time plant some outdoors in the "acid" bed in fall when received as a control group and some in pots under lights as before.

BITS AND PIECES

(from the Middle Atlantic Region Newsletter, September, 1980)

Every year during the first week in April, I take my dear 89-year-old friend, Gladys Musgrave, a bunch of daffodils. This is a very special bunch composed of Louise de Coligny, Trevithian, and Grand Monarque. Perhaps there are prettier flowers in the yard, but these three cultivars are divinely fragrant. You see, Gladys has been blind about twenty years. She is always so bright and cheerful. It makes me feel humble.

Gladys always says, "These daffodils are beautiful!"

When Lew Wallace wasn't writing *Ben Hur*, he created one of my favorite quotes: "Beauty is altogether in the eye of the beholder."

—BETTY DARDEN, *Newsoms, Virginia*

This spring I heard some comments which I shall pass along. It was the consensus that two additional requirements should be made of daffodil judges.

1. Judges should be required to exhibit periodically. Some judges never bother to exhibit once they have been accredited. This makes sense to me. It's easy to slip into an academic approach—to forget the hardships that the exhibitor undergoes.

2. Judges should be required to add some of the newer cultivars to their daffodil collections every year. You have to grow a flower in order to become familiar with its habits and characteristics.

I may have opened a hornet's nest, but it would be interesting to hear comments from members of the Middle Atlantic Region. Let the Regional Vice President know your thoughts on the subject.

—MARY GWYNN ERLANDSON, *Baltimore Maryland*

DOCTOR JAMES PARKINSON



Parkinson is a familiar name in daffodil history. You may recall that the apothecary John Parkinson wrote in 1629 his *Paradisi in Sole, Paradisus Terrestris* in which nearly a hundred kinds of narcissus are figured or described.

Now 350 years later comes the daffodil Dr. James Parkinson, named for another English apothecary/surgeon whose "Essay on the Shaking Palsy," published in 1817, described the disease which now bears his name in such clear and exact terms that it has never been bettered. A medical pioneer, he was also a

controversial social reformer, eminent geologist, and keen observer of all around him.

Whether the two Parkinsons are related is a matter for conjecture—and further research. (Photo courtesy of Matthew Zandbergen.)

YOU'VE COME A LONG WAY, BABY

DOROTHY SHEPARD, *Dallas, Texas*

In the spring of 1972, new to Princeton with a baby due in May, I wanted to share my enjoyment of daffodils with someone. Not being able to find a spring flower show nearby, I turned to the ADS membership roster in hopes of finding a kindred spirit. And there was listed Carol McNamara, not only a member but a judge and regional director, living not twenty minutes from me! She invited me over to see her flowers and came to see mine. It turned out that she too was new to the area, recently having moved from Long Island. Then the daffodil season ended, we had a third boy, and Carol started a mail order horticultural book business; daffodils were far from the center of our thoughts.

Yet the following winter Carol called wondering if I might be willing to put some daffodils around town to drum up some interest in having a daffodil show. Of course I was. David Steadman, then Director of the Princeton University Art Museum, agreed for us to put some in the museum over Easter weekend. Carol then invited all the ADS members in New Jersey to contribute to that effort. They were to meet at my house, a good central location, bringing their daffodils. It was a good spring for daffodils and a beautiful day so we ended up with four or five ADS members, some garden club members, and quantities of daffodils. Out of that meeting grew the "Friends of Daffodils," a group committed to put on a daffodil show the next spring.

Carol, her husband Dan, and I spent hours arranging those daffodils for the museum display. We had a wagonful of arrangements when we finished. The museum director blanched when he saw how many we had; he had expected one arrangement for the desk. So too in truth had we: we hadn't known what to expect. The arrangement job was the toughest I've ever faced, showing the beauty of each bloom in containers harmonious with both the flowers and the museum situation. Once at the museum the challenge became keeping them fresh throughout the whole weekend, a challenge which Carol and I couldn't have handled without the museum docents' help.

The "Friends of Daffodils" functioned with an operating committee, Carol, Jerry Reed, Diana Olcott, Dick Kersten, and me. Diana agreed to be the chairman of the show the next spring. That first show in the spring of 1974, although not an official ADS one, turned out very well. There were a respectable number of entries, the largest class being the "great unknowns," those daffodils whose names were not known.

A segment of the New Jersey daffodil fanciers felt that the name, "Friends of Daffodils," didn't have the stature needed by the group as sponsor of an annual daffodil show. George Lee wrote that the name; New Jersey Daffodil Society, was available for use so it was adopted in time for the 1975 show. George came down to speak to the group for our first meeting under that name. Still functioning under an operating committee but with local garden clubs joining in the sponsorship, the 1975 show, an official ADS one, was held. Spring was late coming so classes in other flowering bulbs and spring branches were added. Mike Magut came down to the show, bringing enough blooms to fill out the show and win the Silver Ribbon.

By the 1976 show, the New Jersey Daffodil Society had decided it needed real officers; Adra Fairman was elected president, Sallie Winmill, vice-president, Bobbie Kafes, secretary, and Dick Kersten continued as treasurer,

a job he had taken on from the very beginning. That year the ADS convention was held in Philadelphia which had two good results for us. Our members learned much from its meetings and from close contact with a national show. Additionally, convention-goers could judge for and/or enter our show. That spring was too hot for most local growers unless they had a good way to hold flowers they'd picked early, and most didn't. Out-of-town entrants were the backbone of the show. The 1975 and 1976 shows pointed out the importance of careful choice of show dates.

The next organizational step for the New Jersey Daffodil Society was to write a constitution and by-laws. They were ready for approval at the annual meeting in the fall of 1976.

With members living all over the state of New Jersey, an important goal of the group has been getting it to function statewide. Accordingly, meetings had been held in several parts of the state. The current president, Mrs. Bassett Winmill, is from Rumson. As yet no other New Jersey town has been willing and able to take on the show itself, although that seems to be the next logical step. Perhaps the best known daffodil grower in New Jersey, Libbe Capen, is an example of one who lives at a distance from the original nucleus of the New Jersey Daffodil Society yet who has shared her garden, her bulbs, and her knowledge with the group through the years.

The 1980 show had 452 entries (648 blooms) and awarded six ADS ribbons plus the National Council Creativity Award and the Princeton Savings and Loan Association Perpetual Trophy for best bloom in show. It was held with the aid of twelve New Jersey garden clubs and a budget of \$950.00. Compare those figures to the ones for that first official show five years earlier: 356 horticulture exhibits, four ribbons awarded, two sponsoring clubs, and a budget of \$460.00. The New Jersey Daffodil Society has grown from a membership of 30 to 95 members. One member is a regional vice-president and one a regional director. Some are judges or student judges; some give talks about daffodils.

I would like to think that the most fruitful results of these efforts are seen in the gardens of New Jersey where better cultivars of daffodils are grown better. Moving to New Jersey this year, I wouldn't have to drive twenty minutes to talk daffodils with an ADS member.

KNOW THE LITTLE JONQUILS

ELIZABETH T. CAPEN, *Boonton, New Jersey*

Our new president, as she took office, emphasized that all of us should study our flowers precisely; look at them with an analytical eye; above all, first grow them to know them well. Marie has certainly proven she has practiced what she preaches, evidenced by her many works of daffodil art.

I suggest that one group that needs study is that of the little jonquils, both species and hybrid, all closely related, yet each an individual.

Of the several jonquil species commonly grown and shown, only two consistently cause trouble in identification: *N. rupicola* and *N. juncifolius*. (The fact that botanists have been playing botanical games with these two for many decades does not alter their individuality, which is all that interests the gardener or judge.) Other jonquil species frequently seen — tall *jonquilla*,

little white *watieri*, tiny clustered *scaberulus*, and a few rarer ones—are readily identified.

The confusion in differentiating these two popular species can be traced to two causes: the method of supply, and the variation within the species.

The method of supply must be kept in mind by anyone buying daffodil species. Unless you know your supplier to be an expert, who knows and grows his product — and fortunately, we have had such — take it for granted that your bulbs will come by the method explained to my husband by a Spaniard on horseback in the mountains behind Grenada, as I was photographing some *calpicola* we had discovered. Jack's Spanish may leave something to be desired, but the caballero's sign language was eloquent. "You dig them in bloom; you tear off the tops; you throw the bulbs in a bag."

Such bulbs were sold not long ago by wholesalers at \$3/100. We have bought a great many hundreds through the years from the major wholesaler. Results would follow a pattern. First year, there would be a scattering of leaves; second year, there would be more leaves, perhaps a flower, quite likely "minimus," regardless of what had been ordered. Another two years might find a few more "minimus" — even one time a *N. watieri* — all out of 100 "*rupicola*." Yet, recently, hoping to replenish our patches of little species jonquils, and ordering several, all that came were *rupicola*, regardless of label. So has the "method of supply" confused general understanding of these two little species.

As an aside, does this remind you that we should reactivate the ADS Commercial Committee? Is there any important flower with less liaison among its Source, the Public, and the Group, speaking for the flower? Should the ADS not recognize its obligation to the daffodil growing public?

But let us return to our topic: the confusion in identification of these two little wild jonquils. The second cause for confusion seems to be that there is so much variation within the species, especially *rupicola*, that some students and judges attempt to divide *N. rupicola* in two.

N. rupicola is consistent in coming rather early for a jonquil and having a solitary bloom, almost sessile on a 3-4 inch stem. Its yellow, globular cup is six-lobed.

The problem comes from its chief variation—the width of the perianth. Think of it as a dieter, who adds and subtracts at the waist, while maintaining the same height, color, and general look. Now most Americans favor the thin look, but remember that *rupicola* comes from the Latin countries, where "fatter is better." Each form is "correct and true to name," so it is up to the judge to decide between examples of the different types, if put to the test. As a judge, I should lean to the fatter, that being closer to the currently favored wide-fat perianth, but thin or fat, all those early little one-to-a-stem yellow jonquils are *rupicola*.

N. juncifolius comes much later in the season. After *rupicola* is remembered only by its maturing seedpods, little graceful sprays pop up among foliage even grassier than *rupicola*'s. While time of bloom and the solitary versus the cluster style will separate these two for a gardener, a judge, seeing flowers from several seasons at a time, should remember that *juncifolius* has a small pedicel, even if improperly solitary.

I recall some years ago, horticulturalist (and one time ADS secretary) Estelle Sharp, defined a successful miniature as "one that reproduces itself on your place." I use her yardstick and found these two to qualify here in Zone 5, persisting for many decades. Further, both self-pollinate, producing seed to flower in but a few years. I do urge all fanciers to grow their own.

On the other hand, other well-known species, such as *calcicola* and *scaberulus*, yellows, and white *watieri* are hardy here for only a few years, while the favorite of the South, *jonquilla*, and other reasonably common ones rarely come up even once and can hardly be called "little," in the usual sense of being small and short.

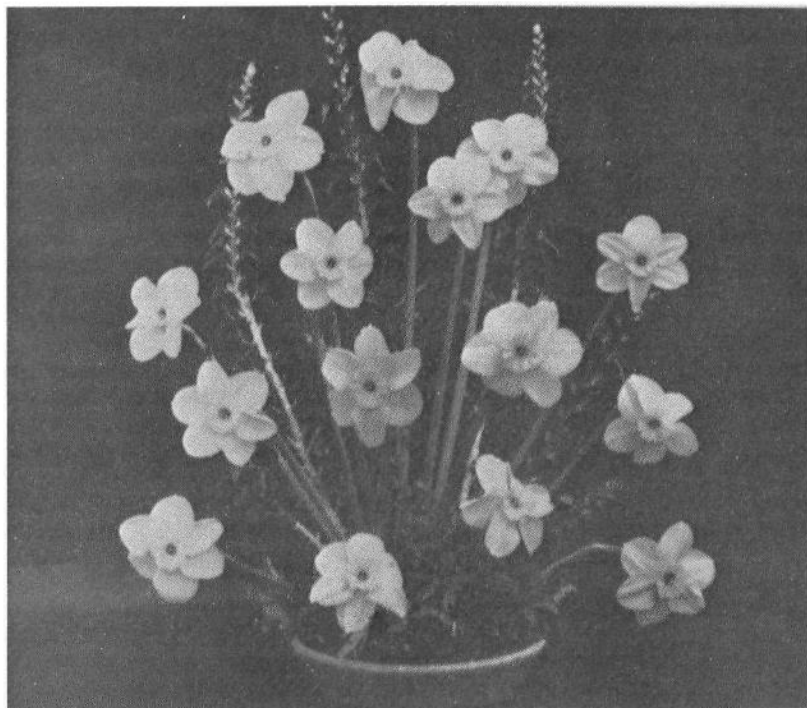
Of the many jonquil hybrids, we have found eight to be little and tough. They have persisted and increased here, although of course not by seed as Estelle was discussing. The source of hybrids is very important, as a small mistake can be multiplied. Of the eight, five came directly from the hybridizer, Alec Gray, bought more than once. Grant Mitsch, whose meticulousness in providing true-to-name bulbs is recognized by all, added two. The eighth was Clare, introduced by Mr. Gray after he retired.

Before listing the identifying features of our eight strongest, I thought it would be interesting to identify their pedigrees, kindness of the printout provided by Dr. Tom Throckmorton.

And so we learn that of the eight, six had *rupicola* as a pod parent. The other two had *juncifolius* on one side or the other. Then, we found six were sired by *poeticus*. "Ay; there's the rub." Did not *poeticus* emphasize hardiness genes and add vigor to the progeny of the two most hardy jonquils? Perhaps, but perhaps we can explore this line too far, or someone will raise the question of how two true species, bearing solitary flowers, can produce two or three hybrids, bearing two or three flowers per scape; sic *rupicola* x *poeticus*. This is a situation devoutly to be ignored, or conscience will make cowards of us all.

Here are the eight completely hardy, healthy, individual, prolific, little jonquil hybrids that we wholeheartedly recommend for show, or better yet, for the many places where a cluster of small spring beauty can fill a gardening need.

- SUNDIAL — short; usually two to a stem; smallest individual flower of the group; earliest and brightest; petals rounded; sepals clear yellow; bowl cup; center green; 6 anthers show, 3 larger than others.
- SUN DISC — a little taller and later than above with flatter perianth; sepals overlap and reflex, petals do not touch; whole flower clear corn yellow with green center. Most distinctive feature is its shallow fluted cup.
- BOBBY SOXER—next to largest of group, always two to a stem; sepals rounded, reflexed, but not touching; sharp apiculation; petals narrow, often irregular in size and shape; cup flaring, irregular edge, orange rim.
- CLARE — the newest of this group, hybridized by Alec Gray. One to a stem; one of the tallest; palest perianth of all; petals slightly fluted; cup corn yellow; slightly smaller than Sun Dial. Only three visible yellow anthers contrast with green center.
- STAFFORD — a precisely beautiful jonquil, one to a stem mid-season. Perianth, pale yellow, slightly reflexed. Its almost flat, clear yellow cup has occasionally a strong green center and one in a thousand a tiny rim of orange. (See *Daf. Handbook* p. 147)



Stafford (photo from the *Daffodil Handbook*, printed with permission of the American Horticultural Society)

- LINTIE — distinguished by its long tube; flower a bit larger than Bobby Soxer; cup brightest of group, being GYO; perianth light yellow is formal.
- BEBOP — with Lintie, last to bloom. Flower almost circular; sepals overlap; petals touch; each segment slightly cupped; always a really circular flower.
- CURLYLOCKS — all of above are in order of bloom. We have put this last, which flowers first, because it is last to be introduced, by Roberta Watrous. One flower to a stem; cup is widely flaring, twice the diameter of the nearest in size and shape, Bebop. Perianth creamy yellow; three anthers and stigma visible.

We began with the exhortation of our new president. Again, Marie practiced what she preached, and when here, compared a couple with which she was unfamiliar. Do follow her lead.

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Going round and round all alone? Get yourself organized. Join a Round Robin.

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EDUCATING THE PUBLIC ABOUT THE MODERN DAFFODIL

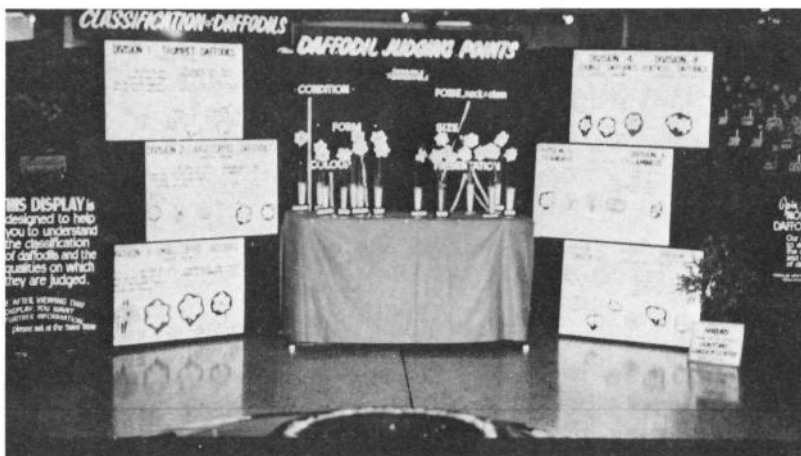
The Northern Daffodil Club in New Zealand stages its late show in a large shopping mall. Last year the several thousand visitors inundated the club's members with a shower of questions about the different types of daffodils and how they were judged. In order to stem the tide (if I may mix my analogies) our committee decided this year to prepare an educational display. This was placed in the hands of Wilf Hall, an excellent poster writer, and who else but the show judge, Max Hamilton. Thus we not only educated the public, but gained an insight into our invigilator's tastes and beliefs on form, size, color, etc!

The results of these gentlemen's endeavors are shown in the photographs. Wilf prepared ten charts setting out the new color classifications together with brief descriptions of each subdivision. Max prepared the judging points section, demonstrating good and bad points with flowers from his own garden. It was pleasing to know that a grower of Max's skill was prepared to admit to the occasional bad flower in his garden—encouraging indeed for those about to be judged.

The public's reaction was very favorable. I'm sure they viewed the show in a fresh light after studying the display. We received the usual queries and statements—"But isn't King Alfred still the best yellow daffodil?" "Those pinks aren't really daffodils are they?" All were treated with courtesy and respect in order to get daffodil converts. We were amused at an educational psychologist's comment—"aren't there any indifferent daffodils," he inquired, "only good and bad?" And then there was the perplexed middle-aged lady who said that she liked all the bad ones best. Closer scrutiny of the stand revealed that a wag had changed all the cards around!

Max and Wilf are already planning changes and improvements for next year. I feel certain that this stand will be a focal point of our show for many years to come.

PETER RAMSAY, *President, Northern Daffodil Club*



A general view of the exhibit (Ramsay photo)

HERE AND THERE

The cover of the *National Gardener* for September-October 1980 is of a block of four stamps proposed by National Council of State Garden Clubs, Inc., to commemorate the fiftieth anniversary of that organization. The design is by our own Gene Bauer, and one of the stamps is of daffodils. Although the U.S. Postal Citizens' Advisory Committee has rejected the first proposal, National Council plans to keep trying.

The *New York Times* of July 20 included an excellent article, "The Littlest Daffodils are Only Inches High," by Joanna May Thach. The beauty of this article is that it is an accurate account of an interview with Peggy Macneale featuring her garden and her knowledge of miniatures and also giving information about the ADS.

The September, 1980, issue of *Horticulture* has a glorious photo in full color of Matthew Zandbergen in a field of yellow/red double daffodils (Tonga or Tahiti?). The accompanying article, "Hybrids of Plain Luck and Pure Science," touches on the Dutch growing and selection process.

The September *Journal* incorrectly listed Mr. & Mrs. W. O. Ticknor as winners of a Rose Ribbon at Chapel Hill with a Tuggle seedling. A Ticknor seedling was the winner.

Newsletters have been received from the Northern Ireland Daffodil Group and the Tasmanian Daffodil Council as well as the Pacific, Midwest, and Middle Atlantic Regions. Local societies which sent newsletters were the Adena Daffodil Society, Central Ohio Daffodil Society, and the Daffodil Society of Minnesota. Virginia Perry's newsletter summarizes daffodil publicity around the country. Several of the newsletters give instructions for forcing pots of bulbs.

Julius Wadekamper's success with raised beds for his daffodils, as told in our June issue, was reported in Vol. 12, No. 12 of the *Avant Gardener*.

DIVISION 1 : TRUMPET DAFFODILS

of GARDEN ORIGIN

*Characteristics: One flower to a stem.
Corona as long or longer
than the perianth segments.
Generally early or mid-season.*

Trumpets are then subdivided by colour

I-Y Perianth coloured,
corona coloured, but not
paler than perianth.



I-W Perianth white,
corona coloured.



I-W Perianth white,
corona white,
not paler
than the
perianth.



I-Y-W Any trumpet variety
coloured petals, white corona
e.g.
Reversed
bi-colour.



The perianth is flattened and measured along the center line. The corona is flattened and measured to include any ribs or frill.



A close-up of one of the posters (Ramsay photo)

Round Robin letters keep daffodils blooming through the winter. Join by writing to Robin Chairman, Richard Ezell, 1341 Lincoln Way East, Chambersburg PA 17201.

OBSERVATIONS ON THE POLLEN OF SOME SPECIES AND HYBRIDS OF NARCISSUS

BARBARA TULLOCH

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INTRODUCTION

In preparation for a breeding program to produce narcissus cultivars, pollen of some species and cultivars was examined in spring 1976 for size and fertility, and in some cases chromosome counts were made. Because plant breeders elsewhere may be interested in the information, most of which has not previously been published, it is presented here as a table. Nagao (1933) measured pollen in several cultivars and seedlings, only one of which is similar to those whose pollen I measured. Sources of information on chromosome numbers of narcissus are Janaki Ammal & Wylie (1949), Wylie (1952), and various papers by Fernandez which are summarized in Darlington & Wylie (1955). Information was lacking on *N. tazetta* and *N. poeticus* hybrids.

MATERIALS AND METHODS

The methods used were those described by Haskell & Wills (1968). Acetocarmine jelly made up to Mark's formula was used to stain the pollen grains. Pollen from ripe anthers was shaken onto a drop of the stain on a slide and the slide left for approximately two hours to allow fertile grains to take up the stain. Up to four slides were made of each cultivar, and forty pollen grains of each were measured with a micrometer eye-piece set to give a magnification of $\times 400$. Only plump, apparently well-formed grains were measured, the maximum measurement being taken. Counts of stained grains and unstained misshapen grains were also made for twenty microscope fields of each cultivar, using a $\times 50$ magnification.

Where roots were available, chromosome counts were made from root tip squashes. The roots were pretreated for three hours in a saturated solution of para-dichlor-benzene and then transferred to acetic alcohol for twenty-four hours. They were softened by hydrolysis with 10% hydrochloric acid for thirty minutes and stained for 2-3 hours in 1% aceto-orcein. Certain cultivars, especially Matador, presented difficulty because their chromosomes appeared to stick together.

RESULTS AND CONCLUSIONS

The most interesting results (Table I, Group 3) were those for the *N. tazetta* hybrids, some of which have $2n = 17$ chromosomes, seven derived from *N. poeticus* and ten from *N. tazetta* (C. North, unpublished). These had by far

the most infertile pollen and the size of their stained grains ranged widely, for instance in *Geranium* from 0.050 μmm to 0.072 μmm . Pollen of Ideal was particularly sparse, with only twelve stained grains found on four slides, the smallest being 0.030 μmm and the largest 0.088 μmm . Possibly the large ones had an unreduced chromosome number.

The *N. tazetta* hybrid Cheerfulness and its derivative Primrose Beauty were more fertile than expected in view of the fact that they had double flowers, petaloid filaments, and anthers with relatively few pollen grains, these ranging in size from 0.036 to 0.072 μmm . The cultivar *Aspasia* was a triploid hybrid with $3 \times = 24$ chromosomes, 14 from *N. poeticus* and 10 from *N. tazetta* (C. North, unpublished), and for a hybrid of this constitution had large and evenly sized pollen grains (0.060 to 0.074 μmm): this was true of plants received both from Camborne in Cornwall and from Cleeve Gardens, Perth.

No stainable pollen was found in the *N. tazetta* hybrids Romeo ($2n = 17$), Golden Dawn ($2n = 24$), or Canarybird (chromosome number not determined). Matador ($2n = 31-34$) and Golden Dawn are stated to be sister seedlings from America (personal communication from Miss B. Fry to Dr. C. North) but they differed in both chromosome number and fertility.

Quick Step (Table I, Group 4) is a tetraploid hybrid selected from the cross Wild Rose \times *N. jonquilla* (Mitsch, 1971). It was fully fertile although the pollen grains were relatively small (0.046 to 0.056 μmm), and it was notable for its strong and attractive scent. Thalia, a *N. triandrus* hybrid of unknown chromosome number, was nearly unstained, its very few stained pollen grains ranging in size from 0.036 to 0.072 μmm . The double-flowered cultivar White Lion (Division 4 in the RHS classification) was almost sterile.

By contrast with most of the other groups studied, including species, the *N. poeticus* hybrids and the modern hybrids (e.g. Golden Harvest, Dominator), which according to Wylie (1952) are derived from *N. pseudonarcissus*, were fertile and tended to have uniform pollen grain size (Table I, Groups 2 and 4). However, in each group the members differed among themselves in the variability of their pollen grains as assessed by Barlett's test for homogeneity of variances. The pollen size of the species measured was usually, but not invariably, slightly smaller than that of the diploid cultivars (Table I, cf. Groups 1 and 2). The pollen both of the species and of the diploid cultivars was considerably smaller than that of the tetraploids. Although the *N. tazetta* hybrids with 17 chromosomes were generally infertile and had pollen grains of very variable size, it is interesting that most of them had some apparently fertile grains, suggesting that it would be possible to make progress in breeding with them.

Stainability is only one of several ways of assessing pollen fertility (Janssen & Hermsen, 1976). No single method can necessarily predict the success of a cross, which also depends on the seed parent and compatibility factors. In a vegetatively reproduced plant a single fortunate combination may produce a new and valuable hybrid, and a plant should therefore not be ruled out as a parent simply because its stainable pollen is sparse or variable. It should also be remembered that female fertility is often higher than male fertility in hybrids of distantly related parents.

ACKNOWLEDGEMENT

Thanks are due to Dr. C. North for his encouragement and for supplying unpublished chromosome counts.

TABLE I

Pollen fertility and size in *Narcissus* species and hybrids.

Material	Somatic chromosome no. (2n)	No. Pollen grains counted	% fertile pollen grains	Mean size of 40 pollen grains	
				Mean (μ m)	Standard deviation
Group 1—Species:					
<i>N. cyclamineus</i>	14(4)	194	99	.0374	1.39
<i>N. asturiensis</i>	14(4)	216	99	.0412	0.61
<i>N. juncifolius</i>	14(1)	232	42	.0326	1.46
<i>N. rupicola</i>	14(1)	104	100	.0368	1.81
<i>N. pseudonarcissus</i>	14(1)	104	99	.0444	1.67
<i>N. minor</i>	14(1)	195	98	.0458	1.74
<i>N. poeticus ornatus</i>	14(2)	336	95	.0358	2.75
<i>N. poeticus ornatus maximus</i>	14(2)	324	100	.0366	1.87
<i>N. poeticus recurvus</i>	21(4)	163	44	.0560	2.75
<i>N. bulbocodium conspicuus</i>	28(1)	114	94	.0516	1.58
<i>N. triandrus albus</i>	14(1)	133	77	.0382	1.96
Group 2— <i>poeticus</i> hybrids:					
Juliet	14(2)	188	91	.0430	0.96
Hexameter	14(2)	261	98	.0434	0.76
Milan	14(2)	191	89	.0446	1.50
Dactyl	14(2)	136	94	.0452	0.83
Glory of Lisse	14(2)	178	84	.0398	1.27
Sarchedon	14(2)	241	96	.0390	1.25
Sonata	14(2)	135	98	.0410	0.67
Raeburn	14(2)	237	89	.0422	1.05
Horace	14(2)	202	99	.0446	0.95
Caedmon	14(2)	249	90	.0422	0.84
Cantabile	14(2)	172	99	.0442	1.46
Actaea	28(2)	209	99	.0588	1.31
Stilton	28(2)	195	77	.0528	2.06
Perdita	28(2)	194	70	.0492	1.62
Mara	28(2)	153	95	.0508	1.83

Nos. in brackets refer to sources of information—see end of table.

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TABLE I (cont.)

Pollen fertility and size in *Narcissus* species and hybrids.

Material	Somatic chromosome no. (2n)	No. Pollen grains counted	% fertile pollen grains	Mean size of 40 pollen grains	
				Mean (μ m)	Standard deviation
Group 3— <i>tazetta</i> hybrids:					
Ideal†	17(2)	389	3.1	.0498	8.45
Geranium	17(2)	212	38	.0482	1.77
Geranium (from Camborne)	17(2)	119	14	.0620	2.67
Cheerfulness	24(2)	287	40	.0448	3.30
Primrose Beauty	—	336	46	.0472	2.29
Aspasia (from Camborne)	24(2)	62	48	.0696	2.24
Aspasia (from Cleeve)	24(2)	69	83	.0662	1.87
St. Agnes	24(2)	214	30	.0466	2.60
St. Keyne	24(2)	174	13	.0430	2.29
Matador	31-34(2)	352	83	.0498	3.36
Romeo	17(2)	192	0	—	—
Golden Dawn	24(2)	150	0	—	—
Soleil d'Or	30(2)	518	49	.0414	2.39
Canarybird	—	179	0	—	—
Group 4—miscellaneous hybrids:					
Golden Harvest	28(2)	182	95	.0546	2.44
Malvern Gold	28(2)	172	75	.0542	1.81
Dominator	28(2)	258	92	.0550	3.02
Trousseau	28(3)	142	80	.0532	2.21
Kilworth	28(3)	240	3	.0540	1.79
Sempre Avanti	—	200	87	.0508	1.25
Quick Step	28(2)	192	94	.0508	0.90
Thalia‡	—	178	1	.0534	5.15
Telamonius plenus	14(3)	171	68	.0406	1.62
Fermoy	—	197	8	.0562	2.70
White Lion	—	175	12	.0512	1.51

Nos. in brackets refer to sources of information—see below.

— = chromosome number not determined.

† Only 12 pollen grains measured for 'Ideal'.

‡ Only 18 pollen grains measured for 'Thalia'.

Sources: (1) Darlington & Wylie, 1955. (2) C. North, unpublished. (3) Janaki Ammal & Wylie, 1949. (4) A. P. Wylie, 1952.

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POETICUS PHYSALOIDES - SNIFF AND KNOW

MEG YERGER, *Princess Anne, Maryland*

Sniff and know is a good sleuthing method for identifying a poet that newly bloomed in our Maryland garden in the 1980 season. A remarkable feature of this variety is the fact one could probably locate it in the garden with the eyes closed, the scent is so extremely fragrant.

An Oregon gentleman, George E. Morrill, had thrown the bulbs over the bank across the street from his house years ago and rescued them recently when he became interested in poets as a means to an end in a poetaz hybridization program. Curious as to what poet it could be, he sent me a couple of bulbs for identification.

Even before the blooms opened, the long swollen spathe gave a clue as to what it might be. E.A. Bowles in his book *The Narcissus*, published in 1934, said that such a spathe was unlike that of any other narcissus. He went on to say that "it is described by M. Beauverd in *Bull. Soc. Bot. Geneve, Series II.*, xxiii., p. 549 (1931), as *N. poeticus* var. *physaloides*. The exaggerated inflation of the spathe causes it to resemble the enlarged calyx of *Physalis*, the Winter Cherry, and suggested the name. After the flower has emerged the spathe remains dilated below and bears two tongue-shaped lobes at its summit."

The Alec Gray catalogue of 1961 lists the variety and indicates the source as Switzerland.

The opening of the blooms in mid-April, which in Maryland is mid-season for poets, gave a chance to color-code them as 10 W-YYO. The plant blooms on 56 cm scapes. The perianth measures 7 cm in diameter with both sepals and petals twisted in a clockwise direction and a slight staining from the corona color. The corona is cupular, measuring 4 mm in depth and 7.5 mm in diameter with the center and mid color zones yellow and the outer zone a suffusion of orange. Best of all the opening of the blooms gave a chance to enjoy the extremely captivating fragrance. In honesty it must be admitted the appearance is very ungainly, perhaps ugly, but -oh what a perfume! The flower is worth having for that alone.

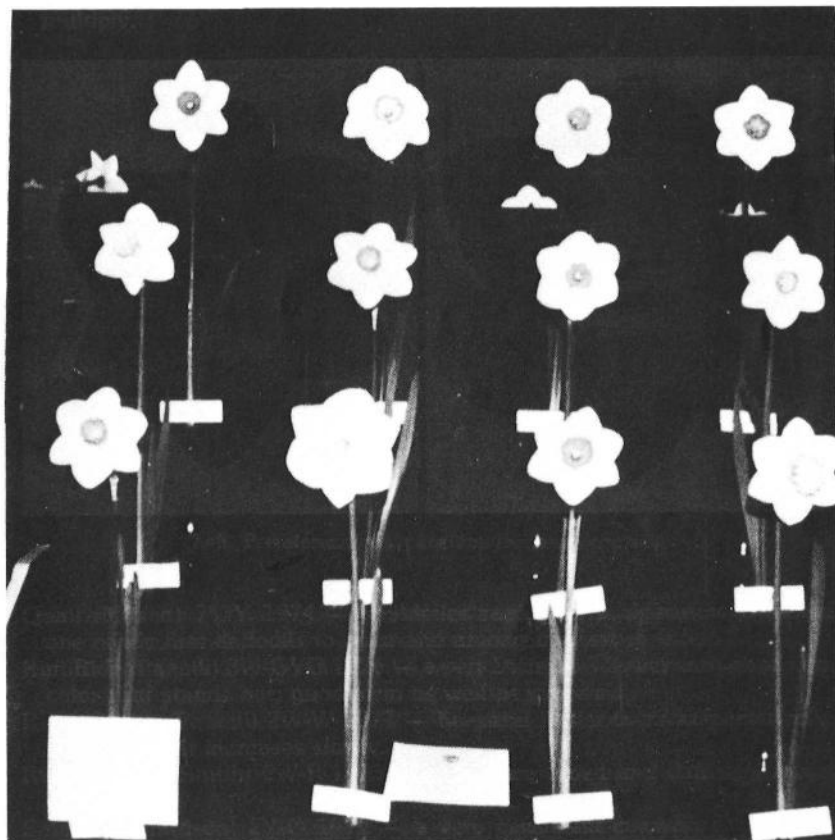
Later Mr. Morrill wrote, "I have been trying to think where I got these bulbs originally. I travelled extensively through the mid-Willamette Valley about 1946 and collected various bulbs at that time from old abandoned homesteads where the house had been burned or had just been abandoned. I think that I picked them up at that time. So it is possible that they were brought across the Plains with the early settlers. There is no telling how long they had been in the US before that time or when they were brought here. So it is possible that they became extinct other places, yet survived in the Willamette Valley."

Ray Scholz of General Robin #2 has been dubbed "King of Manure Haulers" by fellow members. Ray has accumulated over 350 tons of the "good, rotten" stuff, and, according to Isabel Watts, will soon have no room left in his garden for soil.

THE ENGLISH SEASON, 1980

GEORGE TARRY, *Wirral, Cheshire, England*

After the disappointing spring of convention year, we were sure that 1980 could only be an improvement, but few of us foresaw just how exceptional it would be. There was a minimum of cold or snow during the winter period and by March 1 we had every sign of a very early season with plant growth advanced and buds visible. Temperatures then dropped to the level where plant development was halted, but as there was little personal discomfort at this level, even experienced growers took inadequate steps to maintain progress of the blooms programmed for the RHS Competition on March 25. As a result the display was on a par with 1979 with a norm of two or three entries in a class and very few flowers of the quality required to excite comment. Tony Noton won the Devonshire Cup with a nice collection of flowers which come at the start of the season, and he also had best Division 1 with Golden Vale. Mrs. Oxton won most points in the single bloom classes, to add to Best Bloom in Show, Irish Light, and best double, Unique; while Bob



Engleheart Cup Collection: top, left to right: Achduart, Badenloch, Gold Convention, Loch Broom; middle: Pitchroy, Creag Dubh, Cul Beag, Shildaig; bottom: Loch Hope, Ben Avon, 1-9-71, 2-31-73. (Tarry photo)

Southon was runner-up for most points and had best Division 3 with Kimmeridge.

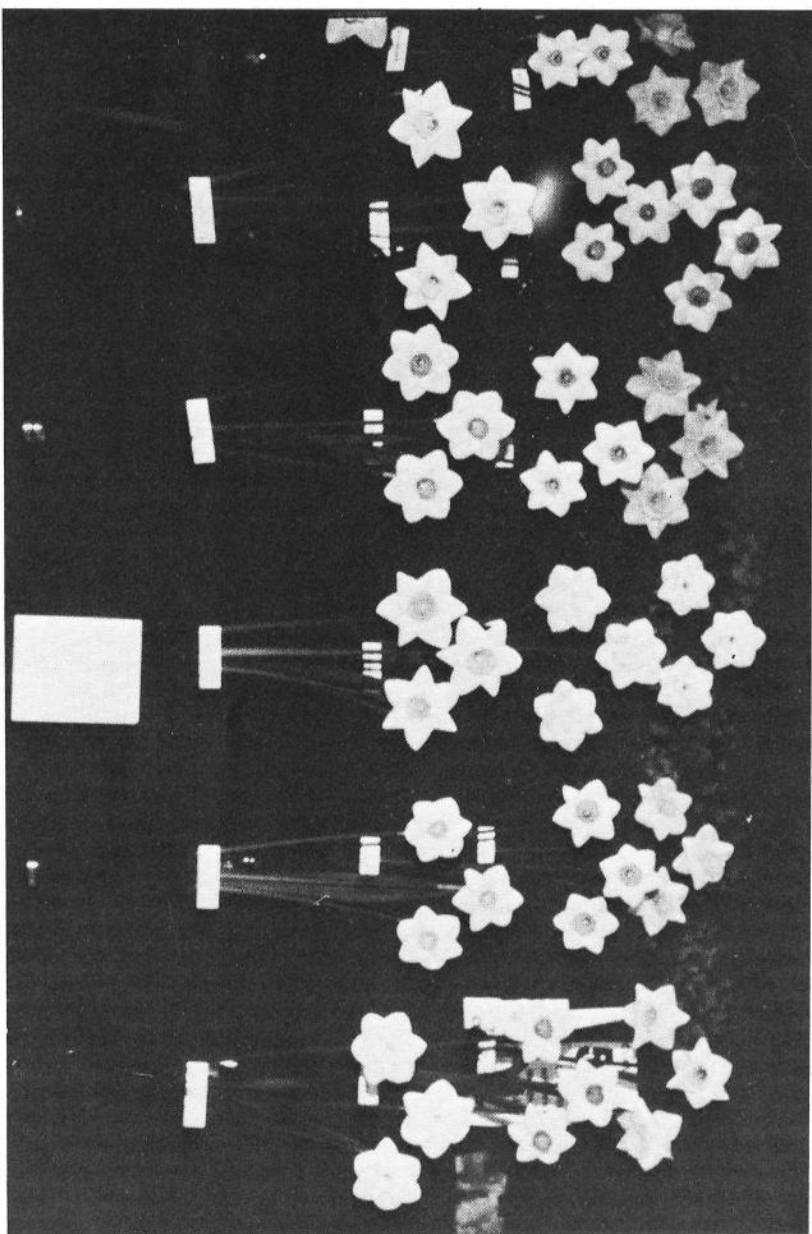
The cold weather continued until early April and then there was a complete change to dry, warm, sunny weather right through to the end of May. By mid-April good flowers from the open were available everywhere, for most growers their best ever, and competition was so keen that honors were difficult to attain. The RHS Show on April 15 was the best for many years both in quality and quantity. Six marvellous entries were staged for the Engleheart Cup (for twelve seedlings) which was retained by John Lea with his best collection ever. A magnificent specimen of Loch Hope was Best Bloom in Show and was well backed by novelties including Badenloch 3 W-YYO, very large and round with a distinctive pale orange band; Ben Avon 1 W-W with its round perianth and narrow trumpet opening to a wide flare; and a refined Creag Dubh 2 O-R. The closest challenge came from Tony Noton whose best flower was the Reserve Best Bloom, Rutland Water 2 W-GWW. Of the remainder I particularly noted Berry Gorse 3 W-GYY and Mill Grove 2 Y-R. In third place Brian Duncan continued his progress towards the major award.

The single bloom classes were keenly contested and with more than twenty entries staged in several classes, it required exceptional flowers to register awards. A best bloom was selected from each division and these were Empress of Ireland (Tony Kingdom), Dover Cliffs (Jim Pearce), Kimmeridge (Reg Nicholl), and Unique (Clive Postles). Other winners were well established cultivars which had been well grown, and expensive novelties made little impression. In the class for flowers with orange perianths, Carncairn were successful with their seedling W1/75, a medium sized bloom with strong color. The award for most points in the single blooms was shared between Tony Kingdom and Wilson Stewart and the records show that this was the first occasion of a tie.

In the Amateur Classes, the two trophies were also keenly contested. Four exhibits were staged for the Bowles Cup, fifteen vases of three blooms, and any one of them would have won in a normal year. In this exceptional year, Clive Postles won by a narrow margin from Tony Noton. Only one cultivar, Unique 4 W-Y, appeared in both exhibits so any comparison relied heavily on personal assessment of the other cultivars used, and the variations in presentation and color range gave adequate scope for those who indulge in the sport of judging the judges when the show had opened.

The Richardson Cup, twelve single blooms, had fifteen contestants, the most ever; and many of the collections were the finest flowers their growers had ever staged, but received no recognition beyond the thrill of taking part in a glorious show. The Cup was won by Paul Payne of Norwich, a grower who has made good progress since he showed in the novice classes in 1977. His flowers were well set up and in perfect condition, and for me the best were Ballyrobert 1 Y-Y, broad and round in the perianth, Premier 2 W-GPP, bright and attractively colored, and Doubtful 3 Y-R, a cultivar which most of us would consider to be below the standard required at this level of competition. Tony Noton was second, his usual high standard being just a fraction short of the requirement for the day.

While the competitive classes claimed the first attention of the exhibitor, the Show was set off by the magnificent background provided by the trade, particularly Rathowen, John Lea, Carncairn, Mrs. Abel Smith, and Broadleigh Gardens.

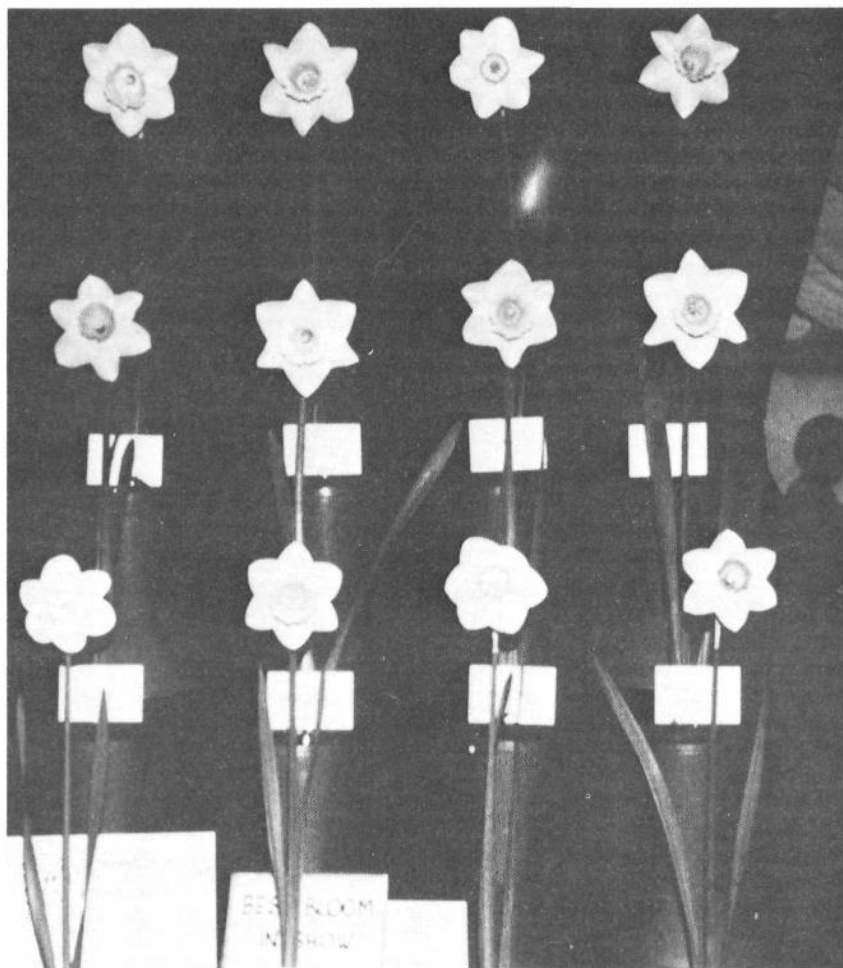


Bowles Cup Collection: top, left to right: 7839, Golden Rapture, Verona, Strines,
Newcastle; middle: Torridon, Dalhauine, Unique, Hotsipur, Loch Lundie; bottom:
Broomhill, 7901, Glen Rothes, Altruist, Cool Crystal (Tarry photo)



Part of the Rathowen exhibit (Knierim photo)

At the end of the week we assembled at Solihull for the Daffodil Society Show. By nightfall on the Friday there was the prospect of a record-breaking show with all resources strained to the limit, but unfortunately there was a gale in the night and part of the perimeter of the tent collapsed, bringing down and damaging a number of exhibits which had already been staged. The working party of volunteers restored some semblance of normality early on Saturday morning, and the unlucky exhibitors then salvaged what they could, cancelled some entries, and rearranged the best of the surviving blooms as far as this was possible. When the show opened, there was little to suggest that anything unusual had occurred and the show was still the best for very many years.



Norfolk Cup Collection: top, left to right: Drumboe, Armagh, Fiorella, St. Keverne; middle: Leander, Castle of Mey, Arctic Gold, Preamble; bottom: Silent Wonder, Bayard, Merlin, Pinza (Tarry photo)

The much coveted Board Medal was won by Jan Dalton with Newcastle, Shining Light, and Merlin, a well-earned success. The ADS Ribbon attracted four good entries, but none of his rivals could seriously challenge Wilson Stewart's collection of Cool Crystal, Kingbird, Butterscotch, Beige Beauty, and Honeybird.

In the Open Cup classes, the Bourne Cup returned to John Lea for a fine collection not quite up to the standard he set in London, while the Cartwright Cup for twelve cultivars in commerce was won by Alfred Bradshaw with a set which included very good Achduart, Hotspur, and Citronita. In spite of the overnight disaster, there were more entries than usual in the remaining open cup classes but although there were many fine flowers, it was the well established cultivars that won the prizes.

To me, the highlight of the show was found in the amateur cup classes, the collection staged by Ivor Fox of Leeds to win the Norfolk Cup for twelve cultivars in commerce, price limit 50 pence a bulb. Every flower was in first class condition, without blemish and they were all set up in immaculate order. To add an extra credit, his bloom of Castle of Mey was a worthy Best in Show, although there was no weak bloom in the whole set.

The third major event of our season is the Harrogate Spring Show on April 24, originally an outlet for northern growers but now attracting keen exhibitors from a wider area. This is an amateur competition but with a public attendance of 45,000 to 50,000 over three days to see the full range of spring flowers it presents modern daffodils to a wider audience than our other shows. This year saw the introduction of the Northern Championship for twelve blooms, and after the RHS show it was no surprise when Paul Payne took the trophy back to Norwich. Once again he relied on well grown blooms of established cultivars: Kingscourt, Viking, Border Chief, Tudor Minstrel, Ringmaster, Daydream, and Rockall for the major part of his exhibit, giving another boost to our Society's campaign that expensive novelties are no longer essential for success. The Norwich Society backed Paul with the winning exhibit in the Society Class with more blooms of reliable cultivars such as Golden Rapture, Merlin, and Verona. This is our only show where a range of champion blooms is selected, and on this occasion they were Ballyrobert 1 Y-Y, Newcastle 1 W-Y, Empress of Ireland 1 W-W, Loch Stac 2 Y-R, Strines 2 Y-Y, Cool Autumn 2 W-Y, Daydream 2 Y-W, Citronita 3 Y-Y, Rockall 3 W-R, Angel 3 W-W, and Unique 4 W-Y. To complete the triumphant day for the visitors, another Norwich grower, Geoff Bell, was awarded Grand Champion (Best Bloom) for Ballyrobert, but I am sure the northern growers will provide a stronger challenge at next year's show.

The season ended with the Daffodil Society's Late Competition in London on April 29, only two weeks after the main show but already most growers were at the end of their resources and it was only by staging every bloom in acceptable condition that we managed a reasonable display for the public. The premier class, the Noton Cup for six vases of three, went to Mrs. Oxtan for the only exhibit staged, and for those interested in flowers for the end of the season her cultivars were Manly 4 Y-O, Lysander 2 W-YYO, Saturn 3 W-GYO, Red Bay 2 Y-O, Daydream 2 Y-W, and Knightwick 2 W-P. Jim Pearce won Best Bloom with Tobernaven 3 W-W, a cultivar which has disappeared from the catalogues; and for the first time we saw a good range of poeticus from the open ground with all their fresh sparkling beauty. And so the season was very brief, but we had the opportunity to stage all our best flowers in good competition with none wasted because they came after the shows.

TEST GARDENS

RUTH PARDUE, *Test Garden Chairman*

The test garden program is currently being expanded. The previously existing gardens were at Clemson University, University of Minnesota, and the University of Arkansas. The garden at Clemson experienced difficulties in that the bulbs had to be replanted due to the construction of parking lots. The new beds were prepared with raw sawdust and most of the bulbs were lost. Some cultivars were sent to Dr. A. J. Pertuit who is in charge of the planting. Otis Etheredge and Curran Craft will follow up on this garden and help with data collection.

New bulbs were sent to the Minnesota planting and a Minneapolis open school. Data will be collected by the 7th and 8th grades in the school. Mr. Michael Heger is the ADS contact person for the Minnesota planting.

The University of Arkansas project, with Victor Watts as ADS representative, received more bulbs.

Four new ADS gardens were established this year. They are at the Denver Botanic Gardens; River Farm, American Horticultural Society's garden, with Mrs. Jennings Pamplin the ADS representative; Riverside Garden, Wheaton, Maryland, Marie Bozievich representative; and Paducah, Kentucky, where Carolyn Roof is the ADS representative. The Central Ohio Daffodil Society and the city of Columbus, Ohio, made available bulbs to be donated in the name of the ADS. Five of the fifteen beds of the CODS garden yielded well over 8000 bulbs from 350 cultivars. Three bulbs of each cultivar were put back. Over 3000 bulbs were sent out for ADS gardens and the remainder were used in other Columbus parks. The CODS garden now contains 1237 cultivars which are true to name, labeled, and evaluated each year.

The test garden chairman has asked each region to supply a list of gardens that fit into any of the following categories:

1. Test gardens where tests are underway
2. Display gardens with large numbers of labeled cultivars where they can be seen together and studied
3. Landscape gardens where different plants are grown in association with daffodils to create a pleasing garden

A test garden report will be assembled yearly with these gardens listed. Also, cultivars growing in the various test gardens will be listed so that new cultivars may be donated by members. It will be stressed that only disease-free, true-to-name bulbs be sent. Test data will be made available in this report. It is the test garden chairman's intention that this detailed report will be sent only to the participating gardens and prospective donors. A condensed report will appear in the *Journal* for the membership's edification.

A packet of information is being prepared for local societies or individuals wishing to start new test gardens. It will give site suggestions, cultural information, evaluation data sheets for cultivars, and other useful information.

It is the plan of the test garden program to expand the scope of the program and to keep the membership aware of evaluation of cultivars in the various regions. The ultimate goal is to have test gardens in each region or locality of this country.

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