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One of John Lea’s spectacular flowers, Glendarroch, 3
W-YOO. (Postles photo)

NO END IN SIGHT

CLIVE POSTLES, Droitwich, England

(from his talk at the 1989 ADS Convention)

My talk this morning, as you all know, is the story of John Lea, his wonderful flowers and my association with him. Last year I collaborated with David Lloyd to write an article for the R.H.S. Journal on this same subject, we called it “Not Yet The End of the Line” which seems most appropriate. I have expanded considerably on that same theme for you today.

John was undoubtedly one of the most important and influential raisers of daffodils to emerge during the latter half of this century, whose flowers have set new standards for us all to strive to improve upon. This
story is fascinating and I feel privileged to be part of it.

I first met John in the early 1970's although I haven't recorded the exact date, I started to hybridize my own flowers in 1974, so the date is about correct. This was a most significant time as John had recently retired and issued his first price list in 1971, and his first catalogue the following year. At that period in my life I was actively engaged growing exhibition chrysanthemums, and until then my concept of daffodils was that "they were those yellow flowers that bloom every spring without fail." I must confess to still having a sneaking regard for those wonderfully preened and pampered, monster chrysanth, but Astrid keeps me firmly in check when I threaten to start growing them again! We first arranged to visit John Lea, to see his flowers after my local Chrysanth Society, Stourbridge, had begun a Daffodil Show to maintain interest for members, spring being rather uneventful for the chrysanth grower. Bulbs had been purchased from Willie Dunlop, and having our appetite whetted, we needed better quality flowers for the following season.

Dunley Hall is a fine old Georgian house where in 1892 Stanley Baldwin a British Prime Minister lived. Set in rural Worcestershire, the house and gardens were impressive but the flowers created an even bigger, lasting impression. John made us very welcome and we were given a conducted tour of the gardens and daffodil beds. I remember vividly seeing Loch Hope, brilliant under its sun-shade, and Dailmanach was of a pink colour that I hadn't dreamed existed. How different they were from the Buncrana, Glenwherry and Glenmanus that Dunlop had sent us, amazingly different in fact. There was no hope for me after that first encounter.

John never confided to me the reason for his interest in daffodils, but his records show that in 1943 he first purchased bulbs from Guy Wilson and a company called Barr & Co., and that in 1947 he first exhibited at the Medland Daffodil Society (later to be just called the Daffodil Society)

Two new Lea cultivars: Reference Point (2 YW-Y) and Corbiere (1 Y-O)
winning first prize in a single bloom class with the variety Brunswick and second prize with a bowl of Beersheba. During the next few years more bulbs were obtained from Wilson and Richardson. Just after the war, on a visit to Guy Wilson, he was given a bunch of the latest daffodils for pollen, he carefully carried these back to London. They were admired by a charming lady that allowed him to share her taxi (apparently London taxis were even more difficult to find just after the war than they are today). He decided to present them to her, but the thought of the seedlings to come overcame his generosity, and as he admitted, “to my everlasting shame, I kept them!” This started his breeding programme that has given us the flowers we see today. By 1950 he had his own breeding stock. The first of his own seedlings to be used was No. 6-46, Porthilly × Shemish. I believe that from this early date we can get an insight into his eventful success. He quickly seized upon the fact that by using his own seedlings as parents, he would be able to create his own individual and unique style. Not for him the haphazard use of flowers from other raisers, but by careful study and selection of his own seedlings, probably flowering for the first time, looking for that small yet important quality that he was seeking. Seedling 1-1-55 was just such a flower, having a brilliant white perianth and a fairly sun-proof cup. This seedling was eventually thrown out and yet its influence can still be seen today, generations later in Cul Beag, Loch Brora, and many others, that have the same brilliant whiteness of petal. But John was not blind to the use of the very best from other raisers. Varieties from Blanchard, Noton, and Navarro, and more recently Dr. Throckmorton and Brian Duncan were introduced into the bloodline. This out-crossing certainly helps to keep the breeding stock fertile and vigorous. The quantity of flowers pollinated surprised many people, being quite small.

Looking at his records in 1979, which is a typical year, only 455 seeds were planted. Indeed the total quantity of bulbs grown at Dunley was little more than many amateurs grow. Not for him the wholesale approach of crossing dozens of flowers of one cultivar in the vain hope of an improvement upon the parents, although he did concede that the more seedlings raised, the more chance of success—all things being equal. But as most crosses produce a very high proportion of rubbish, the greater the problem with selection. His method was careful study of the breeding records, then perhaps only one flower of each would be pollinated, for in most cases only one flower would be available, anyway. He rarely repeated a cross after the first seedlings from the cross had flowered, as in subsequent years newer things would be flowering, offering better and more interesting prospects. Surprisingly John rarely ventured outside the first four divisions, in fact his excursions into breeding doubles was almost entirely confined to white/pink doubles, and he claimed to have raised the first true pink. I can’t remember seeing a yellow petaled double flower at Dunley, and certainly haven’t come across them in his record books. He appeared to dislike the usual lack of perfection in the petaloid area. On one occasion, while helping him judge, he sat down, looked at the
collection of doubles and remarked "What am I supposed to be looking for!" His Killearnan that I named, the beautiful if not controversial poet, is rather a mystery but I have my own theory of its origin.

To illustrate the use of how John's own seedlings featured in his breeding programme, take his last year 1984, only 16 crosses were made using named cultivars — they were mostly of his own raising anyway — and 32 crosses with numbered seedlings. That is typical of his breeding records as far back as 1959.

John's success on the showbench, with flowers of his own raising, was legendary and his ability to grow them superbly, set him apart from his competitors. David Lloyd writing in the R.H.S. Journal, as long ago as 1961, said this: "He grows flowers of a size and quality which only those pampered denizens of the Emerald Isle have hitherto achieved." This brief list of some of those successes will let you judge for yourself. He won the Engleheart Cup 12 times between 1971 and 1984 being the first Englishman to beat the Richardson's in forty years; The Daffodil Society Bourne Cup eight times; Best Bloom at the R.H.S. 15 times, 11 of these with flowers of his own raising; several Gold Medals for his trade groups. In 1982 he won Best Bloom with Achduart, and Reserve Best with Gold Convention, both from the same Engleheart exhibit. The Guy Wilson Memorial Vase was introduced by the R.H.S. in 1982, for six vases of white cultivars, three blooms of each. John was keen to win this trophy as Guy had been such a good friend. Peter Ramsay staged the exhibit for John. Needless to say he won and was delighted. Quite a galaxy of awards I think you will agree. Not only were his flowers, more often than not, superior to the opposition, but his staging portrayed an almost military precision, with stems inches longer giving the whole exhibit the appearance of being best, even before looking at the other entries. His trade displays, although never large, were always full of quality and a main draw to all other exhibitors, with an eye to next year's winners.

John was an engineer by profession, incidentally so was Lionel Richardson. This training seemed to instill amazing precision, not only to his flowers but also to the ingenious devices that he constructed to thwart the British climate. Large cloches, or more accurately mini-greenhouses, were erected over the daffodil beds in mid-winter, and cables with electric light-bulbs every few feet, suspended inside, hanging over the plants. These were switched on in late afternoon and off in the evening, so extending the daylight hours, but more importantly they had the desired effect of warming the cold soil. In cold dull weather the lights would be on all day, and in a late season used to open the flowers with great success. This method of protection, coupled with light and warmth, enabled him to get flowers for early April that would have been impossible in our part of the country without resorting to pot culture, and he rather frowned upon this method, although he did grow a few of his newer things in pots, mainly for ADS Convention Shows or the early R.H.S. Competition. Most British growers rely heavily on potted bulbs under glass for early shows, due to
our very unpredictable spring weather. These were potted into a soil-less compost that John mixed himself, and plunged under a covering of leaf-mould and leaves topped off with chicken netting to prevent the winter wind removing it. There was no magic formula for producing these quality flowers, certainly not feeding, the only substance I ever saw used was wood ash from the open fires in the Hall. If there was any particular treatment that John gave I would single out the use of vast amounts of water. He liked to see his daffodils get the equivalent of five inches of rain during March and April. He had this idea of using abundant amounts of water from observations of *Narcissus Bulbucodium* actually growing in running water on a Portuguese mountain side. The flowers on bulbs growing in the water were twice the size of the surrounding plants. Back home he experimented with bulbs planted over a gravel filled trench with a hose pipe left running through it. The resulting flowers were some six inches taller and larger than their non-irrigated neighbors. The plants were also sprayed regularly including the open flowers. Fresh fertile pasture land would be ploughed each year and early planting was begun even before the orders were dispatched in late August.

John, in conjunction with Rosewanne Research Centre, perfected the dipping technique, and used this in preference to hot water treatment. His stocks were lifted annually, nothing except the seedlings had two years down. This treatment of dipping the bulbs in admittedly foul chemicals kept the bulbs clean.

When John’s children were quite young he managed to persuade them to hunt for virused bulbs, and paid them the princely sum of one shilling for everyone found.

John was also quick to master the art of twin-scaling, and all promising seedlings would be cut up as soon as a surplus offset became available. The one major drawback with this system was that as many seedlings change radically during their formative years, some stocks would have been disposed of amongst the mixed seedling sales, leaving their twin-scaled offspring happily growing on in boxes, or nursery beds to confuse him later on. Nevertheless, it paid dividends in the long run, making available some cultivars for sale before natural division would have allowed.

While John was reaching the pinnacle of his career during the ’70s and early ’80s, incidentally he was appointed High Sheriff of Hereford and Worcester in 1978, a most prestigious position, I was busily growing and exhibiting at local shows, eventually at the Daffodil Society and then the R.H.S. London, with modest success. I began to hybridize in 1974 with the Lea seedlings that I have already mentioned. John was very generous with pollen. He often remarked, that he started with pollen given to him. I remember seeing his Dailmanach exhibited at the Daffodil Society Show in his Bourne Cup group. It wasn’t catalogued at that time! I plucked up the courage to ask for a flower, and telephoned him. He most graciously offered one, and although he was setting out for Scotland that very day, he
left the flower in a milk bottle on the doorstep of Dunley Hall. I hurried over before anyone else took a liking to it, and sure enough there it was. It goes without saying that I used every grain of its pollen. In subsequent years I would go to see the flowers, and collect my own pollen. I was given a free hand, the only restriction placed upon me was that I should not touch the flowers that had already been pollinated by him. The unique advantage was that I was working with seedlings that had perhaps bloomed for the very first time and certainly not available to others. I could not have wished for a better start.

In May of 1984 John Sidney Birch Lea tragically died while on holiday in his beloved Scotland. He was just 72 years old. We could not believe the terrible news as he had been to see my seedlings just two weeks before, and was his usual interesting self. Apart from his daffodils one of his great loves was salmon fishing. In the relaxing atmosphere of his hotel, he would study his records, working out theoretical crosses that probably never got made, and jotting down those almost un-pronuncable Gaelic places, names that graced his catalogue. That same notebook has many names still to be used. The very evening of his death he was listing the seedlings to be specially grown for the next year’s Engleheart, total dedication. Following the sad rituals of his death I volunteered to help Betty Lea, John’s widow, to lift and prepare the bulbs for dispatch. There was already a full order book with more arriving daily. Being such a frequent visitor, I was well used to the system, and it seemed logical for me to take charge. I spent several weeks at Dunley Hall, sorting, digging and dipping, only leaving Betty to pack and dispatch the parcels. It was mutually agreed that I should continue to grow John’s seedlings, and to make every effort to gradually name and introduce them. This I willingly agreed to do! Without John, Dunley Hall and the garden were far too large for Betty to cope with. Both their children lived and worked in London, and had no interest in the daffodils anyway. With some apprehension if not reluctance I agreed to buy the whole bulb business from her. I fully realized that a small daffodil nursery was not exactly a “get rich quick idea.” However, I found myself the owner of John’s stocks, his equipment, and trading name, even down to the unripe seed pods.

Astrid and I had recently bought a derelict 17th century cottage in the small hamlet of Purshull Green, just six miles from Dunley, so the distance to transport everything was not great. The cottage had to be restored to its original condition and totally in keeping with its surroundings. The restoration took us two years, and a lot of hard work and worry. We often wondered just what we had taken on. The gardens had to be completely laid out from open fields that the ruined house stood in. This, then, was to be the new home for us and John’s bulbs. During that summer of 1984 I moved everything from Dunley Hall and safely planted it. Fortunately I had acquired several more acres of land by that time. The seeds that John had crossed, being unaware of his future, were collected and sown. His breeding and planting guides proved invaluable and to the best of my

200
knowledge nothing was lost. However, everything got done and we had that winter to decide the future.

For many years I ran my own business manufacturing T.V. picture tubes, so I was familiar with normal business practices, but Ministry of Agriculture procedures, exporting certificates, and daffodil catalogues were quite a different matter. Anyway I jumped “right in at the deep end” and luckily, we were successful from the word go, although I must admit I did have a head start. I now export daffodil bulbs to many countries including the U.S.S.R. As I stated on numerous occasions “The best is yet to come” as there are hundreds of John’s things still to flower. I’m sure John is “up there somewhere offering me all his help and advice”, because I have been able to continue just a little of his success with breeding, and on the showbench, proving that “It is not yet the end of the line.”

34TH ANNUAL
AMERICAN DAFFODIL SOCIETY CONVENTION
NANCY CAMERON, Anaheim Hills, California

After arriving a day early at the San Francisco Airport on a cloudy, but beautiful, day our transportation whisked us to the Cathedral Hill Hotel at Van Ness and Geary.

Excitement filled the air as we checked into the hotel and proceeded to our room, where we drew open our drapes to see lovely planters on our patio with sweet smelling hyacinths and double Dutch iris blooming—it must be Spring? Being over-joyed at this, our eyes began to travel around the pool area, where to our surprise, were several friends that were also inspecting the beautiful spring flowers and the pool. It has been nearly a year since seeing so many daffodil friends. With my holler of “hello” and their quick response, there was a rushing to our patio door to see the flowers I had packed for my first entry in a National Show.

As Commercial Exhibits Chairman, I was quickly sent to the El Dorado Room where we began to accept these exhibits from Elise and Dick Havens, Brent and Becky Heath, Clive Postles, Kate Reade, and Nancy Wilson. The flowers were outstanding on Wednesday, especially considering that some had traveled up to 14 hours by plane.

Then it was time to work on my first National Show entries. Well, some of my cultivars didn’t make it, especially Starmount which had been crushed across the upper perianth. There went my White Collection, since the only other white cultivar I had as a substitute also didn’t make it. I did manage to enter a Red, White, Blue and Reverse Bicolor plus two three-stem: Wendover and Intrigue. I now know about last minute changes, especially when one checks their flowers through as baggage...

Talked to members of our society Thursday morning, some of whom had ventured outside the hotel Wednesday evening, heading for Fisher-
men's Wharf, riding the famous Cable Cars.

Thursday, the show entries closed at 10:00 A.M. and the judging began under Ms. Marilynn Howe, Chairman of the Judges, and her committee. Of course suspension filled the air, all through the hotel and across the street at "Tommies Joynt" where tables of A.D.S. members were having lunch. Meanwhile, last minute recordings of A.D.S. Ribbons, and the shuffling of tables for Commercial Exhibits were going on in the show room as the judges had finished their job and gone to their Judges' Luncheon. At 3:00 P.M. the 34th American Daffodil Society's National Show opened its doors. People flowed quickly down the aisles, approaching the winners' circle. There, staged on the table were A.D.S. Gold Ribbon, Creag Dubh, Bob Spotts; A.D.S. Miniature Gold Ribbon, Sabrosa, Nancy Wilson; A.D.S. White Ribbon, Ice Wings, Ted Snazelle; A.D.S. Miniature White Ribbon, bulbocodium, Mrs. Christine Kemp; A.D.S. Rose Ribbon, MS 32-40 (PrecedentxCamelot), Sid Du Bose; Junior Award, Demand, Brooke Ager; N.C.D.S. Novice, Avalanche, Jerry Wilson.

It seemed that the name of Bob Spotts monopolized the show with Blue Ribbons, which won him the A.D.S. Silver Ribbon. Bob is a great competitor and generous with his knowledge to members of A.D.S. I have always learned from Bob and others at the N.C.D.S. as I attend their shows yearly in Walnut Creek, a drive of nearly 500 miles. Could this be the reason why Bob has a great amount of show quality daffodils, they feel his generosity of love for them?

The comment of good quality show flowers went around in conversation at the convention. The admiration for the West Coast A.D.S. members who are able to grow sweet smelling tazzettas—Avalanche, Motmot, Explosion, Merry Child, as well as numbers of seedlings—were greatly appreciated by the East Coast members. How great the fragrance and color! Hundreds of flowers, especially tazzettas, were sold at the Registration Desk, which Registration Chairman Stan Baird and committee, handled. People were buying them for enjoyment in their rooms—even myself!—as well as delegates to another convention at Cathedral Hill Hotel.

On Friday, at 7:00 A.M., the Judges Refresher Breakfast was held, with Mrs. Helen Link presiding. A slide presentation with identification of miniatures Div. 1-12 was given, emphasising that judges should grow miniatures as well as standards. Some miniatures are out of circulation, or scarce, and we need to find them! I surely think Mrs. Link will be receiving Junior Miss in the future, after the comments that aired between her and Bill Pannill. Bill, who always carries his Daffodil Book as Murray Evans did, could be seen writing away!...

At 9:00 A.M. one could spot Steve Vinisky directing traffic, as people got off the 4th floor and headed for the Japanese Pavilion, to hear Clive Postles’ "Not Yet the End of the Line." Clive Postles' presentation was a talk with slides about his meeting with the late John Lea and how John Lea
had set new standards in the Daffodil World.

... ... ...

A rememberance of Murray Evans was given by Bill Pannill. Murray was a gentle, kind, self-educated man, with a large collection of books in his library. Bill told of how he first met Murray and Estella in Santa Barbara, California. At a show Murray was holding a book in his hands, looking like a preacher. This book, Bill found out later, was Murray’s Daffodil Bible. I was fortunate to have visited with Estella after the convention, at which time she brought out a picture taken that year in Santa Barbara, and yes, the Daffodil Bible was in Murray’s hands, as he and Estella posed for the photograph.

A rememberance of T. Bloomer by Marilynn Howe, and a rememberance of Grant Mitsch by Father Athanasius Buchholz were also given. It was sad to think of the loss of these three people to the daffodil world.

... ... ...

After lunch three buses set out for the South San Francisco area to visit the Rod McClellans “Acres of Orchids.” Some drove to Nancy Wilson’s, Bob Jerell’s, and Bob Spotts’ to view the growing places of their prize winning cultivars.

The Annual Meeting was held in the Japanese Pavilion, presided over by President, Mrs. Marvin Andersen, at which time Mrs. Andersen gave her report. Dr. William Bender, Chairman of the 1988 Nominating Committee, read the proposed slate of officers, which was voted on, and approved. Mrs. Andersen announced it was her pleasure to award the Gold and Silver Medals this year:

Silver Eve Robertson, South Carolina
Gold John Blanchard, Dorset, England

Retiring Executive Director Leslie Anderson gave her “good-byes” and thanked everyone for being patient and thoughtful of her during years as A.D.S. Executive Director. Mary Lou Gripshover will take over this position beginning April 1, 1989.

After the business meeting the auction was held, with auctioneer Joe Stettinius of Virginia doing the calling. The highlight of the auction was an original cut glass vase that Clive Postles presented to the A.D.S. auction from the United Kingdom. The winning bidder was Convention Chairman Jan Movers—Jan will cherish the rememberance. It was purchased by a person who thoroughly deserves its elegance! Meanwhile, the show was sadly being taken down with a large percentage of the blooms still in good form and condition.

... ... ...
Rise and shine. It’s Saturday, 6:45 A.M., and time for the Hybridizers Breakfast. Chairman, Dr. Bender turned the time left, after a long wait for coffee, over to Clive Postles, who talked about John Lea and his ways of hybridizing. John Lea never stored his pollen from cultivars and neither does Clive Postles. Both men plan their crosses before going into the fields—picking only mature blooms. Many times both men have had an inspiration and made last minute changes. It’s amazing how both men trained as engineers practiced what they know best and believed in applying these techniques to their hybridizing.

After the Hybridizers Breakfast, at eight A.M., five luxurious buses began to roll. Fortunately people had remembered their rain gear since we left the hotel in the rain. Driving through downtown San Francisco, heading for the Oakland Bay Bridge, someone was singing “It Never Never Rains in California!” Little did they know that we have been below normal rain fall for the last few years. Of course it wouldn’t be a A.D.S. Convention if we didn’t have rain as we toured!

We journeyed for two hours, to Stockton and a visit to Melrose Gardens. We passed rolling green hills many with large wind structures, some shaped like large egg beaters, others like large propellers. This area is called the Alta Mont Pass (High Hills, in Spanish). There are approximately 2,000 of these machines which generate power for the nearby cities.

Jaydee Ager was busy selling tickets throughout the bus for the bulb raffle. Nancy Whitlock was seen asking Father Athanasius Buchholz to bless her tickets. Great laughter was heard as cards were being played in the back of the bus—wild, you say!

When we arrived at Melrose Gardens, Sid Du Bose, Ben Hager, and their friends, including the dogs, were waiting with that wonderful invention of clear plastic booties to wear. We were grateful for the thought since we had to walk, or slide, or both on the adobe soil in the rain as we viewed the many cultivars. Rows and rows of beautiful daffodils awaited everyone, each flower holding its head up, even in the rain! Inspected by many surprised A.D.S. members were many rows of seedlings—youp, the West Coast is full of hybridizers! The two hours went by quickly, skipping from Sid and Ben’s cultivars over to Steve Vinisky and Bob Spotts’ seedlings and cultivars.

Time’s up, buses must roll, departing for the Wente Bros. Sparkling Wine Cellars where a lovely gourmet luncheon was served. As one ate, he could glance out the window at the acres of vineyards. Those who stayed on were fortunate to tour the winery with a short sampling time of Brut 1983, Private Reserve Cabernet Sauvignon. I was interrupted by three young ladies who asked, where is your group from? Quickly I said, “all over the world” and our interest is in daffodils. This opened up a conversation—one of the ladies had just dug and replanted her daffodils—what should I do? The daffodil is my favorite flower! I ran to Bob Spotts (Northern California Daffodil Society) since these ladies were from that
area. Bob took it from there. We headed for the bus with three new prospects, not wines, but hopefully A.D.S. and N.C.D.S. members.

• • •

Back to the hotel in time to get ready for our last night's banquet, we were welcomed by Jan Moyers, Chairman of the convention. Father Athanasius Buchholz gave the blessing before dinner. After a lovely salmon dinner, Jan introduced and thanked her committees:

National Show Chairman  Nancy Wilson  
Co-Show Chairman       Jerry Wilson   
Registration            Stan Baird  
Finance                 Jack Romine  
Commercial Exhibits     Gene and Nancy Cameron  
Boutique                Mary Smith   
Judges Refresher        Christine Kemp  
Hospitality             Robert Engelke  
Raffle                  Marilynn Howe  
Publicity               Bob Spotts

Jan introduced the speaker for the evening, Clive Postles with “Past, Present, Future”. Clive Postles’ talk and presentation of slides from The Old Cottage, Droitwich, England, showed the past of his cottage and the present look, now filled with beautiful English gardens of hanging fushia baskets, planter boxes filled with annuals, and a picturesque creek nearby. What an enchantment! It made one feel he was back in the seventeenth century. Viewing some of the “Past”, and his “Present” in hybridizing, and seeing the “Future” through John Lea’s and Clive Postles’ hybridizing we glimpsed some of the world’s greatest cultivars yet to come. From the “Past, to Present, and into the Future” we will go on from such men as Guy Wilson passing to John Lea and John Leas’ stock being passed to Clive Postles—handing down, one generation to another. A big thank you to Clive Postles and his family for their generosity to everyone at the Convention.

The Bulb Raffle was chaired by Marilynn Howe with Jan Moyers doing the honors, drawing names. The name Steve Vinisky was called twice. Lucky Steve.

There was music in the air after the Bulb Raffle. To everyone’s surprise Miss Scarlet O’Daffodil, a sweet Georgia Belle, strolled down the aisle in her bright yellow dress under her bright yellow parsley with her lovely southern smile! She asked us to please come to the 1990 A.D.S. Convention to be held in Callaway Gardens, Georgia, in March. How could anyone not go after Miss Scarlet O’Daffodil’s invitation!

• • •

We have lost, only in body, great hybridizers in the Daffodil World.
these past few months, but their spirit will always remain in what they have left us. I can't say I left my heart in San Francisco, for after the convention I journeyed to Oregon, visiting Dick and Elise Havens, Mattie Kirby, Jeannie Drive of Bonnie Brae Gardens, and Estella Murray in Corbett.

My heart remembers as my eyes watered walking through acres of daffodils where all-time greats have walked before me. I realize that you and I must carry on the growing and showing of their beauties, for the love they had for us through our mutual friend the daffodil.

May you often read the following until we meet again in 1990 at Callaway Gardens, Georgia.....

Lord God, Almighty Father, Creator of Heaven and Earth,
We continually thank Thee for food and fraternal companionship.
May Thy servant, St. Francis, Patron of this town, be our example
as we now proceed farther from here.
May we be imbued with the missionary spirit of his brethren,
to spread love and respect for Thee and Thy creation.
May we imitate the good example of those we have here remembered,
that our names be held some day in benediction.
May our patron flower, the daffodil; Thy servant, the genus narcissus,
continue to teach us to bring beauty out of rain, mud, and adversity.
May our judges judge justly, but Lord, when Thou dost judge us—
do so only in the superabundance of Thy mercy.
And may the daffodils in our hearts, the flowers of Thy grace,
flourish along the waters of life.
We ask this—and always more—
through Christ, our Lord. Amen.

Father Athanasius Buchholz
Invocation, March 18, 1989

---

If You're The Type

who loves flowers, then you can fully appreciate our detailed porcelain jewelry. Each piece is handpainted in white porcelain over a wedge-wood blue porcelain oval. We set them in sterling silver and include an 18 inch sterling silver chain. We gift box each one & guarantee your satisfaction with a written money-back guarantee. In this world of stamped out trinkets, we still believe in American craftsmanship. Yours for only $34.95. (We pay postage).

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P.O. BOX 844 L
HOLLY HILL, FL 32017
1989 BULB AUCTION AND BULB DRAW

MARILYNN HOWE, Culver City, California

The 1989 bulb auction and draw at the San Francisco Convention raised over $4100.00. There were five collections this year and we had participants from all over the country as well as from overseas. We thank all of the individuals who participated in this auction and draw. The winners were:

Kathy Armstrong, Plano, Texas.  Miniature Collection
Elizabeth Bicknell, Lexington Kentucky.  Pink Collection
W.A. Bender, Chambersburg, Pennsylvania.  Pannill White Collection
Steve Vinisky, San Jose, California.  Cyclameneus Collection
Steve Vinisky, San Jose, California.  Double Collection

Steve was the lucky winner of two collections and a generous donor. Thanks, Steve.

The average bulb price at the auction was $147.86. A beautiful crystal vase donated by Clive Postles Daffodils ultimately went to Jan Moyers, 1989 convention chairman, after a exciting exchange of bidding. The highest price paid for a bulb was $310.00 for the miniature Icicle, followed by Junior Miss $250.00, and $240.00 for the Brogdon seedling (See Cover March Journal), and growers should note we are desperate for miniatures.

Donors of bulbs this year were Spud Brogdon, Koanga Daffodils, John Hunter, Jackson Daffodils, John Blanchard/Jim Wells, Brian Duncan, Bill Pannill, Mr. and Mrs. Richard Havens, and Mrs. George D. Watrous. A very special Thank You to each of you.

BULLETIN BOARD

FROM THE PRESIDENT’S DESK

The Daffodil World has lost three very significant contributors in the past few months. All are former ADS Gold Medal recipients attesting to the high regard in which this Society has held each one. Tributes were paid to Murray Evans, Tom Bloomer, and Grant Mitsch at the Convention in San Francisco. We all admire these three great men among men not only for their significant contributions to the genus Narcissus but also for their genuine warmth of character and generous sharing habit. Each spring from here on we shall enjoy the grand heritage they left us. Those of us who knew them are better because of this association. Those who would like to remember Murray, Tom, or Grant may send contributions to the ADS Endowment Fund in care of our Executive Director, Mary Lou Gripshover.

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The American Daffodil Society can and should present an international forum for the sharing of information and plant material. At the National Convention in San Francisco we saw evidence of sharing on a grand scale. The ADS Silver Medal was presented to Eve Robertson partly as a tribute for almost half a century of sharing her enthusiasm for daffodils with everyone she met. Her infectious love for daffodils inspired many individuals from her region in the Southeast to become avid growers and active members in this Society. Her generous gifts of bulbs over countless years have brought many into the daffodil family. If the Society had an Eve Robertson in each of the nine Regions, we would have more serious growers and loyal ADS members.

The bulbs auctioned or distributed in collections at the San Francisco Convention all came through the generosity of the growers. Most of these cultivars exist only as very small stocks, and yet the growers, many of whom are overseas members, were willing to share with an unknown recipient for the benefit of the ADS. Marilynn Howe, our auction chairman, hopes to expand the list of contributors in the future so as not to wear out our welcome with those who have so generously given bulbs in the past. The ADS is indeed grateful to all contributors, and, I am sure, all those fortunate individuals who were able to obtain these rare stocks are thrilled to have the opportunity to grow such choice daffodils in their own gardens.

If you have a stock of an especially nice and choice cultivar, why not give a bulb to a friend when you dig this summer? You might just inspire that friend to take a deeper interest in growing daffodils. Two other benefits could arise from your sharing: the friend might give you a choice bulb or some other kind of plant material in return, or (and this possibility is a real one) you could lose your original stock, and would then have some place to go to find a new start. I am reminded of the woman who refused to share with a friend a tiny bulbule of an unusual lily which she had brought back from China because the woman wanted to be the only one who grew that rare species. The next winter mice cleaned out her entire stock. The purpose of the ADS is to spread interest in daffodils and encourage the cultivation of the best stocks available.

Fortunately, most of our members are anxious to give bulbs to those who will appreciate and enjoy them. Our Test Gardens are populated with donated bulbs, and most local societies will help to spread around extra bulbs through annual bulb sales. Bulbs are frequently given as an enticement to new members of local groups or offered as prizes at shows. Some Regional Fall Meetings ask that those who attend bring a few extra bulbs for door prizes.

Are there local groups or members who would like to share on a larger scale? Perhaps it is time to take a positive step to share bulbs and information on newer cultivars with people unable to acquire these cultivars due to constraints on their currency. Please contact me if you or your organization would like to send bulbs to growers in the Iron Curtain.
countries. Let me know if you might like to sponsor an ADS member in one of these countries which does not permit its residents to send out any money to purchase goods from abroad. Imagine how much you would like to receive new cultivars if you had been cut off from the rest of the horticultural world for over forty years. Plans are already underway to send bulbs to one ADS member in Eastern Europe next summer.

—KATHY ANDERSEN

FROM THE EXECUTIVE DIRECTOR’S DESK

As I write this at the end of March, my early miniatures have about finished blooming and the standards are just beginning. You can’t imaging how exciting it is to be able to walk in the garden each day to see what’s opened overnight. After four years, it’s wonderful!

It’s also exciting to be learning about a whole new aspect of our Society. With help from Leslie Anderson during the transition period, and some sage advice from Bill Ticknor, we are getting the office settled in Ohio. Now I need some help from each of you. We have our own computer and the membership files are now on diskettes. Names and addresses were entered from printouts, 3 x 5 cards, and the list of judges providing ample opportunity for error to creep in. As the old computer saying goes “Garbage in, garbage out,” so would you please look at the mailing label affixed to this Journal and let me know if anything is incorrect about it—spelling, address, anything. The first line indicates the expiration date of your membership, i.e., 89/06 means that the June issue is the last Journal you’ll be getting unless you renew before September’s labels are prepared. If there is an asterisk after the date (89/06*), that tells me that the renewal notice goes to someone other than you. Please help me prepare accurate labels so the post office is able to locate you.

The Royal Horticultural Society has published The International Daffodil Checklist, a 640-page paperback which is an expanded version of the old Classified List and International Register of Daffodil Names. Twenty-three thousand daffodil cultivar names from the RHS files are published for the first time in a single volume. The Checklist contains every name that has appeared in any of the Society’s Lists, Registers, or annual Supplements since 1907, together with a great many hitherto unrecorded names extracted from numerous other sources. Synonyms are given, and names are accompanied where applicable by classification and color code, originator and/or registrant, date, and RHS or Dutch award(s). Copies are on order, and will be available from the Executive Director for $24.00, postpaid.

Literature from Timber Press indicates that Jim Well’s new book, Modern Miniature Daffodils, will be available in July. We will have copies available at that time for $33.00, postpaid.

A 1985 reprint of E. A. Bowles 1934 classic, The Narcissus, is available
for $30.00. Make all checks payable to the American Daffodil Society.

Duke University is offering reprints of several gardening books, among them Elizabeth Lawrence's charming volume on *The Little Bulbs*. Cloth, $25.00; paper cover, $10.95. Also available is *Gardening for Love*, a collection of Elizabeth Lawrence's writings centered around her 40-year correspondence with avid gardeners who share their seeds and plants through ads is market bulletins. Cloth, $19.95; paper, $9.95. Order directly from Duke University Press, 6697 College Station, Durham, NC 27708. North Carolina residents add 5% sales tax; for shipping and handling, add $1.95 for the first book, and $.60 for each additional book.

Gardeners in zones 7 and 8 might enjoy *Successful Southern Gardening* by Sandra F. Ladendorf. This is an all-purpose book which includes a chapter on bulbs. Illustrated with many color photos, it also includes a list of recommended nurseries, plant society addresses, and a list of supplemental reading. Ms. Ladendorf says, "I never give up on a plant until I've killed it three times." I can relate to that! The book is available in bookstores, or can be ordered from the publishers: University of North Carolina Press, P.O. Box 2288, Chapel Hill, NC 27515-2288. $24.95 cloth, $12.95 paper cover plus $.150 postage.

—MARY LOU GRIPSHOVER

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FROM THE EDITOR'S DESK

With this issue we welcome a new author who wishes to remain nameless, and addressless. No unsavory comments to this person! No compliments either! We welcome Persephone to the ranks of regular contributors and hope you enjoy the comments and ideas generated in the column “Of Daffodils and...”

There are two short pieces in this issue that may seem unnecessary or even useless to the regular, long-time reader of this publication: Mrs. Mannfeld’s twelve favorites, and Mr. Hartmann’s comments on yellow trumpets. These are intended to help replace Popularity Poll which had little response from the general membership, but was looked for by many of us. if not for a guide to selections, then a reaffirmation of our own good taste. Everyone of us who shows has certain cultivars which are depended upon every year. These are the cultivars, which when they do not come up to standard, cause us to say “I have nothing to show.” It would be nice if all —and I do mean all —of you would take the time to put pencil, pen, or typewriter keys to paper and comment on half a dozen or so of these flowers that fall into the “I can’t do with out” department. There may be a good bit of overlapping of selections but all that proves is the variability of the flower, the staying power, and the health of that flower —and what good taste you have. Let’s hear from you.

WHERE CAN I GET ... . ?

One of our new members, Scott Kunst, is interested in locating daffodils introduced prior to 1900. If anyone can help him in his search, please write to him at 536 Third Street, Ann Arbor, MI 48103.
## INCOME AND EXPENSES — YEAR ENDED DECEMBER 31, 1988

### INCOME:

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| Bulb Auction          ................................................................
| Advertising in Journal                                         | 4,534.50     |
| Contributions                                                  | 2,775.65     |
| Judges and Refresher Fees                                       | 384.00       |
| Slide Rentals                                                   | 518.62       |
| Dividends and Interest Received                                 | 5,209.04     |
| Registrations                                                   | 27.49        |
| Convention Surplus                                              | 272.82       |
| Repayment of Advance                                           | 1,000.00     |
| **TOTAL INCOME**                                                | **$33,539.40**|

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**AMERICAN DAFFODIL SOCIETY, INC.**

**BALANCE SHEET — DECEMBER 31, 1988**

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<td>Medal Dies</td>
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<td>Gold and Silver Medals</td>
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<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td><strong>$73,433.40</strong></td>
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### LIABILITIES:

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<tr>
<th>Item</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Dues Paid in Advance (in whole or in part)</td>
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<td>Life Memberships</td>
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<td>Memorial Fund</td>
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<td>Herbert A. Fischer Bequest</td>
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<td>Education and Research Fund:</td>
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<td>John Larus Memorial</td>
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<td>Other Contributions</td>
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<td>Convention Surpluses Added</td>
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<td>Interest on Fund Assets</td>
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<td>Less Grants, 1981 to 1987 and expenditures</td>
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<td>Transferred to Research Endowment Fund</td>
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<td>1985 Convention Surplus</td>
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<td>Interest on Fund Assets</td>
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<td>Transfer from Education &amp; Research</td>
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<td>Less Grant in 1988</td>
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<td>Escrow Account (Money from Bulb Auction for Computer)</td>
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<td>Modern Miniature Daffodils Advance Orders</td>
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<td>Contribution for Color in Journal</td>
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<td><strong>Net Worth</strong></td>
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<td><strong>TOTAL LIABILITIES</strong></td>
<td><strong>$73,433.40</strong></td>
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AUDIT STATEMENT

The above statement and balance sheets for the year 1988 were prepared using the cash receipts and disbursement records maintained by the Executive Director. The balances were verified with the bank statement and account statements of the financial institutions indicated. The inventory of publications is shown at cost except that no value is included for surplus ADS publications. In addition to the assets shown, the Society has a substantial library of books on daffodil culture, many of which are rare and valuable, and several colored slide collections. It also has a number of memorial silver trophies awarded at convention shows. The slides, books and trophies were mostly contributed and no value is included.

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

Receipts for dues and other income were verified with deposit slips and disbursements were checked with suppliers’ invoices and cancelled checks signed by the Executive Secretary and Treasurer when required.

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

LUCY F. KING, Auditor

CALL OF SPECIAL MEETING ON THE MEMBERSHIP

Notice is hereby given that a special meeting of the membership of the American Daffodil Society is called to convene at 9 a.m., on Saturday, September 16, 1989, at the Vanderbilt Plaza Hotel, in Nashville, Tennessee, to consider and vote upon the following amendment to the by-laws of the Society as recommended by the Board of the Society at its meeting on October 1, 1988, amended to read as follows:

ARTICLE VI

AUDIT COMMITTEE AND FINANCE COMMITTEE

Sec. 1. Composition—The Audit Committee shall be composed of the immediate past president, the first vice-president and the second vice-president (and the executive director.) The first vice-president shall serve as chairman. The Finance Committee shall be composed of the President (immediate past president,) first vice-president, second vice president, treasurer, and (two) three members-at-large appointed by the president annually. The treasurer shall serve as chairman.

Sec. 2. Duties of the Audit Committee—The Audit Committee shall see to it that the financial records of the Society are audited once each year by an independent certified public accountant or other individual qualified in the opinion of the committee to make an audit, and shall recommend to the Executive Committee adoption of such financial practices as are deemed necessary to protect and properly account for the Society’s funds.

Sec. 3. Duties of the Finance Committee—The Finance Committee shall prepare annually a proposed budget which shall be presented to the Executive Committee at a meeting to be held prior to January 1 of the budget year. The budget for such year shall be modified by the Board of Directors or Executive Committee at any subsequent meeting. No expense may be incurred except in conformity with the current budget as adopted and modified. The Finance Committee shall oversee the society’s investments and make recommendations for the society.

Those words which were changed or added are in italics, and those words which were deleted are in parenthesis.

MARILYN J. HOWE, Secretary
Mr. Grant Emerson Mitsch was born 19 May 1907 into a world which he was to improve considerably. Though born in Woodbine, Kansas, he moved with his family to Brownsville, Oregon, in 1925. He had an early deep interest in natural history, and considered either horticulture or ornithology as possibilities for his life’s work. His decision to put his efforts into horticulture led him first to work with gladioli, his first list coming out in 1928.

Acquaintance with the work of the late Guy L. Wilson eventually led him to devote his attention to the daffodil, which he started to grow commercially in 1933. The results of these endeavors are now enjoyed wherever daffodils are grown.

He married Amy Ross in Stevenson, Washington, in 1937. She was an indispensable part of his life in his daffodil work also. She gave support, encouragement, and inspiration; she also helped in all the physical labor of his chosen life’s work. This assistance was of critical importance during the years of what he called “tough sledding” when he once reminisced among a group of daffodil people.

In the late 1930’s they moved to Lebanon, and in 1946 they moved to a small farm near Canby, Oregon, where the world of daffodil enthusiasts came to visit and enjoy his work. This was especially so when the ADS National Conventions were held in Portland in 1968, 1975 and 1984.

All classes of daffodils received his attention, but some of his more outstanding work was in pink cups, reverse bicolors, and divisions five through eight. Even a sketch of his accomplishments would entail exceeding the bounds of these limited remarks. His interest in division six, one of his favorites, was demonstrated by his and his wife’s sponsoring the Matthew Fowlis Award for the best standard named cyclamineus daffodil at the National Show.

One of the purposes of moving to Canby was to be nearer Portland with its great variety and interest in camellias, rhododendrons, and primroses; but his work with daffodils prevented his working intensely in other fields, though he did hybridize iris in a limited way. He had a fine collection of herbaceous and tree peonies; and his small garden in all seasons was full of other flowers of all kinds. He was also a life member of the American Delphinium Society.

His work with daffodils was intensely personal, and he did not accept an offer from Jan de Graaf to supervise and perform hybridizing of daffodils for the Oregon Bulb Farms Corporation. He was probably the only man working with these flowers who made his living completely from his own specialization of growing and hybridizing.

Mr. Mitsch’s quiet, introspective manner gave the impression of being
a visionary, which he certainly was in the very best sense of the term. His purpose was to work with God’s creation in its natural processes and manifestations in order to bring to everyone the awareness of the divine order behind the beauty of his own productions. He brought his visions into concrete reality for the rest of the world to share, and in the process sometimes very interesting, unexpected and beautiful by-products came into existence.

He deservedly received many national and international awards:
- The Peter Barr Memorial Cup of the Royal Horticultural Society in 1973.

He was the major influence on Mr. Murray Evans and Dr. Tom Throckmorton in their work with daffodils; and countless others were inspired and helped by him and his work.

His early interest in ornithology did not wane with the years for he was always a very competent amateur ornithologist and had a fine collection of books on birds. This interest was also manifest in the names he gave to some of his daffodils, which were of birds from the most varied parts of the earth.

There is no doubt that he would like to be remembered also as a very devoted husband and father, and as a serious and faithful member of the local Church of the Nazarene in Canby. Meditative reading of the Bible was an integral part of his daily life. In this area he also had a collection of English translations of the Bible or at least of the New Testament.

His seriousness may have given the impression of aloofness at times, but he had many entertaining memories of adventures in life and especially of Daffodil Society members and customers.

His sister, Lois Mitsch, recalled that defying convention, he resolutely decided to choose as his wedding day Friday, August 13, with a 13 gallon supply of gasoline in his car to start on the honeymoon. On the fortieth anniversary of their wedding she characterized their life together thus: “It was not luck that gave you a happy and safe journey thus far, but love and commitment to Christ and to each other.”

After the death of his wife in 1982, the symptoms of Parkinson’s disease became progressively more evident. He lived with his son-in-law and daughter, Jerald and Eileen Frey, until he required constant care and supervision. Then he resided in a care center near Salem, Oregon, until his death on March 12, 1989.

He is survived by his daughters, Eileen Frey of Canby, Oregon, and Elise Havens of Hubbard; and three grandchildren, Christine and Kenneth Havens; and David Frey.

One of his brothers, Homer, preceded him in death. Two brothers,
Nathan Mitsch of Albany and John Mitsch of Canby, survive him. Also surviving are his sisters: Lois Mitsch of Woodburn, Mary Ross of Central Point, Ruth Calhoun of Canby, and Martha Cannon of Lebanon.

The loss to the world of horticulture and daffodils is somewhat allayed by the fact that his daughters and their families continue his work. This is especially true of Richard and Elise Havens who have taken over his stocks and are continuing his work in the very best tradition of his ideals.

---

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DAFFODIL PRIMER

MINIATURE DAFFODILS FOR THE BEGINNER

HELEN K. LINK, Brooklyn, Indiana

Miniature daffodils are interesting and fascinating. Some are very small; they have bulbs about the size of a pea. How such a small bulb can survive the rigors of winters in cold areas of the U.S. is definitely a miracle of nature.

The beginner should select cultivars and species which are not temperamental with which to start a collection. It is well to choose those which are inexpensive and easily obtained. Since many of the cultivars do not multiply rapidly, the stock is scarce as well as expensive, if any can be found.

Miniatures should be planted as soon as received if possible. Since the bulbs are so small they dry out quickly and may be lost. If it is impossible to plant immediately, then pot up or store in sand until they can be planted.

Most miniatures like a hot, dry baking in summer except for *N. cyclamineus* which prefers some shade and moisture, but with good drainage.

A good soil mixture of one-third peat moss, one-third sand, and one-third good garden loam is a suitable mixture whether the bulbs are grown in pots or in the open ground. If planted in the ground plastic berry boxes are ideal as containers so that bulbs can be easily recovered when they need to be dug.

Very small bulbs should be planted about two inches deep; larger ones no deeper than four inches. Some of the miniatures have large bulbs, such as Tete-a-Tete and Minnow, and they need somewhat deeper planting. If the area is cold, mulch heavily as soon as a freeze is forecast. Be sure to lift mulch in early spring to see whether leaves are showing, if so, and the weather is warming up, begin to remove mulch a little at a time to slow down the growth. Many of the miniature cyclamineus are early bloomers and must be watched for new growth in order that they do not begin to bloom under the mulch; however, if mulch has been removed and a freeze is predicted, better cover to save the blooms.

Miniatures should not be fertilized heavily. If given too much fertilizer they may divide rapidly into little chips or blooms may become extremely large. A light dusting of a potato fertilizer (3-12-12) is usually sufficient. It should be applied in the fall so that rains wash it down to roots for spring growth.

Some of the miniatures do not like to be dug and divided. So long as a clump is blooming and is not too crowded better leave it alone. Often just digging into a clump and removing a few bulbs will cause loss of the entire clump.
The following is a list of a dozen miniatures which are quite hardy, will bloom well, and will multiply if well cared for. They are also obtainable from various sources and are reasonably priced. Don’t start with expensive bulbs, try the inexpensive ones first.
LITTLE BEAUTY 1 W-Y—well contrasted bicolor of Dutch origin, 4-5 in. tall, rather coarse.
W. P. MILNER 1 W-W—very old, (1884) expanded and serrated trumpet, perianth segments turn inward. One of the parents of Snipe, drooping pose, naturalizes well.
MINNOW 8 W-Y—tazetta hybrid, creamy perianth, soft yellow cup, prolific bloomer, good multiplier.
N. jonquilla 10 Y-Y—very fragrant, up to six flowers on a stem, small cup, whole flower is bright, deep yellow, nine to twelve inches tall, good increaser.
SUNDIAL 7 Y-Y—light perianth, yellow cup, nearly flat crown, early bloomer.
APRIL TEARS 5 Y-Y—several deep yellow flowers, graceful, increases rapidly, late, six-eight inches tall.
BABY MOON 7 Y-Y—very similar to jonquilla, free bloomer, late.
HAWERA 5 Y-Y—very like April Tears, lighter, lemon yellow, does not increase so rapidly.
JUMBLEE 6 Y-O—good grower and increaser, perianth segments reflex, sister to Tete-a-Tete.
N. rupicola 10 Y-Y—all yellow with a wide, flat cup, often, but not always, six lobed, very symmetrical, fairly late, three to four inches tall.

OF DAFFODILS AND.....

PERSEPHONE

MINIATURE DAFFODIL MALAISE or should I say Little Daffodil Discomfort? In any case, after being in Daffodil Limbo for some time, I return to find yet another controversy centered about miniature daffodils—or is it the same one, that comes and goes like malaria?

My first thought is, “Plus ça change, plus e’est la même chose” or, in the words of Yogi Berra, “It’s déjà vue all over again.”

If a daffodil needs to go on or come off the approved list—or a rule needs to be changed regarding the judging of same—why not go ahead and do it, with a minimum of fuss and feathers. Let’s not throw the baby out with the bath water, or make a federal case of each proposal. And, please, por favor, don’t try to unravel the whole organization at this stage.

Things have been limping along and working fairly well for over twenty-five years—I venture a guess they can go on doing the same for the next
twenty-five, with a little bit of consideration and “give” on all sides, and the admission that nobody’s perfect (not even men) and no rule or regulation is ever going to please everybody, or remain set in concrete ‘til the end of time.

WHY ARE MINIATURE DAFFODILS LIKE PORNOGRAPHY? Because a lot of people would agree with the opinion of Supreme Court Justice Blackmam, speaking of the latter, “I may not be able to describe it precisely, but I know it when I see it.”

Surely, anybody can look at a stem of *N. rupicola*, Tete-a-Tete, or Xit and know each is a miniature. What seems to cause the confusion, on beyond that stage, is that people don’t realize that the group of little daffodils we call miniatures, consists of three distinct types; i. e. Mini, Dwarf, and Midi. Further they tend to use terms incorrectly. (This is especially true when one uses the terms miniature and dwarf interchangeably. They are not the same.)

True miniature plants are those low-growing types in which all parts—namely small size of flowers, narrow stem and foliage—are all in proportion to each other and to the low height of about 5 inches or under. Ex: *N. calcicola, N. rupicola, N. watieri* or Flomay, Kidling, and such.

Dwarf plants are also low-growing, but in these one finds size of flower, width of stem and foliage, all somewhat large in relation to low height. Ex: Tete-a-Tete.

Finally, there are the midi types, which are taller, but with relatively delicate dimensions of stem and foliage, and small size of flower. Ex: *N. jonquilla*, Xit, and others. (When we get a daffodil as tall as Xit, but with thicker stem and foliage, and larger flower, we get into the “Tweenies” and that’s another story.)

Many little daffodils are betwixt and between the three main groups but consider them all together and Bob’s your uncle, by George you’ve got it, you can tell what a miniature daffodil is.

WHEN THINGS ARE NOT AS THEY SEEM. When you give a miniature the equivalent of the “duck test”—it looks like Sundial, it’s the same color and form, I bought it under that name, but the pesky little thing is way too big. What is it?

In that famous (or infamous) Report of ’63, George Lee wrote (see page 4, paragraph 4) “Individuals (he meant growers) are occasionally amazed that anyone would consider a certain variety to be a miniature or vice versa, mismamed bulbs is the likely answer.”

Well, as the song says, “It ain’t necessarily so!” Variation in growing conditions (especially feeding) can be the more likely answer. (When trying a new daffodil I always tried to get three bulbs, planting each in a different location, providing more or less sun, in different soil mixes—just to see what variation I would get in performance. A lot!)

When judging or classifying in shows I frequently saw wide variation in a single cultivar. In one class I remember, and made note of at the time, there were a dozen stems of Sundial, no two of which were precisely the same.
The same thing has been observed and commented on by others. In a comprehensive article on miniature daffodils by Charles Montfort, which appeared in the Alpine Garden Society Bulletin, he reported on the wide variation in size he could get by “good feeding.”

In one of his many letters to me, Frank Waley wrote “As regards those ADS lists—I think you would find that if given a year or two’s notice, Coleman, Blanchard, and I could all produce flowers of the same plant of a size to be in both miniature and intermediate classes.”

Alec Gray, Harry Tuggle, and I frequently discussed this problem and in the end everyone agreed that in a changing world where both size and color are appreciably affected by climate and growing conditions, form and proportion tend to remain fairly constant. (Let me emphasize this, form and proportion tend to remain fairly constant.) So, give these two characteristics pride of place when considering a daffodil, trying to decide if it is correctly named and where it should be placed—among miniatures, intermediates, and/or standards.

In deciding whether a daffodil candidate should be added to or deleted from the initial approved list, our committee (Alan Davis, Betty Darden, and I) required that a photograph accompany information listed on the application form—and we urged that it be a comparative photograph, i.e. showing the candidate with one or more well recognized and generally accepted items on the list.

Where possible I have always followed this procedure with my own seedlings or new introductions to my plantings. The idea worked then and it would work now. Further, it would surely help avoid a lot of problems that now fret us.

Getting good pictures like this requires more skill than lifting a fixed-focus camera and banging away at what is in front of it. (Which is apparently what happens too often these days.) I would say having a pictorial record like this could be most worthwhile—not just for use of a miniature committee, but also for use at judging schools, and as an aid to classification and identification at shows. (Let me add, I do mean “pictures” and not slides.)

Thanks to Tom Throckmorton we are now up to speed on utilizing the computer—why not make best possible use of that older invention, the camera?

OUR BIGGEST PROBLEM WITH THE LITTLE DAFFODILS. Everything else pales in comparison to our thorniest problem, i.e. propagation.

A long time before the so-called twin-scaling procedure was talked about and tried, I was experimenting with this, just as I propagated lily bulb scales. I thought I had hit on a new idea and wrote about it in a Robin.

When the Robin got to Roberta she added a note, saying Serena Bridges had discovered this, tried it, and wrote about it much earlier on. Serena discovered this by happy accident—after I read about it in the ’55 WDS Yearbook I always called this Serena’s Serendipity. (Things like this
tend to remind me of what Harry Truman said, "The only thing new is the history we don't know."

I won't attempt to go into the scientific stuff that has been printed on this subject subsequently. When I try to read it my eyes glaze over and I'd venture a guess that the same thing happens to many others.

I will only say that I know of one young plantsman who is following this technique with great success. I'm of a mind to see if I can persuade him to do some work with miniature daffs.

Too, after reading the info from The Avant Gardener—reprinted in the Sept. '86 Journal, I'm almost tempted to send for the book and the equipment and try tissue culture myself. But when I consider my age (on the downhill side of 77) and the various hitches-in-my-git-along, reason prevails and I decide better leave this for my next carnation! (Or do I mean incarnation?)

That's not to say that some of our younger, venturesome members shouldn't give it a whirl. If our stretch is not beyond our reach, then what's a heaven for.

Meanwhile, let's stop taking a myopic view—but raise our sights, broaden our horizons, and start doing a lot of things we could be doing—easy and non-controversial—to encourage a lot of other people to grow and show and enjoy the daffodils.

Notice I said, easy and noncontroversial. (We've had quite enough of the other.)

SINCE IT IS SEED TIME I'LL add a note about OP daffodil seed—i.e. open-pollinated. Is it worth saving and planting the seeds of these fatherless children. I'd say, definitely, "yes" if any of them come from interesting mamas. Here is a partial list of the many I gathered in '65 (including number of seeds). Bushtit-1, N. juncifolius-4, N. triandrus albus (large form) 370, N. rupicola-24, N. scaberulus-30 (this is surprising because I usually pollinated every flower of this one and marked the crosses) N. calcicola-16, Silver Princess-27, Craigywarren-36, Grey Lady-14, Foxhunter-43, Damson-3, and Frilled Beauty-22, and Binkie-30.

I'd have to get Tom Throckmorton to unleash "George" on a project of listing all the interesting daffodils (including breakthroughs) that came from fatherless children, but believe me, the list is long and fascinating.

FINALLY, THOSE MYRIAD MISTAKES. For some reason a lot of people seem to be using the word "myriad" these days—without knowing what it means. The most recent example being in the March Journal "a cultivar had to 'pass' a myriad of tests...before becoming initiated into the inner circle of The List."

The word myriad is an adjective and it comes from the Greek, meaning ten thousand or countless. I don't think any species or cultivar has had to pass ten thousand tests for any purpose. And I would emphasize the fact that there cannot be "a myriad" of anything, be it tests, or daffodils, or whatever.

One can correctly refer to "myriad stars" in the milky way, or "myriad daffodils" as mentioned in Wordsworth's poem. But...a "myriad of"? No. What never? Not ever!
MY TWELVE BEST DAFFODILS

MRS. ROBERT F. MANNFELD, Indianapolis, Indiana

(from the Indiana Daffodil Ledger, Vol. II, No. 1)

Having to adjust many years ago from a half acre suburban lot where I grew daffodils alone on rows in an open area to growing them, now sharing ground space with Hems, Iris, a few annuals and perennials, in a much smaller area has been difficult.

I now live in a apartment but am fortunate to have a kind apartment management which has granted me planting privileges four feet in depth from the building on two sides of it; however, one side has sun only in the afternoon.

In spite of the above environmental problems the following cultivars grew best for me in 1988: Golden Aura, Irish Rover, Stainless, Eminent, Grace Note, Lemon Drops, Tuesday’s Child, Silver Bells, and the pink cupped cultivars Dailmanach, High Society, Gracious Lady, and Fragrant Rose, a late season bloomer, which had show quality in the garden for more than two weeks in the very hot summer days this past summer.

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RAISED DAFFODILS FROM THE

R.H. GLOVER & BROADFIELD STOCK
This year the recipient of the ADS Gold Medal is a second generation daffodil enthusiast who began working with his father in the Daffodil Society in 1954. He became a member of the Editorial Committee of the R.H.S. Narcissus and Tulip Committee in 1969 and has been a yearly contributor to its publication ever since, documenting his trips to the Iberian Peninsula and Morocco to study the species in their natural habitat and clarifying the mysteries of miniature daffodils. He has grown the species at his home in Blanford, Dorset, using them to create many new, choice miniatures. Pequenita and Sabrosa are among his most recent introductions.

His hybridizing program has not by any means been limited to miniatures. His keen eye has selected such best-of-show winners as Purbeck and Ashmore. We look forward to a new line of refined doubles from his garden.

Since 1984, he has served as Chairman of the RHS Narcissus and Tulip Committee, guiding this prestigious organization with the knowledge acquired through association with the daffodil world for many years. It gives me great pleasure to present the 1989 ADS Gold Medal to the man who took the 1989 ADS Convention in Columbus, Ohio, by storm, John W. Blanchard.
ADS SILVER MEDAL RECIPIENT
1989
Mrs. Ben M. (Eve) Robertson

A Charter Member of the ADS, the 1989 Silver Medal recipient has long been a good friend to all who love and grow daffodils. For almost half a century she has generously shared her enthusiasm, knowledge, and bulbs with those with whom she came in contact. One need only mention or admire a certain flower and if she had it, she would remember to share a bulb at lifting time.

She was first elected to the Board of Directors of the ADS in 1955 and has served various terms as Regional Vice President, Director, and Committee Chairman. The interests of the Society have always been of deep concern to her.

A hybridizer of note, she has registered numerous flowers including Indian Brave, Elegant Lady, and Angel Silk. It gives me great pleasure to present the 1989 Silver Medal to our own Eve Robertson of Taylors, South Carolina.
THE DAFFODIL SOCIETY
was established in Britain in 1898 to cater for
the needs of all daffodil enthusiasts and now
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daflloidis are grown seriously.
The Society issues two publications each
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contributions from all growers on the
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DAFFODIL FERTILIZER DEMONSTRATION PROJECT
SPONSOURED BY
THE AMERICAN DAFFODIL SOCIETY, INC.

WILBUR C. ANDERSON AND JAMES B. CARSTENS
Washington State University Mount Vernon Research and Extension Unit
Mount Vernon, WA 98273

Cooperators: Dr. William Bender, Ms. Marie Bozievich, Ms. Lura Emig,
Mr. Quentin Erlandson, Mrs. Helen Link, Mrs. J. Raymond Moore Jr., Mr. William H. Roese,
Dr. Theodore Snazelle, and Mr. Julius Wadekamper

The fertilizer demonstration project was initiated in the fall of 1985 with
the objective to determine if a single complete fertilizer program would
generally be beneficial in growing daffodils throughout the United States.
We had finished evaluating the fertilizer requirements for commercial
daflodil and other bulb production in western Washington and wanted to
determine if these parameters would be effective in the home gardens.
Briefly, our survey and research results indicated that the basic problems
in commercial field production were soil pH below 5.8, and low concentra-
tions in the soil of calcium, magnesium, boron, and zinc. The
\textit{correction} of these problems was important in improving daffodil bulb
production.

This demonstration project was coordinated by Mr. Julius
Wadekamper, Chairman of the ADS Research and Education Committee.
In the beginning, there were 14 cooperators involved and 9 completed
their part in this project. Each cooperator divided their trial area into
rectangular plots of 7.8 sq. ft. Three varieties were supplied: Ceylon,
Salome, and Sweetness. Two or three plots of each variety were planted
to provide space for the following treatments: non-fertilized control, WSU
fertilizer, and local fertilizer. The local fertilizer treatment was optional
and was the fertilizer program the cooperater wanted to use. Bulbs of all
three varieties were collected and divided from a single source and were
supplied to each cooperator to provide a uniform source of bulbs and
constant sizes and quantities of bulbs to be planted in each plot.
Table 1 outlines the basic guidelines developed for commercial daffodil production and adapted for home garden uses for lime, phosphorus, and potassium fertilization. Soil type must be considered when adjusting soil pH with lime. The WSU fertilizer mix contains 5 lbs. of dolomitic limestone and if there is a need to add more lime, it should be added as agricultural limestone of calcium carbonate.

Another fertility problem more difficult to control in commercial production was the loss of fall applied nitrogen fertilizer during the winter season through soil leaching. This can be easily controlled in home gardens with use of controlled release fertilizers such as Osmocote.

WSU packaged up the fertilizer mixture into individual packages with the correct weight of fertilizer to treat a plot. The mixture contained the following fertilizer ingredients in sufficient weight to treat a 100 sq. ft. area (table 2): steamed bone meal, 2.5 lbs; dolomitic limestone, 5 lbs;

Table 1. Lime, phosphorus, and potassium requirements for daffodils based on soil test analysis.

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>Lime Requirement from pH 4.5 to 5.5</th>
<th>Lime Requirement from pH 5.5 to 6.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy and loamy sand</td>
<td>3.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Sandy loam</td>
<td>5.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Loam</td>
<td>7.8</td>
<td>7.8</td>
</tr>
<tr>
<td>Silt loam</td>
<td>9.6</td>
<td>9.2</td>
</tr>
<tr>
<td>Clay loam</td>
<td>12.4</td>
<td>10.6</td>
</tr>
<tr>
<td>Muck</td>
<td>24.8</td>
<td>19.7</td>
</tr>
</tbody>
</table>

1Adapted from the Western Fertilizer Handbook, 1980

<table>
<thead>
<tr>
<th>Soil test for P reads ppm</th>
<th>Apply this amount of $P_2O_5$ in lbs. per 100 sq. ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 30</td>
<td>0.4</td>
</tr>
<tr>
<td>30 - 60</td>
<td>0.3</td>
</tr>
<tr>
<td>60 - 100</td>
<td>0.2</td>
</tr>
<tr>
<td>100+</td>
<td>0.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soil test for K reads ppm</th>
<th>Apply this amount of $K_2O$ in lbs. per 100 sq. ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 100</td>
<td>0.6</td>
</tr>
<tr>
<td>100 - 150</td>
<td>0.4</td>
</tr>
<tr>
<td>150 - 200</td>
<td>0.3</td>
</tr>
<tr>
<td>200+</td>
<td>0.1</td>
</tr>
</tbody>
</table>
Table 2. Fertilizer components in the WSU daffodil mix for an area of 100 sq. ft.

<table>
<thead>
<tr>
<th>Component</th>
<th>lbs</th>
<th>N</th>
<th>P O</th>
<th>K O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steamed bone meal</td>
<td>2.5</td>
<td>0.03</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>Dolomitic lime</td>
<td>5.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osmocote 18-6-12R</td>
<td>1.5</td>
<td>0.27</td>
<td>0.09</td>
<td>0.18</td>
</tr>
<tr>
<td>Treble super phosphate</td>
<td>0.5</td>
<td></td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Fritted trace elements</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murate of Potash</td>
<td>0.75</td>
<td></td>
<td></td>
<td>0.45</td>
</tr>
</tbody>
</table>

Total: 10.5 lbs N, 0.30 lbs P, 0.70 lbs O, 0.63 lbs K

Osmocote (18-6-12R), 1.5 lbs; treble super phosphate, 0.5 lbs; and fritted trace elements, 0.25 lbs for a total of 9.75 lbs. Ideally the steamed bone meal and dolomitic limestone should have been pellitized for uniform spreading. The Osmocote is a controlled-release fertilizer to assure that there will be nitrogen available during the active growth stage in the spring. Additional treble super phosphate and steamed bone meal were included to build up the concentration of P sufficiently to satisfy the phosphorus requirement under all conditions. The potash in Osmocote should be satisfactory for soil tests of 150 ppm and higher. An additional 0.5 lbs per 100 sq. ft. area of murate of potash should be added to the mix where soil tests are below 150 ppm. The addition of steamed bone meal and trace elements was included to satisfy any potential trace element deficiencies. The fertilizer was to be applied and worked into the soil before planting the bulbs.

Before planting, each cooperator took a soil sample that was collected and sent to Oregon State University soil testing laboratory for analysis. The bulbs were allowed to remain in the ground for 2 seasons before digging. The bulbs were counted and weighed by each cooperator and a sample of bulbs were sent back to the Oregon State University Plant Analysis Laboratory for tissue analysis.

Table 3. Soil test results from the 9 cooperators’ test areas.

<table>
<thead>
<tr>
<th>Cooperator</th>
<th>pH</th>
<th>P ppm</th>
<th>K ppm</th>
<th>Ca meq/100</th>
<th>Mg meq/100</th>
<th>B ppm</th>
<th>Zn ppm</th>
<th>Mn ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.6</td>
<td>90</td>
<td>137</td>
<td>11.2</td>
<td>0.9</td>
<td>0.6</td>
<td>2.4</td>
<td>14.1</td>
</tr>
<tr>
<td>2</td>
<td>5.3</td>
<td>7</td>
<td>43</td>
<td>2.0</td>
<td>0.6</td>
<td>0.2</td>
<td>2.4</td>
<td>19.4</td>
</tr>
<tr>
<td>3</td>
<td>7.5</td>
<td>11</td>
<td>101</td>
<td>14.8</td>
<td>8.1</td>
<td>1.6</td>
<td>3.6</td>
<td>30.6</td>
</tr>
<tr>
<td>4</td>
<td>7.2</td>
<td>273</td>
<td>187</td>
<td>12.8</td>
<td>1.2</td>
<td>0.8</td>
<td>5.6</td>
<td>13.6</td>
</tr>
<tr>
<td>5</td>
<td>6.3</td>
<td>16</td>
<td>460</td>
<td>8.3</td>
<td>2.0</td>
<td>0.8</td>
<td>17.2</td>
<td>55.4</td>
</tr>
<tr>
<td>6</td>
<td>7.2</td>
<td>209</td>
<td>277</td>
<td>18.3</td>
<td>1.8</td>
<td>1.7</td>
<td>4.4</td>
<td>15.6</td>
</tr>
<tr>
<td>7</td>
<td>5.3</td>
<td>18</td>
<td>78</td>
<td>6.5</td>
<td>1.4</td>
<td>0.4</td>
<td>1.4</td>
<td>49.4</td>
</tr>
<tr>
<td>8</td>
<td>5.4</td>
<td>50</td>
<td>133</td>
<td>5.9</td>
<td>0.9</td>
<td>0.7</td>
<td>14.6</td>
<td>32.4</td>
</tr>
<tr>
<td>9</td>
<td>7.0</td>
<td>69</td>
<td>39</td>
<td>2.4</td>
<td>0.7</td>
<td>0.3</td>
<td>1.8</td>
<td>2.0</td>
</tr>
</tbody>
</table>
RESULTS AND DISCUSSION

Soil test analysis from the cooperator sites indicated the following problems: 3 sites with pH below 5.8, 4 sites with P below 60 ppm, 6 sites below 150 ppm K, 4 sites with low Ca, 3 sites with B below .5 ppm and 1 location with Mn below 3 ppm (Table 3). The fertilizer needs should have been met with the following exceptions: additional lime for cooperators 2, 7, and 8 and additional potassium for 1, 2, 3, 7, and 8.

Harvest yields were not significantly different between fertilizer treatments for bulb numbers or bulb weights when comparing the 6 cooperators that included all 3 treatments (Table 4).

Bulb tissue analysis revealed that the initial bulbs supplied for this demonstration were generally lower in N, P, K, Mn, Cu, B, and Zn than the harvested bulbs (Table 6). The WSU fertilizer treatment was notably superior in increasing N in the bulb tissue over both the non-treated control and local fertilizer treatments. Potassium was also higher in the WSU fertilized bulbs when compared to the non-treated control.

A very troubling situation with the data obtained from this demonstration project was the very low yield recovery of the harvested bulbs. The average recovered weight for all locations and treatments were only 36% for Salome, 43% for Ceylon and 68% for Sweetness after 2 growing seasons (Table 7). The expected yields after 2 seasons should have been in excess of twice the original weight of bulbs planted. Only 3 cooperator locations had harvest yields approaching the weight of bulbs planted. These results indicate other external factor(s) rather than fertilization to be associated with these serious bulb losses. The differences that occurred between fertilizer treatments were insignificant to these overriding external factor(s). The results from this demonstration project point to the need of identifying and correcting the other factor(s) affecting the establishment and maintenance of daffodils in the home garden setting.

Table 4. Combined data of the 3 daffodil varieties grown in 6 locations.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Number of bulbs harvested per plot</th>
<th>Total bulb weight harvested per plot in grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-fertilized control</td>
<td>30.6</td>
<td>1268</td>
</tr>
<tr>
<td>WSU fertilizer</td>
<td>33.6</td>
<td>1320</td>
</tr>
<tr>
<td>Local fertilizer</td>
<td>29.2</td>
<td>1208</td>
</tr>
</tbody>
</table>

Analysis of Variance

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Variety</td>
<td>***</td>
<td>**</td>
</tr>
</tbody>
</table>

NS = not significant, ** = significant at .01, *** = significant at .001
Table 5. Daffodil harvest data received from cooperators.

<table>
<thead>
<tr>
<th>‘Sweetness’</th>
<th>Number of Bulbs Harvested</th>
<th>Bulb Wt. in Gms.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Fert.</td>
<td>WSU Fert.</td>
</tr>
<tr>
<td>Cooperator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>49</td>
<td>62</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>63</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>31</td>
<td>499</td>
</tr>
<tr>
<td>5</td>
<td>40</td>
<td>35</td>
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<tr>
<td>6</td>
<td>51</td>
<td>58</td>
</tr>
<tr>
<td>7</td>
<td>28</td>
<td>31</td>
</tr>
<tr>
<td>8</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>9</td>
<td>65</td>
<td>78</td>
</tr>
<tr>
<td>Average</td>
<td>43.6</td>
<td>43.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>‘Salome’</th>
<th>Number of Bulbs Harvested</th>
<th>Bulb Wt. in Gms.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Fert.</td>
<td>WSU Fert.</td>
</tr>
<tr>
<td>Cooperator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>26</td>
<td>22</td>
</tr>
<tr>
<td>6</td>
<td>55</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>8</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>9</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Average</td>
<td>26.9</td>
<td>22.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>‘Ceylon’</th>
<th>Number of Bulbs Harvested</th>
<th>Bulb Wt. in Gms.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Fert.</td>
<td>WSU Fert.</td>
</tr>
<tr>
<td>Cooperator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>7</td>
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<td>22</td>
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<tr>
<td>8</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td>Average</td>
<td>26.0</td>
<td>24.5</td>
</tr>
</tbody>
</table>
Table 6. Bulb tissue nutrient analysis.

<table>
<thead>
<tr>
<th>Salome Treatment</th>
<th>N</th>
<th>P</th>
<th>K</th>
<th>S</th>
<th>Ca</th>
<th>Mg</th>
<th>Mn</th>
<th>Fe</th>
<th>Cu</th>
<th>B</th>
<th>Zn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting</td>
<td>1.5</td>
<td>0.2</td>
<td>1.0</td>
<td>0.2</td>
<td>0.5</td>
<td>0.1</td>
<td>23.0</td>
<td>91.0</td>
<td>5.0</td>
<td>16.0</td>
<td>37.0</td>
<td>67.0</td>
</tr>
<tr>
<td>Control</td>
<td>2.2</td>
<td>0.4</td>
<td>1.1</td>
<td>0.3</td>
<td>0.5</td>
<td>0.2</td>
<td>34.3</td>
<td>107.0</td>
<td>11.7</td>
<td>19.0</td>
<td>62.6</td>
<td>90.3</td>
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<tr>
<td>WSU</td>
<td>2.3</td>
<td>0.4</td>
<td>1.2</td>
<td>0.3</td>
<td>0.5</td>
<td>0.2</td>
<td>27.3</td>
<td>121.0</td>
<td>10.3</td>
<td>20.7</td>
<td>52.5</td>
<td>84.2</td>
</tr>
<tr>
<td>Local</td>
<td>2.2</td>
<td>0.4</td>
<td>1.3</td>
<td>0.3</td>
<td>0.5</td>
<td>0.2</td>
<td>41.2</td>
<td>142.0</td>
<td>12.6</td>
<td>20.8</td>
<td>63.0</td>
<td>130.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ceylon Treatment</th>
<th>N</th>
<th>P</th>
<th>K</th>
<th>S</th>
<th>Ca</th>
<th>Mg</th>
<th>Mn</th>
<th>Fe</th>
<th>Cu</th>
<th>B</th>
<th>Zn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting</td>
<td>1.6</td>
<td>0.2</td>
<td>1.1</td>
<td>0.3</td>
<td>0.5</td>
<td>0.1</td>
<td>13.0</td>
<td>96.0</td>
<td>6.0</td>
<td>17.0</td>
<td>39.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Control</td>
<td>2.0</td>
<td>0.3</td>
<td>1.1</td>
<td>0.3</td>
<td>0.5</td>
<td>0.2</td>
<td>23.3</td>
<td>83.0</td>
<td>12.2</td>
<td>18.0</td>
<td>61.0</td>
<td>72.5</td>
</tr>
<tr>
<td>WSU</td>
<td>2.2</td>
<td>0.4</td>
<td>1.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.2</td>
<td>22.2</td>
<td>111.0</td>
<td>13.2</td>
<td>21.2</td>
<td>58.5</td>
<td>89.2</td>
</tr>
<tr>
<td>Local</td>
<td>2.0</td>
<td>0.4</td>
<td>1.2</td>
<td>0.3</td>
<td>0.5</td>
<td>0.2</td>
<td>34.5</td>
<td>99.0</td>
<td>11.5</td>
<td>19.7</td>
<td>56.3</td>
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</table>

<table>
<thead>
<tr>
<th>Sweetness Treatment</th>
<th>N</th>
<th>P</th>
<th>K</th>
<th>S</th>
<th>Ca</th>
<th>Mg</th>
<th>Mn</th>
<th>Fe</th>
<th>Cu</th>
<th>B</th>
<th>Zn</th>
<th>Al</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting</td>
<td>1.5</td>
<td>0.3</td>
<td>0.9</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td>7.0</td>
<td>61.0</td>
<td>5.0</td>
<td>13.0</td>
<td>22.0</td>
<td>41.0</td>
</tr>
<tr>
<td>Control</td>
<td>1.9</td>
<td>0.3</td>
<td>0.8</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td>23.8</td>
<td>85.0</td>
<td>10.3</td>
<td>21.2</td>
<td>57.3</td>
<td>71.8</td>
</tr>
<tr>
<td>WSU</td>
<td>2.1</td>
<td>0.4</td>
<td>0.9</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td>19.8</td>
<td>96.0</td>
<td>10.0</td>
<td>22.2</td>
<td>48.0</td>
<td>69.5</td>
</tr>
<tr>
<td>Local</td>
<td>1.9</td>
<td>0.4</td>
<td>1.0</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td>28.2</td>
<td>123.0</td>
<td>13.3</td>
<td>21.3</td>
<td>60.2</td>
<td>101.8</td>
</tr>
</tbody>
</table>

Table 7. Comparison of the initial bulb weight planted to harvested weight after 2 growing seasons.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Initial Weight: grams per plot</th>
<th>Harvested Weight: grams per plot</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salome</td>
<td>3620</td>
<td>1280</td>
<td>36</td>
</tr>
<tr>
<td>Ceylon</td>
<td>2930</td>
<td>1270</td>
<td>43</td>
</tr>
<tr>
<td>Sweetness</td>
<td>1470</td>
<td>1000</td>
<td>68</td>
</tr>
</tbody>
</table>
In 1984, on a visit to a commercial grower of daffodils in Washington State I was told of and shown a field where daffodils had been grown in previous years, but now would no longer support a commercial crop of daffodil bulbs. Soil research indicated that production decreased to unprofitable levels due to the deficiency of the trace element boron, which is essential for proper bulb growth. Frequent cropping of bulbs from the field and a failure to replace the trace element resulted in the deficiency. This deficiency led to a failure of bulb production.

I then began to wonder if there might be a trace mineral deficiency in the soils of hobby daffodil growers which might not only decrease their bulb increase but also prejudice their flower size, color, and substance. These qualities are desirable for good flowers and are essential for those who show flowers.

To test this hypothesis we set up an experiment to test the soil of several ADS participants in various parts of the country. We then proceeded to set up test and control beds. The control beds had no additional fertilizer added and the test beds were supplemented with a specially formulated fertilizer including trace elements. This fertilizer was supplied by Washington State University Experimental Station at Mount Vernon, Washington.

There are variable soil and rainfall conditions that help determine the availability of both major plant nutrients—nitrogen, phosphorus and potassium—and of the trace elements. These conditions are soil type, soil texture, pH—whether the soil is acid or basic and to what degree—microorganisms in the soil, depth of plowing, and the cation exchange capacity. Thus, the selection of growers from various regions of the country.

Earlier studies at Washington State gave important information with regard to the time of uptake of various nutrients by the daffodil plant as well as the time and method of application of the fertilizers to obtain maximum results.

The accompanying report shows the results of this research project. The report of a lower bulb yield after two years’ growth indicates a serious problem. In at least one case—my own—I know all the bulbs were not recovered. Even though I thought I had gotten all the bulbs in digging, the following spring some daffodils still emerged from the test plots.

Dr. Anderson, in his report, states that “These results indicate other external factors rather than fertilization to be associated with serious bulb losses.”

It is these “other factors” that I would like to discuss in a series of articles after studying and analyzing each co-operators results.

To begin with the soil below the bulbs must be friable, that is, loose and
well tilled. We all know the advantage of raised beds, I have written about that before. One thing the raised beds do is allow six or eight inches of soil below the bulb to be worked up, thus enabling good root growth. Another method to accomplish this is to double dig your beds if they are not raised. Too often when daffodil bulbs are planted five or six inches deep they are planted at the tilled level on hard soil. The soil below the bulb where the roots grow has not been worked sufficiently. Therefore, either use raised beds or double dig your beds so there is at least six to eight inches of loose friable soil below the bulbs when planted.

Soil consists of three parts: mineral and organic content, air, and water. The size, shape, and friability (looseness) of the organic and mineral part determine water and air penetration and retention. These in turn regulate the manner in which the nutrients essential for good bulb growth are available, especially the acidity (pH) of the soil water.

I hope to be able to study carefully the results of each co-operator’s tests and bring you more information on growing great daffodils.

THE THOMPSON PRIZE—AND BEYOND

ANDY MOORE, Waynesboro, Tennessee

A mystery has been solved: the Thompson Prize For New Double Whites was never claimed, and is no longer offered, according to a recent letter from Dr. W.A. Bender. I had been inquiring about the disposition of this prize since reading about it last year, (in the March 1967 Daffodil Journal).

The story begins with Mr. and Mrs. Joseph H. Thompson of Willoughby, Ohio, donating $600 to the A.D.S. in 1963. They were seeking an improved Narcissus poeticus Flore Pleno, a much-loved double white, very late, sweet-scented species, with an unfortunately tempermental blooming habit. Mr. and Mrs. Thompson hoped to stimulate hybridizers to work on double whites, and their prize was to go the daffodil produced which most resembled their vision of an improved N. p. Flore Pleno.

The mechanics of the Prize were a bit complicated; there were to be interim awards given every 3 years, from the interest on the Prize money, to the hybridizer with the best new double white at that point. This is some of the original wording: “Contestants must notify the Chairman of the Breeding and Selection Committee of their intention to compete for the interim award by August 15, 1967. Contestants must be the originators of the cultivars offered...Because of the special emphasis on freedom of bloom and fragrance in this competition, the usual point scoring allocation will be modified to give weight to these elements.”

As things turned out, perhaps due to N. p. Flore Pleno’s sparse bloom or natural resistance to hybridizing, no daffodils were ever tested by the Breeding and Selection Committee. The 15 year time limit for the prize passed, the original donors had died, and the bequest went into the General Fund. This has an inherent sadness, but there are some bright
notes. According to Dr. Bender, Helen Link did produce a fragrant double in this effort, but she did not feel it was good enough to register. Also, there is an entry in the DDB, Patricia by Murray Evans, with N. p. *Flore Pleno* parentage. But the 4 W-R color code explains why this wasn’t eligible. Perhaps there were others who made the attempt.

The real interest, for me, is in looking at the Thompson Prize as a case study: the first ADS Fragrance Award. Why did it fail? Was the incentive too small? Was the goal too difficult? Was the time limit too short? My own favorite fragrant double white is Daphne, but it wouldn’t have qualified either since it was registered in 1914. Was there not enough publicity? We may never know the answers, but to my mind the Thompson Prize was, at least, a noble try.

The larger question here is whether the technique of cash prizes for hybridizers is sufficiently motivating to achieve specific results. If it is, I would advocate an Award for Daffodils of Good Fragrance in Divisions 1-4. This is broader than what the Thompsons wanted, but it’s an area that needs help. I think most of the Thompson’s ideas were sound, but would make the Award perpetual by raising more capital at the start, and only using interest for prizes. (At today’s rates, a little over $1100 could fund a $100 annual Award). Then I would try very hard to see that the first winner was a late, prolifically blooming, double white.

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**EFFECTS OF PRE-EMERGENCE HERBICIDES TO SELECTED NARCISSUS CULTIVARS**

**ELTON M. SMITH AND SHARON A. TREASTER**  
 Professor and Technician, Department of Horticulture,  
 The Ohio State University

**ABSTRACT**

The primary objective of this experiment was to determine if the pre-emergence herbicides Devrinol, Surflan, and Endurance, applied after planting in autumn, would cause injury to four narcissus cultivars. Results suggest that all herbicides at the rates evaluated (Devrinol - 5.0 lbs. aia, Surflan - 3.0 lbs. aia, Endurance - 2.0 lbs. aia) are safe to use with Narcissus ‘February Gold,’ ‘Golden Perfection,’ ‘Barrett Browning’ and ‘Geranium.’

Weed control, from an October 19, 1987 treatment, was rated very satisfactory on June 16, 1988, for both Devrinol and Surflan while Endurance was not effective.

**INTRODUCTION**

With only a limited number of pre-emergence herbicides registered for use on narcissus in the landscape (3), a need exists to expand the label of existing compounds or to determine if new compounds would be non-injurious. Research is also needed to evaluate the herbicides on a wider...
spectrum of cultivars than in past research (1).

Research in 1984 had shown Devrinol, Surflan and Treflan to be non-injurious to narcissus (2). Since that date, Devrinol has been labelled for use with narcissus along with Betasan and Chloro IPC. Among those three pre-emergence herbicides, Devrinol is the only one which is widely available to the landscape maintenance industry.

The specific objectives of this study were to compare Devrinol with Surflan, commonly used in the trade on woody and herbaceous plants, and a new herbicide, Endurance, for phytotoxicity and weed control on four cultivars of narcissus.

**MATERIALS AND METHODS**

Narcissus cultivars selected for this evaluation included: ‘February Gold’ (Division 6 with yellow petals and yellow cup), ‘Golden Perfection’ (Division 7 with yellow petals and yellow cup), ‘Barrett Browning’ (Division 3 with white petals and white, red, red cup) and ‘Geranium’ (Division 8 with white petals and orange cup).

By selecting cultivars that had different characteristics, it was believed that more knowledge might be gained if there were cultivar differences in tolerance to the herbicides. All bulbs were planted October 12, 1987 at a depth of 6 inches.

Herbicides included: napropamide (Devrinol), oryzalin (Surflan), and prodiamine (Endurance), a new material not yet on the market. Formulations and rates were Devrinol 50 WP - 5.0 lbs. aia, Surflan 75 WP - 3.0 lbs. aia, Endurance 2 G - 2.0 lbs. aia, and a control (no herbicide) treatment. The herbicides were applied to the soil on October 19, 1987, seven days following planting. The beds were mulched with 1½-2” of utility wood chips in early November.

Each treatment was in an area 6’ wide and 5’ long, with a minimum of 10 bulbs per cultivar in each treatment. Plots were arranged in a randomized block design.

All evaluations for phytotoxicity were on a 1 to 10 visual scale, with 1 = plant death, 10 = no crop injury and 7 or above being acceptable. Weed control was rated on a 1 to 10 scale with 1 = no weed control, 10 = excellent weed control and 7 or above acceptable.

Phytotoxicity evaluations were conducted in April, when the plants were in bloom. Weed control was evaluated in May and June, because there were no weeds in the planting bed until then.

**RESULTS AND DISCUSSION**

In this study, neither flowers or foliage of Narcissus cultivars ‘February Gold,’ ‘Golden Perfection,’ Barrett Browning’ and ‘Geranium’ were injured by the pre-emergence herbicides Endurance (2.0 lbs. aia), Devrinol (5.0 lbs. aia) and Surflan (3.0 lbs. aia) (Table 1). Devrinol was previously labeled for use with narcissus and within the year the Surflan
label was expanded to include narcissus. Endurance is a new herbicide not yet labeled for landscape crops, but may be safe to use on narcissus based on results of this study.

The narcissus planting was mulched in November with utility wood chips and weed growth was suppressed through April flowering period. Weeds began to become a problem in May, and by mid-June the control plants were heavily infested (Table 2). Weed control from Endurance was still acceptable in June, but superior weed control was noted with Devrinol and Surflan.

In summary, both Devrinol at 5.0 lbs. a.i. and Surflan at 3.0 lbs. a.i. can now be recommended for use on narcissus with some degree of confidence that weed control will be acceptable and phytotoxicity will be minimum.

LITERATURE CITED


Table 2. Spring weed control in narcissus from autumn applied pre-emergence herbicides. Herbicides applied October 19, 1987.

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1Visual Scale of 1-10 with 1 = no weed control, 7 = acceptable weed control and 10 = perfect weed control.
Table 1. Tolerance of narcissus cultivars to pre-emergence herbicides.

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1Visual Scale of 1-10 with 1 = plant death, 7 = acceptable injury, 10 = no plant injury.
BEST OF THE YELLOW TRUMPET DAFFODILS

HENRY HARTMANN, Wayne, New Jersey

In any garden, no flowers make a bigger impact upon me than yellow trumpet daffodils. Whether planted in mass or just individual clumps, some of the 1 Y-Y’s simply steal my heart. Some of these wonderful flowers look up at me and demand attention. In my quest for breeding better yellow trumpet daffodils, I have purchased the finest exhibition quality 1 Y-Y’s, regardless of price. Four of these varieties produce flowers that look much more pleasing in the garden than all the others. One of the traits that enhances appearance are flowers that tilt their heads up 20 to 30 degrees. This produces a friendly appearance which gives me the impression that the flowers are smiling at me. My favorite variety is Swain. This flower has magic. It has an exceptionally beautiful trumpet of proportions, for me, that are just right. The yellow color is exceptional. All Swain blooms burst forth at the same time for tremendous impact. My number two choice is Gold Convention, a large flower of exquisite texture and wonderful color. The buds open over a period of ten days. For a continual supply of cut flowers, this is great. However, for mass planting, Gold Convention has limited impact. My third choice is Midas Gold, an early bloomer with an intense yellow color. Carrickbeg is my fourth choice.

Any of these four yellow trumpet varieties should be outstanding in your garden. They are in mine.

DEAR EDITOR:

In the June 1988 Journal there appeared an article, “On The Trail of Lady Serena.” This has resulted in three member responses already. Dave Karnstedt explained the customary numbering system and thought I could probably exhibit Wheeler sdlg 16/630 under number. Nancy Whitlock wondered how she could get a bulb of it. Willis Wheeler complimented me on the article.

Probably the fact that three readers took the trouble to be in touch indicates that from thirty to three hundred others would enjoy follow-up.
Willis Wheeler turned over a number of his seedling daffodils to Brent Heath in 1974, among them one numbered #16/630.

On December 1, 1983 Brent Heath sent me some bulbs for evaluation as poets. One of them was the Wheeler sdg. 16/630. Records indicated it was from Actaea x P.D.W. 101 (which ultimately became Lady Serena). My own records on it indicate it has poeticus fragrance, a red rim, and anthers 3 up and 3 down, a good neck and shows kinship to Lady Serena. I believe this is worthy of registration as a poet in case Willis Wheeler still has sufficient records to satisfy the RHS Registration Committee. With the probable first year of bloom having been 1970, now eighteen years later there should be ample stock for sale to eager poeticus collectors.

It would be amusing to name it Wheeler Dealer or Free Wheeler but it might be more in keeping with the Wheeler dignity to call it Willis’ Way! At any rate Mr. Wheeler ought to have his say in that matter....

Meg Yerger, Princess Anne, Maryland

The news that the Popularity Poll will be discontinued is quite a disappointment to me. As a new member, the 1987 list provided a convenient starting point for deciding which of the thousands of cultivars to consider purchasing. Just reading catalogue descriptions isn’t too helpful as the breeders tend to use glowing terms about each possible selection. There are other sources such as the show reports in past Journals, but much work is involved in extracting this information in a useful context. The Popularity Poll just has a convenient simplicity that is hard to match. It is a list of cultivars than “someone somewhere liked” enough to respond to Charles Wheatley’s request. That in itself is significant. That does not mean that the list could not be improved. The major deficiency is the limited statistical sample resulting from the lack of participation. This can be changed with some form of incentive. People here in the Washington area respond heavily to an annual poll conducted by a classical music station. Prizes awarded by random drawing provide the incentive.

No matter what we do, the Popularity Poll will never satisfy everyone’s needs. We should be aware of that as we work to improve it. Shooting it in the head is not the right approach. Let us not be too responsive to the criticism of any one member regardless of the eloquence of the argument.

Charles Wheatley has done a very fine job and should be commended for his dedication. He should be encouraged to continue if he has any interest in doing so. If not I would be happy to “whip it right out” on my computer.

John Colwell, Vienna, Virginia

NEW ROSTER IN SEPTEMBER

The ADS will be issuing a new roster in the fall. The fall was selected so that all the members who join in the spring can be included and all those people who have completed or just started judging school will be included. PLEASE check your address on this Journal and report any errors to the Executive Director. Mary Lou’s address is in the front inside cover of the Journal. If you have daffodil friends who are not receiving their Journal please ask them to send a corrected address to Mary Lou —and their dues if that is the cause of non-receipt. Let’s try to make this a good and accurate roster for all of us.

SURPRISE —THE DAFFODILS ARE BLOOMING

LEE KITCHENS, Cinnaminson, New Jersey

Ah spring! The anticipation is over. The surprising blooms are here. Surprises? Am I alone in the wonder of the daffodil bloom? Am I the only one who planted bulbs last fall and was surprised at what surfaced this spring? I have found that my surprises usually fall into three distinct areas:

First, I planted the bulbs in the fall, kept a careful account of their exact location on my bed maps and placed markers on the planting spot. Spring arrives and the bloom doesn’t. The squirrels, raccoons, and moles win again. Next year I’m going to plant in a wire guarded hole.

Second, I planted bulbs last fall with a plan to have specific cultivars available for the local ADS daffodil show and the combination of a mild winter and an early spring have those blooms at their very best on April first… and the show is not until April 25! Am I the only one who watches those potential ribbon winners fade as the show approaches? I am sure that next year it will be just the reverse, as the buds just will not mature by show time. Next year I am planting everything on the south side, the north side and on a north facing hill. Will we nuts stop at nothing in our pursuit of the perfectly timed narcissus?

Third and most frustrating, I planted what the grower had marked as one cultivar, and an entirely different variety bloomed. This year I have had at least three surprises of this type. I planted good old Stainless (2 W-W) in my south-facing bed and got a beautiful stranger that was a large beautiful white perianth with a very flat pink corona. I also planted Salome (2 W-PPY) in a north bed hoping for a nice pink for the late shows and got an early yellow with a very nice red cup. But there is still hope here as there are several scapes that are just emerging as I write this.

I don’t have any solution for this one. I am just willing to be surprised. After all, our favorite grower just might slip in one of those $50 bulbs by mistake in the bag with some $1 bulbs. (Yes, I might hit the Irish
Sweepstakes too).

So keep your sense of humor about these matters. Learn to laugh when the unexpected happens, it’s not life or death. Just feel for the growers when things turn against them and enjoy the many pleasures that we get from all of our beautiful blooms.

HERE AND THERE

The town of Ridgecrest, California, plans to be the “Most beautiful Desert City on Earth” and by the year 2013. They are doing this by planting daffodils — yellow daffodils — every place anyone can think of. We hope this succeeds since we approve of their taste in flowers.

From the Avant Gardener comes the suggestion that plastic golf tees be used to mark the place in a garden where bulbs and other perennials are planted to protect them during the dormant season from the vigorous spade and the active digger. They are cheap, unobtrusive, and probably are not biodegradable.

Mrs. John Capens of New Jersey reported the loss of two founding members of the ADS, Mrs. J. Whitton Gibson, and Mrs. Gay Crosby. These ladies were instrumental in the founding of the New Jersey Daffodil Society. Their loss will be felt by those people who carry on their traditions.

Mr. Henry Hartmann of New Jersey, suggest that the hard surface of the daffodil seed can be scratched by using a orbital sander. He recommends putting the seeds in a shot glass and inverting on the surface of the sander which has coarse sandpaper and turning on the sander while holding the glass lightly against the sander. While the seeds pop around they are nicked each time they hit the paper. This scratching will enhance the absorption of water and therefore, germination.

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HELP WANTED

ALICE WRAY TAYLOR, Franklin, Tennessee

I have a special request of all growers of miniature daffodils, especially of those who want to be sure they have exactly what they ordered. Failing that, perhaps this project will make it possible for growers to properly identify what is being grown in their garden.

As many of you know I am attempting a monumental task—getting close-up pictures and measurements of all the varieties presently on the miniature list. I know that some of them date back to 1902, and some of them seem not to be strong and may have been lost from cultivation, and some of them may be lost for any other number of reasons.

The following cultivars I have had either briefly or for a number of years, and lost because of their weakness or from a natural disaster. For instance, I had Gambas, a charming little 1 Y-Y, from 1974 until winter of 1983 when it was covered with a stone and wasn't able to recover sufficiently during the following very dry spring and summer; Opening Bit, 6 Y-Y, came out in 1973 and lasted two years, but I can't say it was outstanding as it reflexed hardly at all; Sprite, 1 W-Y, also came out in 1973 as did Candlepower, 1 W-W. Sprite was a very nicely contrasted bicolor and did very well. In fact it did so well that I gave away too much and lost it...
in 1981. It came from Michael Jefferson-Brown and was sold through 1974, although the one I had had better color than the stock he sold in later years being of less contrast in color causing its eventual reclassification to 1 W-W. (Which was the real Sprite?) I would really like to have a bulb of the original stock, again. One nice 6 Y-Y I bought in 1980 was Jetage and I was able to keep it through 1986, which was the start of our four year drought. I have a good picture of it but can only guess at the measurements. One other 1 W-Y I bought from Broadleigh in 1979 was Sentry Seedling V13/34. It proved to be a delightful bicolor of good contrast and size, and was sold also in 1980 and 1981 under that number and with the same description. However, some who bought it received what is now called Little Sentry, a 7 W-Y, and is much like Bebop and several other late jonquils. I gave a friend a bulb and scattered out the remaining stock. It never came up in 1984. It and Sprite were the two best bicolor trumpets I’ve ever had. I got Mary Plumstead, 5 Y-Y, by mistake in 1971 and enjoyed it through 1982 when it didn’t appear, and on digging, I discovered two or three hard brown knots only. I bought it again later, but evidently didn’t find the right place to ensure keeping it, or again it might have been the drought which caused its demise.

The following varieties I have never been able to get and wonder if they still exist:

Angie, 8 W-W, Gray, introduced in 1948
Bowles Bounty, 1 Y-Y, Bowles, introduced in 1957
Cricket, 5 Y-Y, Watrous, introduced in 1974
Greenshank, 6 Y-Y, Wilson, introduced in 1948
Little Prince, 7 Y-O, Barr, introduced in 1937
Lively Lady, 5 W-W, Gray, introduced in 1969
Mini-cycla, 6 Y-Y, Chapman, introduced in 1913

(Many say this is a seedling of minimus and cyclamineus.)

Minidaf, 1 Y-Y, Gerritsen, introduced in 1970
Petite Beurre 1 Y-Y, Gerritsen, introduced in 1971
Pixie, 7 Y-Y, Fowlds, introduced in 1959
Raindrop, 5 W-W, Gray, introduced in 1942 (very scarce)
Rockery Beauty, 1 W-Y, Eldering, introduced in 1928
Rockery Gem, 1 W-W, Van der Schoot, introduced in 1930
Sneezy, 1 Y-Y, Gray, introduced in 1956
Snug, 1 W-W, Gray, introduced in 1957
Soltar, 6 Y-Y, Gray, introduced in 1961

I have purposely left off this list most of the twelves, although I have a few of them, as most are very difficult to grow. All of these, as far as I know, qualify as miniatures. There are several good miniature sized flowers that should and will be added to the Approved List as they become better known. I am putting the ones I have in my booklet so that the pertinent information will be available when they are added.

All of this brings me to the issue at hand. If any of you have cultivars

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which are candidates for the Approved List of Miniatures please supply the pertinent information: a picture of the flower, the measurement of the flower from the ground to the beginning of the sheath, the overall width of the flower, and the depth and width of the corona. If any of you have those cultivars which have escaped from my garden, or are on that preceding list of those which I have been unable to find, please supply the pertinent information. Alternately, I will be glad to buy or swap bulbs of miniatures or miniature candidates. I will be glad to borrow any of these bulbs, returning them after blooming, photographing and measuring them. The bottom line is that I want this booklet to be a truly informative work. I will greatly appreciate any help I can get and you may trust me to “play fair” with you concerning any of your own bulbs you wish to promote.

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DAFFODIL EVALUATION AT CALLAWAY GARDENS

WILLIAM E. BARRICK, PH.D.
Executive Vice President and Director of Gardens
Callaway Gardens, Pine Mountain, Georgia 31822

Without question, the most successful flowering bulb for Southern gardens is the daffodil. Over the years, it would be difficult to accurately determine the number of daffodils planted throughout Callaway Gardens. Annually, we are planting twenty to thirty thousand bulbs in outdoor display beds and forcing several thousand daffodils for display in the Sibley Center during the winter months.

One of the most frequently asked questions by visitors is “What do you do with all these bulbs once they are dug from outdoor and indoor beds?” Rather than discard them, they are planted along the Holly Trail and throughout the Meadowlark Gardens area for visitors to enjoy in succeeding years.

Of great concern to us is selecting varieties that will perennialize well in these areas of the Gardens. In order to gain more specific information on this subject, the Gardens participated in a study directed by Dr. Gus DeHertogh of North Carolina State University in cooperation with the Dutch bulb industry. Three test sites within North Carolina and the Chicago Botanic Garden were also selected to provide a broader evaluation over a number of hardiness zones. The study was initiated in 1981 and data was taken through the spring of 1984.

Two hundred and fifty bulbs of 40 varieties were planted. These varieties represented a large range of color as well as flower type. The following is a complete list of these varieties: Golden Harvest, Gigantic Star, Unsurpassable, Dutch Master, Flower Record, Fortune, Yellow Sun, Mrs. R. O. Backhouse, Wilder, Bridal Crown, Tete-a-Tete, Jack Snipe, Peeping Tom, February Gold, Baby Moon, Trevithian, Geranium, Thalia, Mary Copeland, Van Sion, Suzy, Tresamble, Cheerfulness, Magnet, Goblet, Carlton, Mount Hood, Carbineer, Duke of Windsor, Prof. Einstein, Barrett Browning, Inglescombe, Birma, Flower Drift, Canaliculatus, bulbocodium, and bulbocodium conspicuus.

Listed below are those varieties that reflowered better than 95% over three years. This list is by no means meant to be interpreted as containing the only varieties that perennialize well within the gardens or in the South, only those that performed well in this study.

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<th>DIV.</th>
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<td></td>
<td>Unsurpassable</td>
<td>Bright Yellow</td>
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<td></td>
<td>Golden Harvest</td>
<td>Bright Yellow</td>
</tr>
<tr>
<td>II</td>
<td>Flower Record</td>
<td>Outer Petals - White</td>
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<td>Cup - Yellow w/Orange Fringe</td>
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Fortune  Outer Petals - Golden Yellow  Cup - Pale Yellow
Yellow Sun  Outer Petals - Canary Yellow  Cup - Pale Yellow
Mrs. R. O. Backhouse  Outer Petals - Creamy White  Cup - Apricot Orange
Ice Follies  Outer Petals - Creamy White  Cup - Pale Yellow
IV  Yellow Cheerfulness  Pale Yellow
Texas  Outer Petals - Pale Yellow  Cup - Yellow Orange
Dick Wilder  Yellow Bicolor
Bridal Crown  Creamy White and Orange
VI  Tete-a-Tete  Golden Yellow
Jack Snipe  Outer Petals - Creamy White  Cup - Golden Yellow
Peeping Tom  Pale Yellow
February Gold  Golden Yellow
VII  Baby Moon  Pastel Yellow
Trevithian  Outer Petals - Yellow  Cup - Darker Yellow
VIII  Geranium  Outer Petals - Pure White  Cup - Yellow Orange

Note: The preceding article concerning daffodils at Callaway Gardens was written by Dr. William E. Barrick, Vice President and Director of Gardens. In his article, Dr. Barrick mentions Dr. Augusta A. DeHertogh of North Carolina State University. Dr. DeHertogh is head of the Horticultural Science Department at North Carolina State. Both Dr. Barrick and Dr. DeHertogh will be speakers at the Callaway Convention.

Many exciting plans are being finalized for the 35th annual convention which will be held March 29, 30, 21, 1990 at Callaway Gardens, Pine Mountain, Georgia.

HYBRIDIZERS' DISPLAY GARDEN—1990

JAYDEE AGER, Co-Chairman, 1990 ADS Convention

The site for our Convention in Pine Mountain, Georgia, is the world famous Callaway Gardens. Dr. William E. Barrick, Vice President and Director of Gardens, and Tom Brinda, Director of Horticulture at Callaway are very excited about our Convention. Many of you may know Tom Brinda from Longwood Gardens. Tom will be heading up this project at Callaway.

The 1990 American Daffodil Society 35th Annual Convention, is fast
approaching. The Georgia Daffodil Society has many hopes and plans to make the Georgia convention one of the most memorable ever. One of our many goals is to provide a special daffodil display garden such as the wonderful garden seen at the 1988 ADS Convention in Washington, D.C. This ‘hybridizers’ showcase” was a real success! Since imitation is the sincerest form of flattery—we wish to emulate the WDS and repeat this idea again.

We trust you will want to participate in this educational effort. What we are asking of you is this: consider sending your seedlings, or newly named cultivars which represent your greatest breeding advances, or perhaps show your breeding goals. It may be wise to consider the southern climate when making your selections. Callaway has done extensive studies on daffodils in the past and is well equipped and most knowledgeable. We are hopeful that we may also receive some “Down Under” daffodils, too. If you have some new things from the southern hemisphere that the originator would allow you to send to Callaway, please include those also. We felt trying to acclimate “Down Under” bulbs would be perhaps difficult. So if you have some acclimated seedlings or newly registered things you and the originator would like to share—please send those also.

Disposition of the bulbs after the convention will be handled according to your instructions. They could be donated to Callaway for educational purposes or they can be returned to you. Please indicate your wishes when you send your bulbs.

I hope that you will want to share your “pride and joy” and have your daffodils in the Hybridizer’s Display Garden at Callaway. This Display Garden will be a feature on our Gardens tour on Friday, March 30, 1990. Please send you bulbs to Tom Brinda’s attention along with the following information by Oct. 1, 1989.

Please supply the following information:
Name ___________________________________________
Address ___________________________________________

Phone ___________________________________________
Total number of different cultivars sent ______________
2 bulbs each minimum
List seedling numbers or registered names with Division and color code. Bag and label each group of bulbs carefully and send to: CALLAWAY GARDENS, Attention: Tom Brinda, Director of Horticulture, Pine Mountain, GA 31822.

Please specify desired disposition of bulbs: ______________

Subject to matters beyond its control, Callaway Gardens will exercise all care in planting, maintaining, and lifting the cultivars sent. Much appreciation is extended to you by the Georgia Daffodil Society for participation in this project.
WILLIAM R. MACKINNEY

On April 15, William R. Mackinney of West Chester, Pennsylvania, immediate past Northeast Regional Vice President, died of heart failure. Bill was the husband of Joy, ADS Miniature Committee Chairman, and father of Jocelyn Turner, Photography Committee Chairman. A longtime horticulturist, Bill devoted full time to the culture of his two favorite flowers, chrysanthemums and daffodils, after retiring as an illuminating engineer from Rumsey Electric Company in 1977. No matter how wretched a problem arose in growing or exhibiting, he never lost the sense of humor that so endeared him to fellow horticulturists. In 1985, he and Joy co-chaired the ADS Convention in King of Prussia.

Bill had a photographic memory and could identify blooms on sight. His mind was always organized so that he could pull out the needed information to make proper decisions. As Classification Chairman for the Delaware Valley Daffodil Society shows, he prepared the show tables for the judges in record time because he knew the flowers and where they should be placed. His questioning the naming of a flower in a large collection saved more than one major award for a harried exhibitor. At the 1989 show, three people failed to accomplish in one hour the work he had always easily done in 30 minutes. A popular ADS Judge, he was known up and down the East Coast for the bloom identification numbers and ballots he carried to shows to expedite the final judging.

Years of intense gardening and exhibiting were rewarded in 1986, when the Pennsylvania Horticultural Society awarded Bill and Joy its prestigious Certificate of Merit for their joint gardening efforts and plant society leadership in the Delaware Valley. His accomplishments with chrysanthemums were legion and recognized by numerous awards, both national and international.

Our sympathy is extended to his family.

FORCING FOR FUN

(Narcissus not needing a cold period)

BECKY AND BRENT HEATH, Gloucester, Virginia

Several cultivars of narcissus tazetta including N.t. papyraceus (paperwhite), N.t. chinensis (Chinese Sacred Lily), and N.t. Soleil D’or have been cultivared and forced for winter color for many hundreds of
years, even before the coming of Christ, some sources say. Today, thanks to modern horticultural and breeding practices, there are 10 or more cultivars and species not needing a cold period readily available for very simple and rewarding forcing for the homeowner.

The ones described below have not been registered with the R.H.S. and have been called, by the Israeli growers, names sometimes difficult to pronounce and spell. Because of this, they have given us permission to call them by more recognizable names in our catalogue, although we also include their Israeli name in parenthesis.

Galilee is a selected clone of French paperwhites made by Israeli growers. It is a more vigorous clone with relatively shorter stems with average height of 30 cm, 10-15 white/white florets per stem, and one to three stems from one 16 cm or larger bulb. It has a moderate musky fragrance, a bit strong for a small closed room. It normally takes three to four weeks to bloom.

Ziva is also an Israeli selected clone from the French paperwhite Grandiflora. This is one of the most vigorous clones of paperwhites and the one most widely available. The 10-15 florets per 40 cm tall stem are a big larger than Galilee and have a strong musky fragrance. This fragrance is likable to some and too strong for others. Some say it smells like freon—still others look to the soles of their shoes to see if they might have stepped in something! Aside from that, this is the quickest to bloom. It often blooms in two to three weeks after planting when conditions are favorable. It normally has 10-18 white/white blooms per stem and one to three stems per topsize 16 cm bulb.

Bethlehem (Nony, Israeli name) is probably a hybrid between a clone of paperwhite and French Soliel D’or. It is one of the shortest with stems of 20-30 cm with 10-15 florets per stem, and up to four stems per 15 cm bulb. It has a mild sweet fragrance. The florets are creamy white with pale yellow centers. The bulbs usually take four or five weeks to bloom.
Israel (Omri, Israeli name) is, in our opinion, the finest paperwhite yet. It is probably the paperwhite × tazetta hybrid which was bred as a cut flower. It has up to three very strong 35-40 cm stems per bulb that do not usually require staking, and blooms three to five weeks after planting. The large florets, 15-20 per stem, are creamy yellow with pale yellow centers. This has a mild, sweet, musky fragrance that is quite pleasant.

Jerusalem (Shelag, Israeli name) is the largest selected clone of paperwhite with two to four of the longest (40-45 cm) and strongest stems yet. The flowers are the largest and sparkling white and of a mildly sweet fragrance. They bloom three to four weeks after planting and usually do not require staking due to the strength of stems. This is one of the finest.

Nazereth (Yael, Israeli name) is probably a paperwhite × Soleil D’or cross with up to ten creamy and yellow florets on one to three stems with a mild sweet fragrance. It takes about three weeks to force. The 25-35 cm stems will sometimes need staking.

Chinese Sacred Lily (narcissus chinensis), a bi-color beauty, is one of our favorites because of its beauty and fantastically delicate, non-pervasive fragrance. It should win a place on many a winter table. It takes three or four weeks to produce several 30-35 cm stems bearing five to ten florets of clear white and cheesy golden orange. The stems are a bit weak and require staking. This can be very easily accomplished with 6” hyacinth rings (available from the Daffodil Mart). This bulb is reputed to be from Mediterranean and Oriental regions. It is also referred to as ‘Chinese Grand Emperor’ and the ‘New Year Lily’. A wonderful ancient art form involving the intricate carving of n. chinensis bulbs by Oriental people to produce blooming “crab-claw narcissus sculpture” is still practiced in the Orient and on Hawaii.

Constantinople is the lovely double sport of Chinese Sacred Lily. It shares the many good attributes and few weaknesses of its mother. Wonderful sweet fragrance and attractive, colorful florets make this favorite worth the effort of staking.

Cragford is a truly multi-purpose bulb in that it can be forced easily without cold treatment and it can be grown outside in most parts of the country (zones 5-9). Several mildly musky fragrant florets of white and orange grace each stem. This one takes eight to ten weeks to bloom. Stems of 25-30 cm are relatively strong and generally do not require staking.

Grand Soleil D’or of the Mediterranean region remains one of the most popular cut flowers in England and pot plants around the world. With its stems of 10 to 20 bright yellow and orange florets sporting a marvelous sweet fragrance, this variety takes six to ten weeks to bloom. This cultivar has a relative hardiness of zones 7-9.

There are additional cultivars that force well with a minimal cold or cool period in our cool (40°F night temperature) greenhouse. The tazetta group, including Avalanche, Grand Monorque, Grand Primo, Polly’s
Pearl, Erliecheer and canaliculatus, all do well for us. They all take about six to eight weeks to bloom. The performance of canaliculatus is marvelous—most bulbs bloom as compared to sparse bloom outdoors. The cultivars Hawera, Minnow, Little Gem and Little Beauty have all done well and take a little longer to bloom. The species, bulbicodium conspicuus and obesus, jonquilla henriquesii and fernandesii and the hybrid bulbicodiums all do well for us also, and bloom in eight to ten weeks. I think that continuous experimentation will reveal a number of other cultivars that will readily force with a minimal cold period.

The bulbs of the above mentioned cultivars are generally available from September 15th onward until December 31st. I understand from Dutch grower colleagues and friends that they will soon be available year round from Holland.

The bulbs are best kept dry and room temperature until potted. Try not to store over four weeks, as bulbs will begin to sprout. Bulbs may be grown on pebbles in the traditional way. Keep the water level below the base of the bulbs. Our preference is to grow them in bulb pans (6" pan-6 bulbs; 10" pan-12 bulbs) using a coarse “peat-bark-sand mix” with our 5-10-20 slow-release daffodil fertilizer (Our experience shows that flowers of bulbs grown in pots using this fertilizer and potting soil are stronger and last longer). If soil is used, it should cover the shoulders of bulbs and have a layer of gravel around the necks to hold bulbs in place while rooting and blooming. Soak pots, let drain, and water sparingly—once a week or when

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Chinese Sacred Lily (Narciseus Chineses) and its sport, Constantinople.
pot begins to dry. **DO NOT OVER WATER BEFORE GROWTH BEGINS—BULBS CAN ROT IF WATERLOGGED.** Bottom heat (radiator, heat cable, refrigerator top or warm spot near heat source) is beneficial to help roots form and get bulbs started. September started bulbs take longer to bloom than December started ones. Light or darkness appears to be of little consequence with the paperwhite types during rooting time. However, as the bulbs get growing and tops appear, good light and extra day length with florescent or gro-lights is beneficial and will help keep the bulbs from growing too tall or "leggy" (a symptom of low light or not enough light hours). I was once explaining this to a garden club audience in Greenwich, Connecticut, and a lovely lady in the audience said to me, "Mr. Heath, I just give my bulbs a little gin." We have found that, indeed, a little rubbing alcohol (1 teaspoon to 1 qt. of water) does tend to stunt the growth of the stems. There are also several hormone growth arrestors on the market, primarily for greenhouse operators. Fortunately, with proper variety selection and a good culture, you may not need to worry about staking or having to share your gin! Keep your bulbs well watered after foliage starts to grow.

One can easily regulate the whole blooming process by either keeping the pots warmer (75° F for faster growth) or cooler (38° F for slower growth). Once they have bloomed you can prolong bloom life by keeping the flowers cool at night and misting daily.

After bloom, most of these bulbs are consigned to the garbage or compost heap by most except for the most diligent of gardeners who have a sunroom or greenhouse, or those who live in zones 8-9 where the bulbs can sometimes be carefully transplanted to the garden or landscape. If you wish to grow the bulbs on in your greenhouse after bloom, water on regular basis, once or twice a week, and use the slow-release 5-10-20 daffodil fertilizer or close equivalent houseplant fertilizer. When the foliage dies, keep the bulbs dry until ready to start again in the fall. Blooms are seldom as large or plentiful the next year because they have been forced and conditions are not ideal for replenishing spent energy. Larger bulbs usually produce larger flowers, more stems, and more florets. That is why we recommend the top size bulbs of 16 cm up. Most garden centers and mail order catalogues offer a 12-14 cm size which produce good blooms and are cheaper. However, we feel the 16 cm up are worth the difference in cost for a finer display.

With careful planning, the homeowner can, with weekly or bi-weekly planting, have blooms from October through April. Thanks to the excellent bulb cooperative, Agrexco of Israel, and its grower members like Yoash Cohen-Zhdek of Yodfat Nurseries and breeders like Mrs. H. Yahel of the Volcani Center, we have a wide choice of excellent, stronger and more colorful bulbs to force. Our Dutch grower friends will soon add some new varieties and extend the growing season so that we can force bulbs year round. We will keep you posted with new developments. In the meantime, we wish you fun, fruitful, fragrant forcing!
SERVICES AND SUPPLIES

Slide Sets:
1. Show Winners
2. Symposium Favorites
3. Novelties and Newer Varieties
4. Daffodil Primer (Garden Club Special)
5. Miniatures
6. A Survey of Pink Daffodils
7. Species and Wild Forms
8. Classification and Color Coding
9. Poeticus Daffodils in Present Day Gardens
10. Landscaping with Daffodils
11. Artistic Daffodil Designs
12. Breeding Double Daffodils
13. Mitsch-Havens New Cultivars
14. Today's Seedlings—Tomorrow's Daffodils (Mitsch Havens)

Slide rental $15.00 per set to ADS members, $20.00, non-members. Confirm dates well in advance. Address all correspondence concerning slides to:
Mrs. Richard M. Turner, Route 1, Box 241, West Kingston, RI 02892 (Tel. 401-783-6934)

Membership application forms. No charge.

ITEMS FOR SALE

Daffodil Pin (tie back, pin back, or ring back) .................. $10.00
Daffodil Cuff Links, Earrings .......................... 40.00
Daffodils to Show and Grow, 1989 ...................... 6.00
The Daffodil Handbook, 1966 ............... Paper Cover 4.50
Modern Miniature Daffodils .................... 33.00
Daffodils for Home, Garden and Show ........... 27.00
The Narcissus (reprint) ......................... 30.00
Print-out of Daffodil Data Bank .............. $18.00; with binder $22.00
Dr. Throckmorton's Stud Book .............. 75.00
RHS Daffodil Checklist ....................... 24.00
Ten back issues of the Daffodil Journal (no choice) ........ 12.00
Single copies of Daffodil Journal .............. 3.00
Journal Binders (holds 12 copies) .......... 12.00
ADS Approved List of Miniatures, 1987 .......... two first class stamps each.
Show Entry Cards - Standard or Miniature (please specify) 500 for $20.00; 1000 for $33.00
RHS Yearbook, Daffodils, 1980-81, 1982-83 ........ 5.00
RHS Yearbook, Daffodils, 1986-87 ............ 6.00
RHS Yearbook, Daffodils, 1987-88 .......... 7.00
RHS Yearbook, Daffodils, 1988-89 ............ 8.00

Prices subject to change without notice.

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

AMERICAN DAFFODIL SOCIETY, INC.
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