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Back Cover: Eve Robertson in her garden in Taylors, SC, surrounded by an acre of daffodils, most of them her own seedlings (story page 207).



Sandra Stewart Seedling
(‘Orangery’ x ‘Scholar’)
(see story page 172)
Sandra Stewart photo



‘Rapture’ 6Y-Y
“Winningest” Standard Daffodil in
2001
(see story page 186)
Tom Stettner Jr. photo



‘Des Oldham’ 2W-P
Gold Ribbon, Kirby Fong
Livermore Show
Kirby Fong photo



‘New Penny’ 3Y-Y
Gold Ribbon, Sara Stanford, 1986
Memphis National Show
(see story page 215)



'Atom' 6Y-Y

See "Are These Miniature Daffodils Extinct?" on page 203



'Tweeny' 2W-Y

See "Are These Miniature Daffodils Extinct?" on page 203



Big Spottershill at The Floriade. (See story page 202.)

REPORT FROM UCI

Harold Koopowitz, Santa Ana, CA

Despite the new and expensive varieties that grace each year's daffodil catalogs, it can be argued that daffodil hybridizing is reaching a plateau where advances are hard to come by and progress is marked by small steps. There are several reasons for this. Among the first four divisions there is already a long history of hybridizing, and the major advances involving form have already been made. In most of the other divisions sterility is a serious problem that precludes significant additional breeding without going back to the original species. Most standard daffodils are tetraploid while the species are diploid. This results in triploid hybrids, most of which are sterile. These problems are exacerbated by the small numbers of viable seed often produced in a pod and the long generation times which are at least three to five years from seed to flower.

As many daffodil people know, the ADS is partially supporting a research project in my laboratory at the University of California at Irvine (UCI). What follows is a report on one section of the work, following the first two years of the grant. The grant is to conduct research aimed at improving upon traditional daffodil breeding techniques and to apply some of the more modern approaches to daffodils. We proposed to get around the sterility problems by developing and applying techniques that have proven themselves to be valuable for other groups of bulbous plants.

Two main goals were to develop "embryo rescue" techniques that could be used with daffodils and secondly, to work out easy ways of converting sterile hybrids into fertile ones by doubling chromosome number.

Embryo Rescue: Embryo rescue requires removing immature ovules from the ovary after fertilization and growing them on an artificial medium. There are several reasons for doing this but the most important is that it allows one to make crosses that normally fail when traditional seed production techniques are employed.

In many plant groups, the reason why crosses do not take is not because pollen is unable to fertilize the egg cells in the ovule, but rather because endosperm development either fails completely or partially. Endosperm failure results in flattened seeds, most of which never germinate. If the ovules are extracted after fertilization, they can be placed on an artificial medium that can substitute for the nourishment provided by the mother and also the endosperm. We have also found in using other bulbous flowers in the past that we can achieve immense savings in time to maturity using embryo rescue. For example, in *Ornithogalum* (Gries-

bach, Meyer & Koopowitz, 1993) not only could we make hybrids between normally non-fertile species but also they would flower in 9 months instead of 3 years. In *Eucomis*, the pineapple lily, embryo-rescued plants flowered in 18 months instead of 4 years (Koopowitz & Meyer, unpublished). Maybe daffodils could mature at a faster rate too.

The two main problems for doing embryo rescue are finding the correct medium on which to grow the embryos and knowing the time after pollination that fertilization takes place. The first year of the grant was spent trying to find a successful medium and to work out the correct time for harvesting ovaries following pollination. If one succeeded in these two endeavors, then in the second year one could try to embryo-rescue "impossible" crosses that normally fail.

Year 1. We decided to use a medium that had been successful for meristem tissue culture of narcissus (Steinitz & Yahel, 1982). We also tried a second medium that was touted as working for *Clivia*, a notoriously difficult amaryllid in tissue culture (Finnes, 1999). All work had to be performed under sterile conditions using a laminar flow hood to exclude microorganisms.

We selected three different pod parents in order to cover the spectrum of narcissus types and made 3 crosses. They were 1) 'Paperwhite' x 'Paperwhite'; 2) 'Little Gem' x 'Gloriosus' and 3) 'Ice Follies' x 'Altun Ha'. The three crosses also spanned the season and gave us material to work with from December to March. We will discuss only the results of the 'Little Gem' crosses here because they produced the most seed. The other crosses were very sparse seed producers and even the controls allowed to mature on the plant produced very little seed.

'Little Gem' x 'Gloriosus' pods were harvested 8, 10, 12, 14, 16, 18, and 20 days after pollination. These dates were selected because previous experience had suggested that this might be an appropriate time for fertilization to have taken place. Pollen had been stored in a refrigerator. At least 10 pods were harvested for each date and the contents of each pod were planted into separate magenta jars. A few of these were contaminated and had to be discarded.

The 'Little Gem' x 'Gloriosus' embryo rescue attempts were very successful and we found that the Steinitz & Yahel medium gave better results with more embryos. The ovules swelled to about normal seed size for 'Little Gem' and then the seed coats, which had partially darkened but not developed to the normal black color burst open and a mass of cellular tissue developed. We found no growth from embryos removed 8 days or less, post-pollination; a very few in those harvested 10 days post-pollination produced embryos that developed into bulblets. Many of the embryos taken 12 to 20 days after pollination developed into plantlets.



Converted 'Hawera' compared to normal 'Hawera' flower between fingers



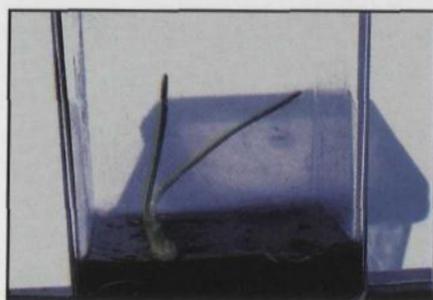
Embryo-rescued seedlings a few months out of the flask



'Little Gem' x "Gloriosus" seedlings still in flask



'Little Gem' x "Gloriosus" seedlings still in flask



Paper White seedling in flask

This suggests that at least 10 days are required after pollination before fertilization can occur in the 'Little Gem' ovaries.

There were several different ways that the embryos developed and sometimes all types occurred in the same jar. In general a mass of cells formed, or a stout root-like structure which then produced leaves formed. The leaves emerging from all these plants seemed to be different from normal seedling leaves. In the culture medium, the initial leaves were fairly stout and channeled on one side. They looked more like second-year or older leaves. They started to make small bulblets while still in the jars and growth continued through that first summer. By September, 2000 a few plantlets had made two leaves. Normally one would only be planting seeds in August or September so the technique allowed a gain of year's growing time.

The next step was adapting the plants to growing outside the laboratory. We waited until the late fall when temperatures started to drop before we planted them out. This appears to be a critical procedure and despite soaking the plantlets in a fungicide we lost half of the plantlets when they were potted up. The survivors, however, grew vigorously, producing several additional leaves. They were forced into dormancy at the end of May 2001.

At the current time of writing, early January, 2002 these plants have successfully broken dormancy and are growing vigorously. Many of them resemble third-year seedlings.

We can summarize the project at that point by saying that we demonstrated that embryo rescue techniques are possible for narcissus, we have a medium that works, and it appears that this technique may even help accelerate seedling growth. So now, what does this mean for the rank and file daffodil grower? This technique should make it possible for breeders to make new kinds of daffodils that were impossible to produce before. For example, *N. dubius* is a tetraploid small white tazetta species that could make a range of new miniature daffodils if it could be bred to miniature trumpet daffodils that are diploid. Last season we harvested over twenty pods of 'Little Beauty' x *N. dubius* and similar numbers of 'Little Gem' x *N. dubius*. All of the pods were chock full of large but aborted seeds, every seed was flat; they all were useless, because of endosperm failure.

Year 2. During the Spring of 2001 we repeated those two *N. dubius* crosses. Ten pods of each cross were harvested approximately 15 days after pollination and embryo-rescued, while a further 10 of each cross were allowed to ripen on the plants. None of the pods allowed to ripen on the plants produced viable seed although they were filled with copious flattened chaff-like seeds. As of this writing we have six embryos devel-

oping from the 'Little Gem' x *N. dubius*-rescued ovules. Two of these have now produced a mass of callus and several bulblets. The results of the 'Little Beauty' x *N. dubius* cross did not develop despite the fact that the ovules from that cross grew to normal seed size but there was no evidence of plantlet formation. Some of the latter seeds were sectioned and examined microscopically but they were devoid of embryos. In the latter case embryo rescue did not work. The utility of embryo rescue seems to vary depending on the parents used to make the crosses. Another series of embryo rescues will be repeated in the coming season.

We are not suggesting that daffodil hobbyists will carry out these laboratory techniques themselves, although they could. They will be able to follow the example of orchid breeders, many of whom are amateurs, who make crosses and then routinely send their pods to one of the various commercial laboratories scattered around the country, to carry out embryo-rescue procedures.

Ployploidy

One of the main reasons there is so much sterility in modern daffodil hybrids after crossing with the various species is because the chromosomes are mismatched. This problem could be overcome by doubling the chromosome numbers. This is what happened spontaneously with 'Quick Step' and its progeny such as 'Limequilla' and 'Regeneration'.

Doubling chromosome numbers is a routine operation, but one needs to work with a very small piece of actively dividing tissue. Normally, the apical bud (called *apical meristem*) in a regular daffodil could be used but getting to that bud is difficult. It is easier to use twin scales and force them into making a new meristem. Ten days after cutting twin scales, swellings between the leaves' bases making up the scales can be seen. At this stage they can be soaked for 24 hours in an agent that stops cell division. The agent is then washed out and the twin scales further incubated to produce bulblets. A certain percentage of the twin scales will make polyploid bulbs, but one generally cannot tell if the process has been successful until they have flowered and been pollinated. While polyploids tend to have larger flowers with heavier substance, this is not always the case.

In 1998 we used an agent called Oryzalin (2%) on a range of different sterile narcissus cultivars. One of these was 'Hawera', a known sterile miniature originally from the cross *N. jonquilla* x *N. triandrus*. About 60% of those bulbs flowered in 2001 and of those flowering, about half had flowers much larger than the size of normal 'Hawera'. All of these flowers were pollinated with viable pollen of *N. longispatha*. But only one of the pollinated plants produced seed. Nine seeds were harvested and of this writing all nine have germinated. The pollen of the seed-

producing plant also looked very good and that was used to pollinate a number of flowers of 'Regeneration'. Several pods were set on 'Regeneration', but when they matured and split open they contained partially formed flat seeds in them. At this time (February, 2002) one quite strong seedling has germinated from that cross. This technique holds promise for making other "sterile" cultivars fertile.

In 2000 we tried to convert an enormous series of sterile miniatures (using 1% Colchicine). This was attempted to increase the range of potential breeding material. In two years time we will know how successful this has been. Our earlier work gives us optimism that we will be successful.

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MAKE PLANS TO GROW YOUR OWN DAFFODILS FROM SEED THIS YEAR

Sandra Stewart, Jasper, AL

(Adapted from a Daffnet posting with permission)

Now that I have demonstrated to all on the Daffnet that I do not recognize my daffodils on sight, here is one I do know—because I have been waiting for five years for it to bloom. This is my first split cup seedling (see photo page 164). I have a couple more buds out there from this cross if they don't freeze tonight—it may be next year before I see those. This one is probably never going to be a show flower, but at least it is definitely a split cup and compared to the blooms out there on some of my named cultivars right now, it's not *that* bad. I am considering it a good start because it bloomed to be the division I was looking for. I know many of you don't count split cups as daffodils (Bill Pannill has probably already deleted this email), but my friends and neighbors love 'em! I started out thinking that if you plant seeds from daffodils you like, you will get some seedlings that you like.

Sometimes we forget that most people in this world who enjoy daffodils will never even see a daffodil show and won't care that they missed it. Also, new folks may be intimidated sometimes by the old hands here on the Daffnet. I would probably be intimidated too except I hang out with Weldon Childers, who knows a lot about daffodils, and we've spent lots of time talking about daffodils.

I hope all you new people on the Daffnet will think now about pollinating a few daffodils this year and planting the seeds to see what you can grow. It is fun to finally see them open and you can get all kinds of things accomplished in your life while you are waiting! The kids really love this pollinating thing: Autumn learned enough about the parts of a flower doing this to ace her science test in fourth grade; I have learned enough that I wanted to put this on Daffnet before the pollen starts fluffing.

When you bloom seedlings depends directly on when you plant the seeds! I'm not an expert at hybridizing, but I thought some people would like to read the basic way I do it; it will be too late this year if you don't think about it now.

This daffodil came from 'Scholar' (seed parent) x 'Orangery' (pollen parent). 'Scholar' 2Y-W (reverse bicolor) is a Havens cultivar, but I'm not sure where you can get it now. Weldon gave me mine in 1995. 'Orangery' 11aW-OOY is a Dutch daffodil which I bought for 50 cents each from the Dutch Gardens catalogue. Both will win ribbons if you take them to a show and your friends will love you more if you give them a

bouquet. 'Orangery' is my proof that you win many more ribbons with fifty \$1 daffodils than you can with one \$50 daffodil (not to mention having enough flowers to give gifts to your friends). My thought in making this cross was that the 'Scholar' might lend some substance to the petals of a split cup. Petals on Division 11 are usually pretty flimsy, and the daffodil that has corona segments completely covering the petals will be judged the better flower if the judges don't look too closely at the back side.

This bloom is from the first group of crosses I planted in 1997. It appears that most of those crosses are going to bloom this year, but there are a few plants that look as if they are only now coming up. It may be years before all these '97 seedlings bloom. I started planting daffodil seeds the year before that with all OP (open pollinated) seed; I even got a couple of blooms good enough to win ribbons from open-pollinated seeds from 'Ceylon', 'Ice Follies', 'Oratorio', and 'Cabra', to name a few. I also have some seedlings that I got from a close friend; she was 71 years old and when she learned you could grow daffodils from seed, she picked all her seed pods and gave them to me. She loves the split cups too. These may bloom next year.

I have noticed that if I allow seed to develop on a new daffodil that blooms for the first time, I lose that daffodil the next year. Maybe this is just coincidence, but maybe growing the seed pod weakens the bulb if it's not acclimated to my conditions? I don't raise seeds on new bulbs now for that reason, although I might pick them and use the pollen if I don't put them in a show.

I don't do anything special to plant my daffodil seeds. I just move my compost pile and plant the seeds in the ground on that good bare spot in late summer by poking holes in the ground with a pencil; you don't have to double dig or do any elaborate soil preparation. Here in Alabama you have to wear long clothes while you are doing this in order to keep the mosquitoes from biting you and making you drop your seeds where you didn't want them to land.

I put the year and the cross and the number of seeds on the same kind of labels I use for my bulbs. I planted several hundred seeds in a 5' x 5' plot, planting them only about an inch apart. I don't ever water after that first day, but I do cover them up with good thick pine straw mulch to keep unsightly weeds under control because I am always afraid I will pull the seeds or small bulbs up if I have to pull too many weeds. If weeds do grow and are too tall to pull, I cut them down with scissors *before* they make seeds. The weeds don't bother the seedlings, but they do bother the Lawn Ranger (my mother). After six years, I now have a whole bed of new daffodils growing—for free. I do plant the miniature

seeds in little plastic pots and sink them in the ground so I won't lose them. Some of the bulbocodium seeds I planted are putting up buds after only two years. (Maybe we can get blooms sooner in the South since our growing season is so much longer?) I make them tough it out, thinking that we don't need any more weak stuff wasting ground in Alabama.

I store the seeds in little packs made from the corners of junk mail envelopes with the cross and number of seeds written on the pack. You can make your garden labels while sitting in front of the television: just copy from the envelopes. After you get your seeds in the envelope, tape the open edge with scotch tape. When you are ready to plant, you can snip off a corner with scissors and you will have a spout on your pack.

You can document your crosses in the garden when you make them by writing the name of the pollen parent on the stem of the seed parent plant with a ball point pen (example: *x 'Orangery'*); it will not wash off or fade. When the pods are turning yellow on the top, you can write the seed parent name on the stem ('Scholar') as you cut it and keep the stems/pods in a sack or something until you get time to write the names on the envelope packs. It is much easier to write on the paper before you put the seeds in there.

It's a good idea to mark your pollinated flowers some way while they are still pretty so that your friends won't pick them. I pull the top petals off so they are too ugly for anyone to want. Of course, I have to admit I picked some of them myself before I learned this!

There can be a lot of science involved in pollinating daffodils but most of that is over my head. This is like everything else, you can go to as much time and trouble as you like. I don't even plan my crosses too much—I just pick the good looking flower I want to use for pollen and go around dusting it on things I think will look good put together. Just be sure the pollen bloom is freshly open—the pollen has to have some time to fluff out though, but not so much time that it is falling off the anthers. The stigma on the seed parent you choose must be fresh too; you should be able to tell that the stigma doesn't already have pollen on it and it should be light in color and appear moist—they turn darker as they age. You will be able to tell most times if you make a good pollination because you will be able to see the pollen pretty much glued on there.

I suspect that if I did spend a lot of time planning crosses, something would happen—like this freeze we are having or the usual tornadoes—to ruin my plans. I do have some seedlings growing from 'Little Gem' and some other early miniatures that I made when the temperatures were below freezing, but it was not easy. Maybe when I am able to retire from the day job, I will put more thought into planning crosses.

You can get information about your daffodils from the ADS Data Bank. There is a code under the FT (fertility) column that may say S (seed) or P (pollen). I learned from being in the New Hybridizer's Robin that just because a daffodil is not indicated in the Data Bank to be fertile is not to say it is not fertile. An "S" means that the daffodil is the seed parent of another registered daffodil. A "P" means that it's the pollen parent of another registered daffodil. For example, 'Scholar' already has a "P" in the FT column and 'Orangery' has both "S" and "P."

Always make more crosses than you think you will want. Most of the crosses I make don't even produce seed. Always plant more seed than you think you will want because they will not all come up. Don't hesitate to plant seeds from daffodils that are selfed or open pollinated—if you plant your daffodils close together, as I do, there's no telling what you might get.

Always keep a permanent written record of your seeds planted and store the records where you will be able to find them five or six years later when the plants start making buds. I use those hardcover blank journals with lines they sell at Waldenbooks. I don't write the crosses down until after they are planted because I always lose some between the house and the garden and my two beautiful cats. I don't keep this information on the computer because I know the computer will crash someday, although that would be a good backup place to keep it. It's also a great idea to make a map in case some of your labels go missing. I try to plant mine in alphabetical order of the seed parents.

Don't hesitate to plant your seeds just because you don't want to write all this stuff down. I have two years of seeds out there with labels that only say the year and the name of the person who gathered them.

The ADS gives ribbons to the best seedling exhibited by the originator at each show—the Rose Ribbon to the standard and the Miniature Rose to the best miniature seedling. These flowers just have numbers (no names yet) and the name of the exhibitor/originator is not visible until the judging is finished. Of course, some shows attract more hybridizers than others but they all like to talk about growing daffodils so you can meet some very good people and see what grows well in your vicinity.

Who is to say you will not be the next Grant Mitsch?

(Editor's note: Steve Vinisky told me years ago that he always encourages daffodil growers to try hybridizing. Frequently the comment is, "I'm too old to start hybridizing now." Steve says that twenty years later he reminds them that they could have had fifteen years worth of seedlings if they had started back when they were "too old.")

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RECOLLECTIONS OF THE 2001 NORTHWEST BULB AND CUT FLOWER CONFERENCE

Kirby Fong, *Livermore, California*

The Northwest Bulb Growers Association holds an annual meeting in Seattle in late November. The members are primarily family-owned companies in the state of Washington who grow tulips, irises, daffodils, and other bulbous plants commercially. The topics cover not only agricultural practices but such business matters as running gift shops and demonstration gardens, labor and regulatory issues, and the business of the Association. The 2001 meeting obviously featured the handling of cut flowers, and the Association invited Michael Reid, a professor at the University of California at Davis, to be the keynote speaker. Other speakers came from Washington State University research stations and industrial suppliers of, for example, pesticides. Though I'm not a commercial bulb grower, I've gone to a few of these meetings when the conference topics seemed interesting to me. What follows are random items of information I collected that may be of interest to other daffodil hobbyists.

I gleaned the following from the keynote talk. Cut flowers should be stored at 32 degrees Fahrenheit, not 40 to 45 as most florists do. At 40 to 45 the flower continues to age, albeit slowly. The flower will last longer stored at 32. Storage at the lower temperature yields a longer vase life when the flower is brought back up to room temperature. When rehydrating flowers after they have been out of water (for example, while flying across the country to the national daffodil show), stand the flowers in deep, not shallow, water. For some unknown reason, believed to be associated with hydrostatic pressure, the flowers will take up water more easily if most of the stem is immersed. If stems are standing in clean water in clean containers, there should be no problem with bacterial growth, but if you have a problem, use one milliliter of plain laundry bleach per liter of water. Dr. Reid recommends putting cut daffodils in cold storage immediately rather than standing them in water for a couple of hours first. Gibberellic acid is known to prolong the vase life of daffodils. Dr. Reid showed a picture from a test conducted by his postdoctoral research associate, Don Hunter (John Hunter's son), of two cut daffodils, one in plain water and the other in water with gibberellic acid. The flower with the gibberellic acid lasted longer than the one without. Daffodils lose moisture through the stem rather than the petals. That was a surprise to me! This means in a warm show room the stem is pulling water out of the petals and transpiring it rather than the water transpiring directly into the air from the petals. If true, this means we should com-

pletely immerse the stem to keep the petals from losing substance and that misting the petals is of no benefit. Maybe we should try misting the stem?

Marty Coble of the Wilbur Ellis Company mentioned that if you still have and use Benlate, it is effective for four days if the pH is 4.5 but loses its effectiveness quickly if the pH is 7.

The bulb industry is having to phase out formaldehyde as a disinfectant. It is normally used during hot water treatment to make sure no fungus spores survive while you're trying to kill nematodes. The most promising substitute seems to be chlorine dioxide. It is effective as a disinfectant but breaks down into environmentally friendly compounds for subsequent disposal. Until recently you needed expensive equipment to create chlorine dioxide where it was needed because you cannot store it. Joel Tenny from EKA Chemicals was invited to speak about chlorine dioxide. His company is a major producer of chlorine dioxide, which is used in the pulp and paper industry. He is looking for other industries that could be potential customers. He reported that chlorine dioxide can be produced through alternative methods. For example, it is now possible to package the ingredients as two separate solids to be brought into contact with each other to make the gas. The gas can be used as is or be put into solution. Indeed, chlorine dioxide is being considered as an alternative to chlorine for disinfecting water. I didn't find out whether consumers can get the materials. (*Editor's note: See related articles by Clive Postles on Jet 5 and Bob Spotts on peracetic acid.*)

One of the Washington State University researchers I talked to was Gary Chastagner. He reminded me that fungal spores can survive in the necks of dormant bulbs and infect the leaf tips when the tips emerge in the spring. It does not hurt and can be helpful to break off any hard black tissue around the neck before replanting a bulb. Normal dried tissue is tan or brown; black may be harmless but is suspect. Obviously, you should not drop such bits of suspect tissue on the ground near your daffodils. He has been experimenting with the gaseous form of chlorine dioxide using the solid ingredients in the bottom of a five-gallon, sealed can. He reported that ten parts per million for one hour will kill spores of alternaria, botrytis, fusarium, and penicillium. The hope is that a gas will penetrate into small openings on the bulb surface better than a liquid would.

Paul Kaufmann, also of Washington State University, mentioned that pyrethroids are the most effective insecticides if you're trying to stop aphids from spreading viruses among your daffodils.

PERACETIC ACID—SOMETHING PROMISING FOR CONTROL OF BULB ROT DURING SUMMER STORAGE

Bob Spotts, Oakley CA

Living in hot-summer California, I have a problem keeping bulbs during storage after lifting. I simply don't have a cool place to store them. I dig in early June and don't replant until late October or November. That means the bulbs are out of the ground for 5 months. As a result, I lose bulbs from fusarium rot during storage. This year was especially bad—I lost most of the bulbs I lifted to neck rot!

When I lift bulbs, I remove the soil from the bulb and roots with a water spray. Then I give them a lengthy soak in warm water with Clearay 3336 and formalin added. I dry them outside for a few days and hang them in mesh bags from the rafters in my garage. Though I leave the garage doors open and our California summers have very low humidity, the warm environment is conducive to fungus growth. I believe the fusarium spores left unkilld by my formalin soak did me in.

Both Clive Postles and Brian Duncan have told me about the effectiveness of peracetic acid as a soak upon lifting. One UK brand name is "Jet 5," which is a 5% solution of peracetic acid in water. Clive sent me a laboratory report on the effectiveness of Jet 5 in killing fusarium spores. Incredibly, Jet 5 diluted 1:100 gave 100% kill of fusarium spores in 30 minutes when used in a hot-water (112F) treatment. HWT alone or with formalin is not 100% effective.

This same concentration of peracetic acid in HWT also gave a complete kill of "free-swimming" bulb-and-stem nematodes (eelworm) in one hour. Diluted further to prevent burn of plant leaves, peracetic acid is effective as a contact spray to kill fungus on growing plants.

Peracetic acid is used commonly in the agriculture and horticultural industries in the UK, Germany, and Italy for disinfecting/sterilizing bulbs, plants, and equipment. As yet it is not used in these industries in the USA.

In an Internet search, Kirby Fong and I found three companies that make and market the product in the USA: FMC, Minntech, and Enviro Tech Chemical Services. Although peracetic acid has EPA approval for plant use, none of the three companies markets to the agricultural or horticultural arenas. FMC is focused on the food industry; Minntech is focused on the medical/surgical market.

Enviro Tech is a new and growing company in central California. I visited them and talked with their chief. Peracetic acid is sold in a five-gallon container, and now Kirby and I each have 2½ gallons of it. The

company will be investigating opportunities to market in agriculture and horticulture.

What makes me so enthusiastic about peracetic acid? In addition to being effective, it is environmentally friendly! No poisonous residues left to contaminate soil, aquifers, and rivers. No toxic chemical to inhale or absorb. Peracetic acid decays into water and vinegar. It might be viewed as a heavy-duty mixture of hydrogen peroxide and acetic acid. Yes, it can burn you, so gloves are necessary, and inhalation of fumes is to be avoided; but it kills by oxidation, not poisoning.

This may be the fungicide/nematicide/miticide of the future.

MY EXPERIENCE USING JET 5—PERACETIC ACID

Clive Postles, Worcester, England

What is Jet 5?

Jet 5 was first brought to my attention around 1995 by a good friend and daffodil fanatic who sent me a photocopy of an article printed in the trade paper *Horticultural Weekly*. This told of a new use for Jet 5 in the hot-water treatment of daffodil bulbs on a commercial scale. Jet 5, a 5% solution of peracetic acid, is a powerful disinfectant that is safe to use and very effective against many pests and diseases. As a bonus, it's kind to the environment!

Trials have demonstrated that Jet 5 can be used as a replacement for formaldehyde in hot-water treatment of daffodil bulbs to control bulb-and-stem nematode (eelworm) and fungal infections such as fusarium. Formaldehyde is banned in several countries on health and environmental grounds. Therefore, Jet 5, being a safe alternative, is in my opinion a godsend for the amateur daffodil grower. Jet 5 breaks down into natural substances: oxygen, water, and acetic acid. There is no risk of pollution and while there is a strong smell it does not pose any risk to the user. Providing protective gloves and clothing are worn, it is perfectly safe to handle.

Since those early days I have passed on my experience in using Jet 5 to many U.K. growers and now they use it on a routine basis to help keep their bulbs clean.

How I Use Jet 5.

As I do not hot-water treat my bulbs, I have modified the original system to use Jet 5 in a cold-water dip. I do have a hot-water treatment plant, but to coin that wonderful American expression, "If it is not broken do not try to mend it" (or something like that).

Bulbs are dug and placed in appropriate-sized plastic baskets; all soil and grunge are washed off by water jet. Bulbs are only dug in the morn-

ing, leaving the rest of the day for washing and dipping. Eight baskets (a full load) are lowered into the tank for a period of 30 minutes. I use 1.5% Jet 5 in cold water with an added wetting agent. In my tank, this works out to 1.5 gallons of Jet 5 in 100 gallons of water. After dipping, bulbs are left to drain, then moved into the drying shed which is an open-ended structure with racks down each side and the middle. Because of the design of the building, hot air spills out the open ends and cold air is sucked in at the bottom. This keeps the temperature quite cool even during our occasional hot summer.

Before planting back, all *dry* bulbs are dipped again, this time in the mixture of Jet 5 along with three liters of Storite (thybendazole). This dipping is for 2.5 hours. Bulbs are then taken back to the drying shed in readiness for planting back.

This is a very simple and effective method to help keep your bulbs healthy. I rarely find soft bulbs at planting time, though I process thousands. I hasten to add that I make no claim that my system is in any way scientifically based. It is more on a practical "trial and error" basis that works for me.

I do have one other use for Jet 5. I put shallow trays of Jet 5 solution for my visitors to walk through in the hope that avoidable contamination does not occur. This might be a waste of effort, but it makes me feel a little more contented.

MARIE BOZIEVICH'S GROWING SECRETS

Clay E. Higgins, *Gaithersburg, MD*

Looking through my daffodil scrapbooks, I found some interesting handwritten notes from Marie Bozievich, one of the Washington Daffodil Society's first members. Two of those notes that I was able to decipher were on the subjects of fertilizing and early watering. They provided some interesting tidbits.

On Fertilizer

The note said that during her first trips to England and Ireland, which would be about 30 years ago, she discovered that most of the growers fertilized their daffodils in late February. She was particularly interested in the gardening habits of the late John Lea, who used the ashes from his many fireplaces as fertilizer. Ashes from burning wood are an excellent source for natural potash.

Second, the better growers on the Irish Isle applied fertilizer as a top dressing in February, using a mixture of fertilizer that was rich in potash, or just straight potash. In her calculations, she came up with a formula that she used on her daffodils, and passed along to me and which I still

use. Her method was the liberal sprinkling of 5-10-20 fertilizer as a top dressing. She noted that the English and Irish growers believed that an application of fertilizer in the early spring when the daffodils were putting on spring growth assured that the stems were large enough to support the bloom, and provided the best possible "form" for showing. She ended the statement with, "That was good enough for me."

She advised using sulfate of potash if soil needed acid, and muriate of potash if the soil had a high acid content. In addition, she wrote, "Potash improves the color in the bloom."

On Watering

Marie Bozievich, who thoroughly studied watering, always said that to successfully grow daffodils, "Water, water, water." She once said to me and Tom Taylor, the Vice President of the Washington Daffodil Society, while Tom and I were neighbors, "You boys don't believe me when I say, 'Water, water, water.' But believe me, during the budding period, daffodils can stand in water."

Marie's notes indicate that she started watering in March and continued watering until the end of the bloom season. She'd go out each day and turn the water on, then go back two or three hours later to turn it off. She put in an underground watering system. Her daffodils were always large and beautiful and she consistently put winners on the show bench.

I still follow her advice. However, I use "bulk" soaker hoses that I put on the beds before I add the mulch. I also use electric timers that run off batteries in order to give the daffodils a good watering every day. The only problem I've had using the battery timers is that sometimes in March the hoses will freeze and you have to reset your timers because they will "time-out" when the water freezes in the hoses and they stop working.

YOU CAN'T GROW DAFFODILS IN FLORIDA

Mary Lou Gripshover, Milford, Ohio

You can't grow daffodils in Florida, did you know that? At least that's what I thought before I met the late John Van Beck, of Tallahassee. Well, John educated me! And a lot of other people, too. He was the founder of the Florida Daffodil Society (FDS), which now numbers 216 paid up members. Kind of embarrassing, isn't it, for an area that "can't grow daffodils"?

The latest newsletter of the FDS says they planted 9,935 bulbs last fall on college campuses, technical centers, and public parks. Most were 'Carlton', not a show flower, but certainly a vigorous grower. Their show this year (not an ADS show) was on March 2-3 at Tallahassee

Nurseries. I'm sure a lot of visitors were surprised at the number of daffodils that grow in Florida.

You can grow quite a lot of daffodils in Florida, but you have to know which ones do well there. Write to Linda Van Beck, 6061 Weeping Willow Way, Tallahassee, FL 32311, and ask her to send you the list of locally successful daffodils. You can also check the website of the FDS at <<http://gamma.magnet.fsu.edu/fds/>>.

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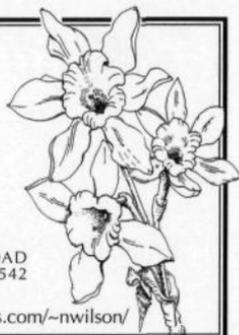
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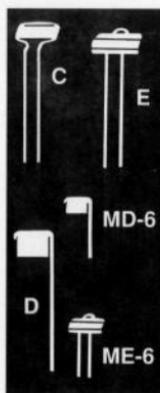
Bill Lee, Batavia, OH

I have a friend who works at the downtown branch of the Cincinnati Public Library. He called me one day and asked if I had read a certain book from the library's collection. I told him that I had but wondered how he knew. He said that there was a sentence in the book that referred to the name of a daffodil, 'Hawara'. He said someone had crossed out the middle "a" and written in an "e." I confessed. I'm sorry I don't remember the title of the book, but it was a suspense novel I think and this was its only reference to daffodils.

An ADS member who lives in Columbus, Ohio told me once about a small daffodil garden in front of a public building she visits periodically. She said that every spring someone methodically bundles the foliage into a topknot secured with a rubberband. Do you think it's a coincidence that when she drives away at the end of the visit all the rubberbands are gone and all the daffodil leaves are spread out?

Pat Lanza is a garden writer friend who owns a shop in Wurtsboro, New York. Pat is also the author of *Lasagna Gardening*, which describes in great detail how to make new beds by layering compost materials directly on the site of the bed. Pat hates campaign signs, especially those that candidates and committees do not remove immediately after the election. One of her missions is to wander through the town pulling up the signs. She drops a daffodil bulb in each hole left behind by the stakes the signs are mounted on.

(The Journal welcomes additional tales of mischief and/or good deeds involving daffodils.)



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WHAT MIGHT WE LEARN FROM OUR 2001 SHOWS?

Bob Spotts, *Oakley, CA*

As much as you would like, you can't grow all the daffodil cultivars! However, a look at what flowers were exhibited successfully in 2001 might be of help in deciding what daffodils to add to or delete from your collection.

At first, the list of winning daffodils is daunting—1,034 different species or named cultivars, 918 standards and 116 daffodils on the ADS Approved List of Miniatures won at least one ADS award in 2001! Let's take a look at the exceptionally successful daffodils. We'll treat standards and miniatures separately.

We all want to win the bigger prizes such as the Gold (or Mini Gold) Ribbon for Best-in-Show. To achieve such successes, I've assigned the ADS awards weights as follows:

- Best-in-Show (Gold or Mini-Gold Ribbon): 4 points
- Best Three Stems (White or Mini-White Ribbon): 3 points
- Best Collection of Twelve or more Stems: 2 points
- Best Collection of Five Stems: 1 point
- Best in Hybridizers' Classes (National Show): 3 points
- Hybridizers' Collection of Twelve, Six, or Three Stems (National Show): 2 points
- Any other ADS Award: 1 point

Applying this measure, in 2001 the 24 most successful standard daffodils in ADS shows were:

1. 'Rapture' 6Y-Y46
2. 'Intrigue' 7Y-W.....39
3. 'Homestead' 2W-W.....33
4. 'Conestoga' 2W-GYO27
5. 'Pacific Rim' 2Y-YYR26
6. 'Ice Wings' 5W-W24
7. 'Clouded Yellow' 2YYW-Y23
8. 'River Queen' 2W-W.....21
- 9-10. 'Carib Gipsy' 2Y-WWY20
- 'Lemon Silk' 6YYW-W.....20
- 11-12. 'Gull' 2W-GWW.....19
- 'Williamsburg' 2W-W19
- 13-14. 'Beryl' 6W-YYO.....18
- 'Killernan' 9W-GYR18
15. 'Kokopelli' 7Y-Y17
- 16-18. 'American Classic' 2Y-WYY ..16
- 'Golden Aura' 2Y-Y16
- 'Indian Maid' 7O-R.....16

19-21. 'Colley Gate' 3W-YOR	15
'Spindletop' 3W-Y	15
'Daydream' 2Y-W	15
22-24. 'Purbeck' 3W-YOO.....	14
'Eland' 7W-W	14
'Crackington' 4Y-O.....	14

The Havens Award (for 12 cultivars in Divisions 5-10) offers an opportunity to exhibit cultivars in the higher divisions. The high frequency of ADS awards won by cultivars from the higher divisions is also an outcome of the breadth of divisions required in the large ADS collections such as the Quinn and Bozievich Awards.

In 2001 shows the fifteen most successful miniature daffodils were:

1. 'Snipe' 6W-W	55	9. 'Hummingbird' 6Y-Y	28
2. 'Segovia' 3W-Y.....	52	10. 'Stafford' 7Y-O	26
3. 'Sabrosa' 7Y-Y.....	47	11. <i>N. bulbocodium</i> 13Y-Y.....	23
4. 'Yellow Xit' 3W-Y.....	46	12. 'Angel's Whisper' 5Y-Y.....	20
5. 'Minnow' 8W-Y.....	44	13. 'Ferdie' 6Y-Y.....	18
6. 'Xit' 3W-W	33	14. 'Angel's Breath' 5Y-Y	17
7. 'Clare' 7Y-Y	31	15. 'Hawera' 5Y-Y.....	16
8. 'Little Rusky' 7Y-GYO	30		

The most successful miniatures won more awards (and thus have much higher scores) than did the most successful standards. This reflects the relatively small number of cultivars eligible for exhibition in miniatures classes.

STANDARD DAFFODILS

Division 1 Hybrids. In Division 1, 108 trumpet daffodils won at least one ADS award. The ten most successful standards from Division 1 were:

1. 'Magic Lantern' 1Y-O.....	13
2. 'Pink Silk' 1W-P.....	12
3. 'Quiet Waters' 1W-W	11
4-5. 'Bravoure' 1W-Y	10
'Pops Legacy' 1W-Y.....	10
6-9. 'American Dream' 1Y-P.....	9
'Glenfarclas' 1Y-O.....	9
'Young American' 1YYW-WWY....	9
'Lighthouse Reef' 1YYW-WWY....	9
10-11. 'Tuscarora' 1Y-Y	8
'Chanson' 1W-P.....	8

Most trumpets, especially the all-yellows, bloom early in the season and are available only for early shows. The low scores for trumpet cultivars reflect this.

'Magic Lantern', a new cultivar as yet not widely grown, won two ADS Gold Ribbons. The very new 'Chanson' also won a Gold Ribbon, as did 'April Love' 1W-W and 'Ethos' 1Y-Y. 'Francolin' 1Y-Y won a White Ribbon. 'Tuscarora', the leading 1Y-Y, is fairly new and scored well given that only a small number of persons yet grow it.

Division 2 Hybrids. In Division 2, 417 cultivars won at least one ADS award. Long-cupped daffodils received or were members of winning exhibits in over 40% of the ADS awards. They won 14 Gold Ribbons in the 40 ADS shows. The fifteen most successful cultivars were:

1. 'Homestead' 2W-W	33
2. 'Conestoga' 2W-GYO.....	27
3. 'Pacific Rim' 2Y-YYR.....	26
4. 'Clouded Yellow' 2YYW-Y.....	23
5. 'River Queen' 2W-W	21
6. 'Carib Gipsy' 2Y-WWY	20
7-8. 'Williamsburg' 2W-W	19
'Gull' 2W-GWW	19
9-10. 'American Classic' 2Y-WYY....	16
'Golden Aura' 2Y-Y	16
11. 'Daydream' 2Y-W	15
12-16. 'Ashland' 2W-Y	13
'Lennymore' 2Y-R.....	13
'Altun Ha' 2YYW-W.....	13
'Loch Lundie' 2Y-O	13
'Lara' 2W-O	13
17-20. 'Geometrics' 2W-Y.....	12
'Fire-Blade' 2Y-YYO	12
'Great Gatsby' 2Y-R.....	12
'Fly Half' 2Y-R	12

Most of the successful cultivars are mid-season or later. The all-yellow classes include cultivars with color codes 2Y-Y, 2YYW-Y, and 2Y-WYY. These classes are most heavily contested in shows held before mid-season. 'Clouded Yellow' added to its outstanding record of show successes of the past several years by winning two Gold Ribbons and one White Ribbon. 'American Classic', very new and not yet widely grown, scored one White Ribbon. 'Golden Aura', a long-time favorite, earned one Gold Ribbon. With 10 points, 'Gold Convention' 2Y-Y and 'Lemon Lyric' were tied for fourth and fifth most successful yellow cultivars, outpointing the new 'Whisky Mac' 2YYW-Y, which earned one Gold and one White Ribbon! 'Lemon Lyric' also won a Gold Ribbon.

'Pacific Rim' won two Gold Ribbons and again completely dominated its color class. It has been one of the most successful show cultivars in each of the past several years.

The 2Y-R (and 2Y-O) class was heavily contested in almost every show except those held in late season. Results indicate parity among cultivars. Numerous fine cultivars had similar success. 'Lennymore', 'Loch Lundie', and 'Fly Half' are proven show cultivars. 'Great Gatsby' is newer and not yet widely grown. Another promising new cultivar is 'Fire-Blade', which won one Gold Ribbon in 2001.

The scores of reverse-bicolors were somewhat elevated by the availability of the Maroon Ribbon for five such cultivars. Reverse bicolors will be discussed below.

Surprisingly, no pink-cupped or pink-in-cup cultivar was more than moderately successful in 2001 shows, perhaps reflecting parity among these cultivars as well. The highest score of any pink-cupped daffodil was 10 points, attained by 'Fragrant Rose' 2W-GPP. 'Pink China' 2W-P, 'High Society' 2W-GWP, and 'Kelanne' 2YYW-P followed with 9 points each. 'Fragrant Rose' blooms very late in the season and can seldom be exhibited in shows held in warmer climates. Size is both a disadvantage and an advantage for 'Pink China'. Judges often favor competing daffodils of more imposing size. But when exhibited in shows having classes for intermediates, it is a leading contender for Best Intermediate Award.

Among white-perianthed cultivars with color other than pink in the corona, 'Conestoga' was by far the most successful. Though color-coded as a rimmed bloom, in appearance it is not. Its orange "rim" extends well into mid-zone; indeed it commonly extends to the eye-zone! 'Conestoga' was a popular collection flower and also won a Gold Ribbon in 2001. 'Lara', 'Ashland', and 'Geometrics' recorded substantial show successes. The last two cultivars are exceptionally impressive in form, but perhaps a greater intensity of cup color would make them even more competitive for the Gold Ribbon.

There were four all-white daffodils among the top eight cultivars. All-white cultivars were most successful in shows outside the warmer climates. 'Homestead' earned one Gold Ribbon and one White Ribbon. It was consistently successful in collections, as were 'River Queen', 'Williamsburg', and 'Gull'. Other large-cup whites with show successes were 'Misty Glen' 2W-GWW with 10 points and 'Broomhill' 2W-W with 9 points.

Division 3 Hybrids. In Division 3, ADS awards were won by 152 different cultivars. Success was spread fairly evenly among them. Eight

different cultivars each won a Gold Ribbon. Seven cultivars scored 10 points or more. All other cultivars had eight or fewer points.

- 1-2. 'Spindletop' 3W-Y..... 15
- 'Colley Gate' 3W-YOR..... 15
3. 'Purbeck' 3W-YOO 14
4. 'Bee Mabley' 3W-YYO 12
- 5-6. 'Merlin' 3W-YYR..... 11
- 'Carole Lombard' 3W-YYO..... 11
7. 'Triple Crown' 3Y-GYR..... 10

The top six cultivars have white perianths. Of these, only 'Bee Mabley' won a Gold Ribbon. The next highest scoring cultivar with yellow perianth was 'Molten Lava' 3Y-YYR with 8 points.

Most Division 3 cultivars bloom after mid-season. Since most southern and western daffodil shows are held at or before mid-season, small-cupped daffodils are usually under-represented in these shows.

Division 4 Hybrids. While 43 cultivars in Division 4 won at least one ADS award, only two doubles gained substantive point totals:

1. 'Crackington' 4Y-O 14
2. 'Muster' 4W-O 11

No other Division 4 cultivar exceeded six points.

'Crackington' perhaps has been the most successful show double for several years. 'Muster' is a new cultivar that scored extremely well, given the limited number of exhibitors who have it.

Growers in many climates have difficulty getting Division 4 blooms to open without deformation, greening, or blasting. As a result, doubles are rare in many shows. Blooms of 'Crackington' and 'Muster' excel in form, substance, and color. It would seem that they are more likely to open properly as well.

Division 5 Hybrids. Awards were won by 33 different cultivars in Division 5. No named triandrus cultivar won a Gold Ribbon in 2001 shows, although one seedling did. Four cultivars collected significant point totals. They were:

1. 'Ice Wings' 5W-W..... 24
- 2-3. 'Sunday Chimes' 5Y-Y 13
- 'Lapwing' 5W-Y..... 13
4. 'Saberwing' 5W-GWW..... 9

All other cultivars had a score of six points or fewer.

'Ice Wings' won two White Ribbons in 2001 shows and scored substantially higher than its Division 5 competitors. Since 'Ice Wings' has

become readily available in commerce, it has consistently been the top show flower in this division. At the ADS National Show, 'Sunday Chimes' won the Olive Lee Trophy as best cultivar in Divisions 5-9.

Division 6 Hybrids. There were 67 Division 6 cultivars obtaining one or more ADS awards. Despite the fact that many cultivars bloom very early in the season, Division 6 is the most popular of the species-hybrid divisions. Several cultivars attained substantial show successes:

1. 'Rapture' 6Y-Y.....	46
2. 'Lemon Silk' 6YYW-W.....	20
3. 'Beryl' 6W-YYO.....	18
4-5. 'Warbler' 6Y-Y.....	13
'Jetfire' 6Y-O.....	13
6. 'Wings of Freedom' 6Y-Y.....	12
7. 'Arrowhead' 6Y-R.....	9
8. 'Trena' 6W-Y.....	8

'Rapture' was the highest-scoring standard show daffodil in 2001 and continues to dominate this division. It won two Gold Ribbons and four White Ribbons in shows during 2001 and was also a frequent cultivar in winning large collections. It has classic cyclamineus form and pose. It blooms somewhat later than many Division 6 cultivars.

'Lemon Silk' won three White Ribbons in 2001 shows. 'Beryl' attained several awards in the classes for historic daffodils in addition to its successes in the regular classes for standards. 'Warbler' with its pleasingly waisted form is a favorite of judges. Form-perfect 'Jetfire' frequently is hampered by color mottling in the cup—attributed to virused stocks. 'Wings of Freedom' and 'Arrowhead' are fairly recent introductions which should continue to exhibit well in the future.

With the exception of 'Beryl', all the above cyclamineus cultivars demonstrated key Division 6 attributes: reflexed perianth and acute-angle (below the horizontal) pose.

Division 7 Hybrids. Awards were won by 47 hybrids in Division 7. Seven cultivars' scores topped the others:

1. 'Intrigue' 7Y-W.....	39
2. 'Kokopelli' 7Y-Y.....	17
3. 'Indian Maid' 7O-R.....	16
4. 'Eland' 7W-W.....	14
5. 'Limequilla' 7W-W.....	11
6-7. 'Dainty Miss' 7W-GWW.....	10
'Quail' 7Y-Y.....	10

'Intrigue' was especially successful in reverse-bicolor collections and in supplying division breadth in large collections. 'Kokopelli', not on the Approved List of Miniatures, is petite in cold climates and often was

exhibited successfully in classes for miniatures. 'Indian Maid' was frequently a member of winning large collections. 'Eland', which won a White Ribbon, and 'Limequilla' were also effective in collections. 'Dainty Miss' won two White Ribbons. Of intermediate size, often with near-flawless flatness and symmetry, it is sometimes slighted by judges because it has but one floret. Very commonly grown and exhibited, 'Quail' is useful in collections.

Division 8 Hybrids. ADS awards were won by 23 cultivars from Division 8. Scores were low, but five cultivars outdistanced the others:

1. 'Falconet' 8Y-R.....9
- 2-4. 'Castanets' 8Y-O8
- 'Chorus Line' 8W-Y8
- 'Acapulco' 8Y-O8
5. 'Hoopoe' 8Y-O.....6

All these five are poetaz (actually, 'Matador' progeny). Because of their poeticus genes, they are hardy in cold climates. Only three pure tazettas received more than one ADS award: 'Brentwood' 8W-Y, 'Geranium' 8W-O, and 'Polly's Pearl' 8W-W. In the warmer climates where tazettas thrive, tazettas usually bloom before the show season begins.

Division 9 Hybrids. Only 19 different poets received an ADS award during 2001. One cultivar from Division 9 had many successes:

- 'Killearnan' 9W-GYR.....18

All other poeticus cultivars received two or fewer awards.

'Killearnan' won one Gold Ribbon. Killearnan is larger than most poet cultivars, having the size and substance of an exceptional short-cupped cultivar.

Division 10 Hybrids. As yet, there are few standard bulbocodium hybrids. None received an ADS award in a show during 2001.

Division 11 Hybrids. Only seven different hybrids from Division 11 received an ADS award in 2001. Two cultivars outdistanced the rest:

1. 'Trigonometry' 11aW-P.....10
2. 'Tripartite' 11aY-Y 7

No other cultivar received more than one award. There now are several split-cup cultivars with flat, overlapping perianths, but "best-in-show" quality is yet to be attained. In competition for collection awards, few exhibitors include their split-cups because they have other cultivars with better perianth form. 'Trigonometry' and 'Tripartite' are the exceptions. 'Trigonometry' has a single-floret of standard size while 'Tripartite' shows its triandrus blood with two or three florets of intermediate size.

Division 12 Hybrids. Four hybrids from Division 12 received an ADS award. Two of these cultivars received more than one award:

1. 'Pakotai' 12Y-Y.....6
2. 'Mesa Verde' 12Y-GGY.....5

Of the four Division 12 cultivars receiving an award in 2001, only 'Bittern' 12Y-O and 'Eaton Song' 12Y-O (scoring one point each) are available commercially in the United States.

Daffodil Species. No standard species received an ADS award during 2001.

Reverse Bi-color Hybrids. There is a special ADS award for the best collection of five reverse-bicolor hybrids. The Maroon Ribbon is rather infrequently won. Qualifying cultivars are not plentiful, blooming times among them vary, and each bloom in the collection must be of blue-ribbon quality. The top five reverse bicolor cultivars in 2001 shows were:

1. 'Intrigue' 7Y-W.....39
- 2-3. 'Carib Gipsy' 2Y-WWY20
- 'Lemon Silk' 6YYW-W.....20
4. 'Daydream' 2Y-W.....15
5. 'Altun Ha' 2YYW-W.....13

For each of these cultivars, only a minority of show successes were from the Maroon Ribbon. The strength of these cultivars is validated by their ability to win other awards.

Intermediate Hybrids. In the ADS, Intermediate Daffodils are single-floreted standard daffodils from Divisions 1-4, 11, and 12, with diameter typically between 1.5 and 3 inches. There is a show award for the Best Intermediate, and many shows have classes reserved for intermediates. The leading intermediate daffodils in 2001 shows were:

1. 'Pink China' 2W-P.....9
2. 'Lissome' 2W-W.....7
3. 'Treasure Waltz' 2Y-Y.....6
4. 'Bantam' 2Y-O.....4
- 5-6. 'Rimski' 2W-YWP.....3
- 'Scarlet Tanager' 2Y-R.....3

'Pink China' won the Best Intermediate Ribbon at five shows. 'Treasure Waltz' won this award three times. 'Bantam' and 'Scarlet Tanager' each won the award twice.

Historic Hybrids. Each of six cultivars won the Best Historic Daffodil multiple times at ADS shows in 2001. With number of wins, they are:

1. 'Beryl' 6W-YYO.....6
2. 'Sweetness' 7Y-Y.....4
- 3.-5. 'Erlicheer' 4W-Y.....3
- 'Trousseau' 1W-Y.....3

'Actaea' 9W-YYR	3
6. 'Saint Keverne' 2Y-Y	2

MINIATURE DAFFODILS

Division 1 Hybrids. Fourteen cultivars in Division 1 won an ADS award at a show during 2001. Only one cultivar had moderate success:

'Small Talk' 1Y-Y	7
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No other cultivar exceeded four points. Most miniature trumpets (including look-alikes 'Bagatelle', 'Little Gem', and 'Wee Bee') bloom too early to be exhibited at many shows. In addition, their form is too irregular to win ADS awards consistently.

Division 2 Hybrids. Only three cultivars from Division 2 won an ADS award in 2001. Of these, one had considerable show success:

'Sewanee' 2W-Y	14
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Division 3 Hybrids. Although only five different cultivars from Division 3 won an ADS award in 2001, three of these were among the top six miniature show winners. These three cultivars were:

1. 'Segovia' 3W-Y	53
2. 'Yellow Xit' 3W-Y	46
3. 'Xit' 3W-W	35

These three cultivars might have been created by the same superb mold. 'Segovia' won three Gold Ribbons and five White Ribbons. 'Yellow Xit' won two Gold Ribbons and two White Ribbons. 'Xit' won one Gold Ribbon and one White Ribbon.

Division 4 Hybrids. Two cultivars, 'Pencrebar' and 'Rip van Winkle', each won an ADS award during 2001. However, these two cultivars have now been re-evaluated and are now categorized as standards (intermediate).

Division 5 Hybrids. Eight miniature triandrus cultivars earned ADS awards during the 2001 show season. Those cultivars having substantial scores were:

1. 'Angel's Whisper' 5Y-Y	23
2. 'Angel's Breath' 5Y-Y	20
3. 'Hawera' 5Y-Y	17
4. 'April Tears' 5Y-Y	13
5. 'Fairy Chimes' 5Y-Y	12
6-7. 'Angel o' Music' 5Y-Y	9
'Mary Plumstead' 5Y-Y	9

'April Tears' won two Gold Ribbons and one White Ribbon. 'Angel's Whisper' won one Gold Ribbon and one White Ribbon. 'Mary

Plumstead' won a Gold Ribbon. 'Hawera' won two White Ribbons. 'Angel's Breath' won a White Ribbon.

'Angel's Whisper', 'Angel's Breath' and 'Angel o' Music' are siblings and are very similar. 'Hawera' is often confused with 'April Tears', which has more symmetrical form. Commercial supplies of 'April Tears' often turn out to be 'Hawera'.

Division 6 Hybrids. Next to Division 7, more cultivars from Division 6 won an ADS award than those from any other division. Eighteen different miniature cyclamineus cultivars won at least one award during 2001. The five leading cultivars were:

1. 'Snipe' 6W-W55
2. 'Hummingbird' 6Y-Y28
3. 'Ferdie' 6Y-Y18
4. 'Minnie' 6Y-Y9
5. 'Blynken' 6Y-Y8

'Snipe' was the top Miniature in 2001 shows, winning three Gold Ribbons and eight White Ribbons. 'Hummingbird' won three Gold Ribbons and two White Ribbons.

As a miniature, 'Snipe' is of medium size, while 'Hummingbird' and 'Blynken' are robust. 'Ferdie' and 'Minnie' are quite diminutive.

Division 7 Hybrids. This is the most popular division for miniature cultivars. 26 cultivars from Division 7 won at least one ADS award in 2001 shows. The ten leading cultivars were:

1. 'Sabrosa' 7Y-Y49
- 2-3. 'Clare' 7Y-Y31
- 'Little Rusky' 7Y-GYO31
4. 'Stafford' 7Y-YYO27
5. 'Yellow Fever' 7Y-Y16
6. 'Sundial' 7Y-Y13
- 7-8. 'Pixie's Sister' 7Y-Y12
- 'Sun Disc' 7Y-Y12
9. 'Rikki' 7W-Y 8
10. 'Pequenita' 7Y-Y 7

'Sabrosa' won two Gold ribbons and was in a remarkable 22 winning ADS collections. 'Clare' and 'Stafford' each won two Gold Ribbons and one White Ribbon. 'Yellow Fever' was very successful, considering the small number of exhibitors who grow it. A few years ago, 'Pequenita' seemingly was emerging as the top miniature. Only single-floreted but with exquisite form, it is infrequently exhibited. Perhaps a reclassification into Division 2 might be in order.

Division 8 Hybrids. Only four cultivars in Division 8 won an ADS award. The point scores for the two that won more than one award were:

1. 'Minnow' 8W-Y44
2. 'Canaliculatus' 8W-Y14

'Minnow' won one White Ribbon and was an effective collection flower. 'Canaliculatus', an infamously sparse bloomer, won one Gold Ribbon. These two cultivars benefit from widespread availability at an inexpensive price.

Division 9 Hybrids. As yet, there are no named miniature hybrids in Division 9. However, two of John Kibler's "found" cultivars, Weston-12 9W-GYR and Weston-13 9W-GYR, did win ADS awards in miniatures classes.

Division 10 Hybrids. Seven bulbocodium cultivars received at least one ADS award in shows during 2001. All of these cultivars are fairly recent introductions from Australia; six of these are from Glenbrook Bulb Farm in Tasmania. During 2001, four bulbocodium cultivars accumulated six points or more:

1. 'Spoirot' 10W-W11
2. 'Mitimoto' 10W-Y 8
- 3-4. 'Smarple' 10W-W 6
- 'Orclus' 10W-W 6

'Mitimoto' won one Gold Ribbon; 'Spoirot' won a White Ribbon.

Most bulbocodium hybrids bloom in late winter or very early spring. Successful exhibitors raise them in pots and delay their blooming time by managing their access to heat and light. The cultivars 'Gadget' 10Y-Y (five points) and 'Golden Bells' 10Y-Y (two points) are exceptions. 'Gadget' usually is in bloom for early shows; on the other hand, 'Golden Bells' is in bloom for late shows.

Division 11 Hybrids. As yet, there are no Miniature split-cups.

Miscellaneous Cultivars. Twelve miniature cultivars from Division 12 received at least one ADS award during 2001. All these are cultivars having more than one floret of cyclamineus form. The most successful were those most easily obtained in the trade:

1. 'Jumblie' 12Y-O14
- 2-3. 'Tete-a-Tete' 12Y-Y11
- 'Oz' 12Y-Y14
4. 'Toto' 12W-W 8

These cultivars have husky blooms for miniatures.

'Jumblie' and 'Tete-a-Tete' are siblings long available in Dutch catalogs. A third sibling is 'Quince' 12Y-Y (six points), which has recently yielded a sport of darker shade, 'Golden Quince' 12Y-Y (also six points).

Likewise, 'Oz' and 'Toto' are siblings of more recent origin. They too have a sibling—'Junior Miss' 12W-Y—which is a superb show bloom but a balky grower and shy increaser.

Species. In 2001, 14 different species or subspecies and two different wild hybrids received an ADS award. The ADS promotes the conservation of the species and encourages their growth and propagation. Primarily for the education of the public, the ADS offers a show award for the best container-shown species.

Many species have had no difficulty in adapting to garden propagation; some have even escaped to the countryside and spread as "wild" plants. Stems of non-threatened species are commonly exhibited in appropriate miniature classes.

The most successful species in 2001 shows were:

1. *N. bulbocodium* ssp. *bulbocodium* 13Y-Y. 23
2. *N. rupicola* 13Y-Y 19
3. *N. jonquilla* 13Y-Y 15
- 4-6. *N. triandrus* ssp. *triandrus* 13W-W 8
- N. jonquilla* var. *henriquesii* 13Y-Y 8
- N. assoanus* 13Y-Y 8

N. bulbocodium and *N. rupicola* were popular choices for collections. Each won one Gold Ribbon and one White Ribbon. *N. bulbocodium* is widely available in the trade and is easily grown in most climates. It increases readily by bulb division. *N. rupicola* is difficult to find and expensive, reflecting the challenge it offers those propagating it. It multiplies chiefly from seed. Those who grow (and exhibit) it successfully are relatively few.

N. jonquilla and *N. jonquilla* var. *henriquesii* are easily grown in most climates. Indeed, several strains of *N. jonquilla* grow wild in the countryside in the southern USA. *N. jonquilla* won a White Ribbon during the 2001 season.

N. triandrus ssp. *triandrus* and *N. assoanus* were at one time commonly available in the trade from bulbs harvested from the wild in Spain or Portugal. This is no longer allowed, and these species are now seen in shows primarily as container exhibits. Bulbs seldom divide and propagation is maintained through pollination and growing from resulting seed.

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THE HONORABLE MENTION AWARD

Dave Karnstedt, *Silverton, OR*

One sees them in every ADS show—white ribbons attached to exhibits to indicate the flower was recognized with the award of “Honorable Mention.” All too often, alas, those ribbons have been hung on flowers that could barely score third place if point scored. In other words, the honorable mention was something of a consolation prize. This use of the honorable mention demeans its value since it is being awarded for nearly always the wrong reason.

Well, then, just what does this award really represent? The ADS *Judge's Handbook* is curiously silent on the issue, stating only that it can be awarded, but not until first, second, and third places have been recognized. Hence, I think this is the reason it has come to be viewed as the consolation prize for also rans and not as it should be: as an award to recognize blooms of exceptionally high quality scoring 90 points, or more, when the first, second, and third place blooms have each scored more than 90 points. In other words, it is awarded to flowers of highest quality rather than, as one so commonly sees, to blooms of less quality.

It is not unusual for the major classes in large shows to contain more than a hundred blooms. Out of so many flowers, several will be in contention for the blue ribbon. If first, second, and third place awards are made to blooms scoring more than 90 points and there remain several equivalent blooms, awarding Honorable Mention to those flowers is both indicated and warranted. Thus, the award of Honorable Mention is appropriately given to unplaced blooms of highest quality and *not* to those that can barely place.

If you're an accredited judge and have judged long enough, you'll always encounter the judge who (after awarding the three places in a class and is then facing unplaced flowers at a lesser level), says, “Oh, let's give it an Honorable Mention for effort; we have to encourage these new exhibitors.” I submit this to be exactly the opposite of what should be done to encourage new exhibitors. After all, one gets what one expects. If new members are to be encouraged to become better exhibitors, it has to be with appropriately awarded entries. If the flower entered is worthy, it will have earned its award. As such, the ribbon should have greater value to the recipient because it is a reflection of a lesson well learned.

CLAY AND SAND

Chriss Rainey, Reston, VA

Many daffodil growers who have heavy clay soil avoid using sand in their beds. I've heard it said on more than one occasion that clay and sand make concrete. Is this claim fact or fiction? (I am sure many who say this don't mean it literally, but I wanted to be sure since I have clay here in Virginia.) So, I asked the experts. "Not so," they say.

I began my search for answers on the Internet. I also used Microsoft's *Encarta Encyclopedia* and Van Nostrand's *Scientific Encyclopedia* to get information. What I read was very enlightening. I located a contact for the National Sand, Stone, and Gravel Association, which represents over a thousand manufacturers and suppliers for the stone and aggregate business in the U.S.A., Mr. Larry Quinlivan. Mr. Quinlivan really knows the "nitty gritty" on this subject and was most helpful. He laughed aloud when I told him I needed this information to solve a daffodil growing problem, but then he graciously helped me to understand concrete, even though I wasn't about to build the next interstate road system or purchase a stone quarry like most of the people who come to him for advice.

Cement? Concrete? Is there a real difference, or is it one of those pine needle/pine straw things? Before I started this search, I couldn't tell you much about either one for sure. I quickly discovered concrete is a combination of cement, sand, and coarse aggregates mixed together with water. Aggregates, in case you don't already know, are small stones such as gravel or sand. A typical mix for concrete is 10-15% cement, 60-75% aggregate, and 15-20% water. Aggregates give strength to the mass. Concrete doesn't set completely right away, but hardens gradually over a long period of time. Concrete structures can actually become stronger as they age. Different formulas are used depending on many factors considered by the engineers who are responsible for the strength and load bearing capabilities of a structure.

Once I knew cement was only an ingredient of concrete, I looked for more information about cement. I was surprised to find that a patent was issued in 1824 to Joseph Aspdin, an English stone mason, for a formula he devised in his kitchen. He heated a mixture of finely ground limestone and clay in his stove and created a hydraulic cement, by definition, one that hardens with the addition of water. He named the product "Portland cement" since it resembled the stone found on the Isle of Portland off the British coast. (There are only a few areas in the world where stone of this type exists.) Aspdin's formula led eventually to worldwide manufacture of this product. Today Portland cement is made from raw

materials consisting of lime, shells or chalk, and shale, clay, sand or iron ore, alumina, and magnesia.

It would be easy to assume that the lime in cement is ground up limestone, but it is more complicated than that. Limestone is sedimentary rock composed of calcium carbonate, CaCO_3 . It is sometimes formed from shellfish or coral, which has been compressed over millions of years. Lime is calcium oxide, CaO . It is produced through the chemical manufacturing process known as calcination, in which limestone is heated to between 2800-3000 degrees Fahrenheit to drive off the material's volatile component. In the case of limestone, heat is applied to separate the calcium carbonate, CaCO_3 , into carbon dioxide gas, CO_2 , and calcium oxide residue, CaO . Lime, not limestone, is the key ingredient in cement. There is a huge difference. It should be noted that the lime gardeners frequently spread on their lawns to adjust the pH level is ag lime, pulverized limestone, or calcium carbonate and not actually lime, calcium oxide.

When enough water is added to dry cement to form a paste-like mixture, a chemical reaction called hydration occurs, causing the compound to harden and gain strength, forming the rocklike mass known as concrete. It is neither the sand, which is an inert ingredient, nor the clay in cement, but the presence of lime that reacts chemically with water to form concrete. Without lime, sand and clay may compact in a period of drought, but with the addition of moisture the two will separate.

According to Gregory Evanylo, "Sand is inert and would not react chemically to produce concrete when mixed with clay soil. Cement requires a liming agent to harden clay to a concrete-like material. Adding sand to a clayey soil will improve drainage by increasing the number of larger pores." (Mr. Evanylo is an Associate Professor of Crop and Soil Environmental Sciences at Virginia Tech in Blacksburg, VA. He received his PhD from the University of Georgia.)

Soil particles are arbitrarily divided by size into sand, silt, and clay. Sand is gritty, silt feels like flour, and clay feels gummy when wet. Depending on the proportions, soils are classified as the following: sandy clay, silty clay, clay loam, sandy clay loam, silty clay loam, sandy loam, silty loam, or loamy sand. In the United States about 70% of the soil is eroded limestone in various particle sizes. However, this is not the same as lime and will not react the same when it comes in contact with water, regardless of whether sand-sized soil particles are present or not.

Sand is a soil particle that is defined by measurements of between 2 and .05mm in diameter. If you decide that you want to create better drainage for a daffodil bed, adding sand, because of its particle size, is a good choice. Sand may be natural or manufactured and what you select

may depend on what you need it for. Natural sand has been formed by nature and is round. It is harder to coat and may be the best choice for soil amending because it will give the best separation of soil particles. Manufactured sand is a by-product of stone cutting and crushing. These particles tend to have flat sides and are "sharper." This type may provide the agitation under a base plate some growers are looking for to promote root growth. You may find that after you have added sand to your heavy clay soil it is still "hard as a rock" when you get ready to dig the next time. This is probably due to the lack of water and not the fault of sand. According to the experts I contacted, you may have expected too much after not adding *enough* sand. Just adding a little will not significantly affect the "flow." You probably need to add more sand to get the desired result of good drainage and easy separation.

THE FLORIADE

Jan Pennings, Breezand, Netherlands

The Floriade, a world exhibition garden show under the auspices of the A.I.P.H takes place every ten years in Holland.

This is the window where we show people from all over the world what we are doing in horticulture and what is available in Holland. Every group involved in the horticulture business is there to show the public what is happening and to promote their products. Some companies even wait until the Floriade to launch a new product. Our government is there to show possibilities in landscaping and gardening. Trial stations demonstrate their work, including exhibits which are sometimes very futuristic. Nursery people display their newest ideas for building greenhouses, and those greenhouses are filled with flowers and vegetables. All kinds of scientists demonstrate their work. And of course the bulb businesses are prominently present.

The Floriade will be opened on the 5th of April by our Queen Beatrix. Among the many exhibits she will find beautiful indoor as well as outdoor bulb plantings. Inside and outside Joost and I will have displays under our own name, J.S. Pennings "De Bilt." Outside we planted about 9000 bulbs in October, which will flower for a long time because we planted so many different kinds. The outdoor bulb-presentation is expected to be at its peak from mid-April to mid-May, depending of the weather. Inside (April 6-15) we will have a display of about 500 square feet, with everything shown in pots that we have forced in our own greenhouse. Of course we also feature many flower arrangements.

In 1992 the Floriade was close to The Hague but now the park is situated close to Amsterdam and Schiphol. The park, which is quite

large, 65 hectare (160 acres), will be, once the Floriade closes, a public recreation park for the people who live nearby. A part of the park is newly developed, featuring the latest ideas in gardening, such as natural gardens, future gardens, and recreational gardens, many of which are built in cooperation with the environmental organizations, with whom the Floriade has a very good relationship.

Because the Floriade is a world exhibition you will find displays from countries such as Japan, Thailand, Germany, and the United States, to name only a few.

There are many travel combinations available, including the Floriade, Keukenhof, and Amsterdam. And when you have a stop-over at Schiphol airport, there is a possibility to make a visit of some hours.

The show will be open to the public from April 6 until October 20 from 9 am to 7 pm. The organization expects more than three million visitors with about 30% from foreign countries. Every day there are special activities such as workshops, flower arranging, music, dance, and special country days. You can find more information at <www.floriade.nl>

A remarkable feature of the Floriade will be Big Spottershill, which is shown in the photo on page 165. I am sure when you have visited the Floriade you will say, "Unforgettable!"

(Bloembollenkwekerij J.S. Pennings, Schorweg 14, 1764 MC, Netherlands. Telephone: (31) 223-521751; fax: (31) 223-522922; e-mail info@pennings-de-bilt.nl)

ARE THESE MINIATURE DAFFODILS EXTINCT?

Delia Bankhead, *ADS Miniatures Chairman*

I am trying to determine if any of the following miniatures are still grown anywhere. All but 'Atom' were registered before 1958 and I have been unable to locate true stocks of any of them.

'Atom' 6Y-Y

'Peaseblossom' 7Y-Y

'Picarillo' 2Y-Y

'Sea Gift' 7Y-Y

'Skiffle' 7Y-Y (not the tall, round 'Sun Disc' lookalike sometimes seen as 'Skiffle')

'Snug' 1W-W (not the mislabeled bulbs that bloomed as 'Minnow')

'Tweeny' 2Y-Y (not the Australian or New Zealand stock that was actually 'Yellow Xit')

I would particularly like to hear from anyone overseas who may be growing them. In the United States there were bulbs that circulated under

some of these names, but these have either never bloomed or turned out to be another cultivar. If true stocks of any of these cannot be located by the end of this year, the names will be dropped from the ADS Approved Miniatures List as lost to cultivation.

It is important to point out that if the breeding of 'Skiffle' was correctly recorded by Alec Gray, and I think we must assume it was, that the tall, round, nearly flat-cupped, very late flower referred to above cannot possibly be 'Skiffle'. Both parents, *N. asturiensis* and *N. calcicola*, are very early flowers that bloom on short stems. Gray's catalog description states the height as 3", and in another place the flower is described as having rather long cups, which makes perfect sense, given the seed parent. I believe the real 'Skiffle' is no longer grown anywhere.

In the case of 'Tweeny', there are a few bulbs circulating under this name in the U.S., but whether or not they represent true stock of this cultivar remains to be seen. Whatever the cultivar is, it is not very vigorous and is a very shy bloomer. When it does bloom, it is nearly always two-headed, so either the name or the classification must be incorrect. If it can be established that all the bulbs labeled 'Tweeny' growing anywhere in the world match the description given here, then I think the classification should be changed to either Division 7 or Division 12. This flower is clearly not a Division 2. The 'Tweeny' I know has a muddy white perianth, an expanded and fairly long pale yellow cup, and always two florets. I am not certain if the smaller back petals (see photo on page 000) are always present, but if they are, they would serve as another aid to identification. This characteristic is not very common.

Will anyone who is growing, or who knows of the existence of, any of these, please contact me? Please send a photograph of the flower, if at all possible. (Delia Bankhead, 118 Chickadee Circle, Hendersonville, NC 28792; tel: 828-697-8122; e-mail deliab@ioa.com)

DAFFODILS TO SHOW AND GROW 2002

In early December because of low inventory it was necessary to reprint the 1999 edition or print a new one. It was decided to print a new edition with the addition of registrations from 1999, 2000, 2001; no deletions were made.

Daffodils To Show And Grow, 2002 Edition, is now available. Price: \$7.25 single copy or 10 or more \$6.25 each, mailed to the same address.

Naomi Liggett, *Executive Director*

THINK MEDIEVAL

Hurst Sloniker, *Batavia, OH*

Prepare for a test. Of your imagination, that is. The upcoming national convention and show in Cincinnati will give you the chance to test your imagination in two unusual ways. First, you will be asked to figure out a possible relationship between the names of the daffodils you grow and some facet of the Middle Ages. Once you have done that, you can bring your flowers to the show in April and enter them in the special 3-stem Medieval Class set up just for the convention. The other test of your imagination occurs as you consider your choice of a medieval costume for the banquet on Thursday night. Choose carefully, because prizes will be awarded for the most beautiful, most historically accurate, and most humorous costumes.

Before we continue, let us pause to define our time frame. The Middle Ages traditionally includes the centuries between the fall of Rome in 476 AD and the fall of Constantinople in 1453 AD (rounded off for convenience to 500 and 1500). Actually, historians tell us that in southern Europe the period ended earlier than 1500 and some claim that in northern Europe it ended later. These qualifications need not unduly concern us, though we should make a valiant effort not to spill over into the Renaissance if we can avoid it.

Bearing that thought in mind, let us look at some examples of appropriate cultivars. 'Notre Dame', a lovely 2W-GYP from Brian Duncan, would certainly be an acceptable entry. While many churches are given the name *Notre Dame*, the most famous of them, including Notre Dame, Paris, belong to the Middle Ages. Another appropriate entry would be Lionel Richardson's 'Hotspur' 2W-O, named for the fiery English lord appearing in both *Richard II* and *Henry IV*. Although Shakespeare himself is a Renaissance, not a medieval, figure, the settings for these two plays, late 14th and early 15th centuries, are in the Middle Ages. Another example not to be missed is Elise Havens' 'Canterbury' 5Y-Y, which would have especially delighted Chaucer, had he seen it. And finally, 'Oxford' 3W-Y from Grant Mitsch would be a good choice, as both the world-famous English town and its university are rooted in the Middle Ages. But you get the idea. Keep in mind that historic, as well as modern, cultivars are welcome entries, just so long as they fit the theme. And don't forget the more obvious 'Merlin' 3W-YYR, 'Guinevere' 2Y-Y, and 'Lancelot' 1Y-Y.

Now for your costume: think of figures from mythology, literature, history, and everyday life in the Middle Ages. The Arthurian legends and the stories based upon Robin Hood probably come to mind immedi-

ately—and they offer many possibilities. But also consider the memorable characters from Chaucer’s *Canterbury Tales*, such as the Wife of Bath, the Pardoner, the Prioress, the Squire, and the Miller; or maybe you have always admired one of the great historical figures—Charlemagne, perhaps—or Roland, Eleanor of Aquitaine, Richard Lion Heart, St. Francis, Joan of Arc, Abelard, Heloise, or Queen Isabella of Spain. Now is your chance to become that person! On the other hand, you might prefer to transform yourself into a typical monk of the period, or nun, troubadour, *jongleur*, knight, lady, Viking, outlaw, or peasant. The Middle Ages is rich in possibilities. Test your imagination, and you may win a prize for your effort; but whether you do or not, you will surely have some fun.

DRIVING TO THE DRAWBRIDGE INN ADS CONVENTION HOTEL

From the North: Take I-75 or I-71 South to Cincinnati where they merge. Continue on I-71/I-75 across the bridge into Kentucky to Exit 186, Buttermilk Pike. Turn left onto Buttermilk Pike. Continue through one light, get in the left lane and turn left onto Royal Drive at the next light.

From the South: Take I-75 or I-71 until they merge into I-71/I-75. Continue to Exit 186, Buttermilk Pike. Turn right onto Buttermilk Pike, and turn left onto Royal Drive at the next light.

From the East: Connect with I-71 in Ohio and follow the directions for “From the North” or connect with I-75 in Lexington, KY and follow the directions for “From the South.”

From the West: Take I-74 from Indianapolis to I-75 in Cincinnati and follow the directions for “From the North.” South of Indianapolis, connect with I-71 in Louisville and follow the directions for “From the South.”

Hotel Lobby/Registration: Bear to the left on Royal Drive; the hotel lobby will be on your right after a short distance.

MEMORIAL TO SEPTEMBER 11, 2001

Keith Kridler, Mt. Pleasant, TX

(Excerpted from a Daffnet posting with permission.)

We are donating trees and bulbs in this area as a memorial of the events of September 11, 2001. We planted the donations at our fire station in memory of the firefighters whose lives were lost in the heroic rescue effort at the World Trade Center Towers.

Our son Shawn is 14 and has proposed that each school plant some trees and bulbs so that they will come back every year. Planting a tree or even a simple flower bulb shows that we are looking to the future and preparing for new life and the generations to come! We know the beauty that can spring forth from a tiny seed or rough looking bulb when given its freedom in fertile soil.

We will use either red spider lilies or Oxblood lilies as they were in full bloom in this area at the time of the attack. The timing of the blooms and the color of the flower will serve as a stark reminder that our freedom has been paid for in blood for hundreds of years and that this is just one more payment demanded and paid for with lives of people from 80 different countries.

The tree we have chosen is a selected strain of *Paulownia elongata*. Originally found in China, it was carried to Japan and then Australia and made its way around the world. It is a super fast-growing tree that can be grown from seed or cuttings or even a tiny piece of root. If cut off at the ground it will spring back from the stump faster and stronger than before. The extremely light weight of this hardwood makes it ideal for use in musical instruments. Remember that music is a universal language understood without translation by anyone who hears it.

The Paulownia we are planting is called "Americana 357." It is selected from American-grown stock and given the "357" designation as it "Shoots out of the ground!" I planted a piece of a root this year in May and transplanted it into the ground on June 19; by September 19 it had topped out at a little over fourteen feet tall. Planted in pairs you could rapidly grow your own "Twin Towers" that are truly from around the world. *Paulownia elongata* is hardy to only -10F, so bald cypress trees might be a better choice in some areas and soil types as they also rapidly grow into beautiful "towering" trees.

Feel free to use or pass on this idea to others in your area as I can think of nothing better than this that each and every one of us can do to remember and honor those lost. Be sure to use hardy, long-lived trees and bulbs that return every year in your area.

ADS LEGENDS: EVE ROBERTSON AND HELEN LINK

The 2001 convention of the American Daffodil Society was the first in its history at which no charter member was present. This sad note, however, does not diminish our delight in the years we have enjoyed knowing these individuals who have played such an important part in creating and participating in the activities of the ADS.

The two charter members most recently active are Helen Link, of Brooklyn, Indiana, and Eve Robertson, of Taylors, South Carolina. Helen, a Gold Medal winner in 1995, as well as a past president, briefly visited the Fall Board Meeting at Indianapolis in 1999; Eve, a Silver Medal winner in 1989, attended the Portland Convention in 2000, enjoying everything, including the optional trip to Mt. Hood.

EVE ROBERTSON
Loyce McKenzie, *Madison, MS*

Eve Robertson has lived her entire life in the same small rural area near Greenville, South Carolina, either in Taylors or in Greer. Daffodils became a part of her world at age six when she “pilfered” a handful of yellow blooms on the way to school as a gift for a beloved teacher. Her conscience hurt her, and when she confessed, the understanding gardener gave her blooms and also bulbs.

Eve enjoyed growing the older daffodils, and when she read in the *New York Times* Sunday paper about Guy Wilson and his Irish daffodils, she wrote to him, ordering bulbs, and also asking how to go about hybridizing. Wilson answered with lengthy and specific instructions, and Eve began to hybridize, following the Irish legend’s advice to extend the season at both ends. She was later to meet and talk with Wilson at the first ADS convention in Washington.

Even before there was an ADS, Eve was not only a hybridizer and an exhibitor, but also had judging talent. Harry Tuggle heard that she had a good eye for daffodils, and recruited her to judge the Garden Club of Virginia shows in Charlottesville. “I heard afterward,” Eve laughed, “that they always put me on the panel with Judge Quinn because I was the only one who would stand up to him.” Harry Tuggle later reported, “Judge Quinn said Mrs. Robertson was the best judge he ever judged with.”

Eve’s husband Ben, the postmaster at Taylors, was a hunter, a fisherman, and a rhododendron grower, thanks to the influence of Bill Gould, but he learned to enjoy daffodil people and daffodil trips. Ben went with Eve to shows and conventions, and on one occasion they took their camper on a six-week visit to the Pacific Northwest, which included a visit with the Mitsch and Evans families.

When Ben wanted to move to a steep wooded lot in Taylors, Eve said there would be nowhere to grow her daffodils. Ben assured her that if she would let him build his dream house, he would build her a dream daffodil garden. With a bulldozer, he cleared an area the size of a double

tennis court, with high fences and rich soil. The sign out front tells us we are at "Daff-o-Dale."

Those of us who grow Eve's 'Elegant Lady', 'Limey Circle', and 'Amy Linea' regret that she was such a severe critic of her own creations that she registered so few of them. To walk those rows in her garden today is to regret that these beautiful, unnamed seedlings never acquired names and the awards they deserve.

Eve rarely missed an ADS convention and also began her travels abroad during daffodil season in 1962, when she went to England, Ireland, and Scotland alone for a six-week trip. Her only regret was that Guy Wilson had already passed away, but she did visit his garden. She also visited with Willy Dunlop, Nell Richardson, and Fred Board, and stayed over for the Chelsea and London shows.

After Ben's death in 1983, Eve said, "I had to turn to my friends" and so joined the ADS trip to Australia and New Zealand. She went with Elise Havens on an English/Irish trip in 1989, beginning with the RHS show in London. In 1998, at age 92, she was one of the American group on the Centennial tour of England and Ireland, and had a wonderful, flower-filled time.

As much as Eve loves her daffodils, she loves her daffodil friends more. If you plant a better daffodil patch, the world will beat a path to your door, especially if you offer that special brand of Southern hospitality for which Eve is famous. Both American and overseas visitors too numerous to list found ways to go to or from conventions by way of Taylors, South Carolina, and visit with the matriarch of the ADS.

Eve spent her 95th birthday last July 10 at the National Health Center in Greer. Impatient to go home, and "plant a few more daffodils," she talks not only of Cincinnati but also the Asheville convention. She would welcome cards and letters at the NHC, 1305 Boiling Springs Road, Room 101, Greer, South Carolina 29650.

HELEN LINK

Suzy Wert and Joe Hamm, Indianapolis, IN

Helen's love for daffodils started when she was just six years old and first saw the blooming daffodils she and her mother had planted on the south side of the henhouse at her childhood home in Elkhart, Indiana. She was so excited, she dug up a clump and took them to her teacher in a pot. At that time, she didn't know that daffodils needed time to go dormant before being moved, but as she says, that's part of the charm of the daffodil, they can survive neglect and the overly enthusiastic love of little girls.

One autumn evening in 1940 Helen's husband, Goethe, came home with a huge bushel basket of daffodil bulbs he had purchased from Bash Seed Company whose store he passed every day as he left his office. "Here, see what you can do with these," he told Helen as he presented them to her. Helen planted them and the rest is history. Helen founded the Fall Creek Garden Club along with LaVonne Mannfeld* and Marguerite Myers* in March of 1941. A few years later Helen and LaVonne decided that Indiana needed to put on a daffodil show. This was the beginning of what would become the Indiana Daffodil Society a few years later. The Fall Creek Garden Club still exists today and is a member of the Garden Club of Indiana and the National Council of State Garden Clubs. The bulbs in that bushel basket, mostly poeticus, with a few tazettas, still bloom to this day, as do their progeny, which have self-sown over the past 50 years filling the 17 plus acres of Helen's garden. That bushel of bulbs created the spark that ignited Helen's desire to study and promote the daffodil in the United States.

Helen was one of the original members of the ADS and was in attendance at the first organizational meeting in Virginia. She has served on the national level as a board member and was President for the 1984-1986 term. She received the Silver Medal in 1963 and the Gold Medal in 1995. Helen was an active past-president as evidenced by the establishment of major criteria in our existing show schedules, fertilizer studies, and the Wister Award. She was unbeatable on the showbench, both in standard cultivars and the miniatures she prizes so highly. Helen is a meticulous record keeper. Her earliest map and ledger of 1953 is detailed, including her crosses of that season. Her legacy is 49 registered cultivars and numerous numbered seedlings. She is very humble and would prefer to praise the work of others, considering theirs superior to her creations. Helen established the Goethe Link Award for hybridizers, a National Show Award.

Helen has been a widow since 1981 when Goethe Link died at the age of 101. Not far from Indianapolis, the property and attached observatory are a gift to Indiana University with the provision that Helen live there as long as she wishes. The 17-plus-acre property is a treasury of not only species, crosses, and historic daffodils, but of specimen trees, shrubs, and perennials, a testament to her wide interest in plants. A caretaker and his wife, who live in a separate house on the property, assist Helen on weekends with the upkeep and heavy work. As of last year, if you were to visit Helen during the week, you would find her working out in the soil somewhere on the property, or possibly in the greenhouses where she raises prize-winning orchids. Rain or shine, sleet or hail, Helen is out marking tags, weeding, or talking to visitors about her fa-

vorite flower, the daffodil, often walking up the steep slopes on the property with the ease and agility of a person half her age.

In the September 1985 *Daffodil Journal*, Helen wrote, "Perhaps there will be daffodils in the hereafter for us to enjoy without all the tasks of digging, sorting, replanting, showing, and wondering why we missed that blue ribbon. I doubt there will be any shows, but one never can tell." Helen would welcome cards and letters at RR6, 1660 Observatory Road, Martinsville, IN 46151.

*Former ADS members now deceased.

IN SEARCH OF ANCIENT AND VENERABLE DAFFODIL SOCIETIES AND SHOWS

Loyce McKenzie, *ADS Historian*

One major feature in "The ADS: The First 50 Years," which will be available at the Golden Anniversary convention in Washington in 2004, focuses upon the oldest local daffodil societies and shows within the United States.

Tradition and history place the Maryland Daffodil Society first chronologically, with a meeting of interested ladies and a first show in 1919. The Garden Club of Virginia began its daffodil shows in 1934. The Chambersburg, Pennsylvania, Garden Club held its first daffodil show in 1936.

We would like to feature brief histories of all of the local daffodil societies which are older than the American Daffodil Society itself, and all of the continuing shows which have been held for more than a half century.

If you have historical records, including oral traditions, of both societies and shows of long standing, please contact Loyce McKenzie at Lmckdaffodils@aol.com, at 249 Ingleside Drive, Madison, MS 39110, or call her at 601-856-5462.

2002 DAFFODIL SHOWS

Kirby Fong, *Awards Chairman*

As of February 8, 2002 I have received the following information about daffodil shows in the United States for the year 2002. Atlanta, Chillicothe, Wadsworth, Charles Town, Chapel Hill, West Boylston, and Hillsboro will not have shows in 2002. The vice president for the Northeast region has not designated a regional show.

Differences between this listing and the December 2001 *Daffodil Journal* are: (1) The date of the Shelter Island show is April 27, not April

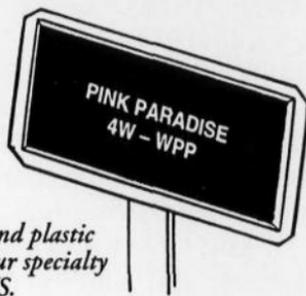
6. (2) Edie Godfrey's area code (Chanhassen show) has changed from 612 to 952. (3) The Atlanta show has been canceled because the facility will not have completed remodeling in time for the show. (4) The Rye show has been added. (5) The Washington Daffodil Society show at Wheaton is the Middle Atlantic regional show. the contact person for this show is Mary Koonce, PO Box 45, Halltown, WV 25423; (304) 725-5609; email: marykoonce@aol.com. (6) The Knoxville show will be one day only, March 23, due to the unavailability of the facility for a second day. (7) Yakima was able to find enough accredited judges, so their show will be an ADS approved show. Also, it will be April 20-21, not April 19-20.

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HERE AND THERE

MORE CHANGES IN THE BULB INDUSTRY

Dutch Gardens announces that it is now part of Gardener's Supply, a direct mail purveyor of gardening tools and supplies in Burlington, Vermont. The new president of Dutch Gardens is Leo Vandervlugt, formerly Director of Merchandising and General Manager of Breck's Bulbs.

*

KEITH KRIDLER ON BLUEBIRDS

Congratulations to ADS member Keith Kridler on the publication by Harper Resource of a book he co-authored titled *The Bluebird Monitor's Guide to Bluebirds and Other Small Cavity-Nesters*. This book is a Cornell Bird Library Guide and is sponsored by the Cornell Lab of Ornithology and the North American Bluebird Society. The book is lavishly photo-illustrated and should be in every birder's library. The cover copy says of Keith: "His bluebird trail is the oldest and most productive in Texas and may well have fledged more birds than any other single trail in North America." The book is available directly from Keith for \$17, which includes postage. He'll even inscribe it for you. Contact Keith at 1902 Ford Drive, Mt. Pleasant, TX 75455; email, kridler@1starnet.com

*

RHS VEITCH MEDAL AWARDED TO BRIAN DUNCAN

The February issue of *The Garden*, the publication of the Royal Horticultural Society, announces the award of the Veitch Medal to Brian Duncan "for his contribution to horticulture, particularly in raising and exhibiting daffodils."

*

A MILLION NEW DAFFODILS & TULIPS IN NEW YORK CITY

The March/April issue of *Horticulture* described the Daffodil Project. It is a collaboration of parks organizations from around New York City, aided by donations and volunteers from all over the world. The group created a "sea of sunny yellow as a tribute to New York's recovery from the September 11 attacks." More than a million daffodil and yellow tulip bulbs were donated by B&K Bulbs and the city of Rotterdam. Target Stores and Ames True Temper also provided funds and tools. Visit the Web site at <www.itsmypark.org>.

*

AMERICAN-RAISED DAFFODILS GAIN RHS AWARDS

Mary Lou Gripshover reports: 'Kokopelli' 7Y-Y was not the only American-raised daffodil to gain an RHS award in 2001. Several others

figured prominently in the awards list, among them 'Eaton Song' 12Y-O. It received an Award of Garden Merit and was raised by the late Harry Tuggle and grown on by Rosewarne EHS. It was sent for trial at Wisley during 1999-2001 by Broadleigh Gardens. 'Jingle Bells' 5W-Y, raised by Bill Pannill and exhibited by Brian Duncan, received a Preliminary Commendation. Also awarded the Award of Garden Merit were 'Intrigue' 7Y-W, raised by Bill Pannill, and 'Mission Bells' 5W-W, 'Pipit' 7YYW-W, 'Rapture' 6Y-Y, and 'Swift Arrow' 6Y-Y all from Grant Mitsch. William Pannill's 'Chromacolor' 2W-P and Grant Mitsch's 'Precocious' 2W-P also received an AGM; both were sent to Wisley for trial by Jan Pennings.

*

CHARLES CULPEPPER CULTIVARS

Robert Darling and the Washington Daffodil Society are interested in daffodils planted at the Culpepper Gardens Retirement Home, which is Charles Culpepper's old property in Arlington, VA.

Mr. Culpepper registered eleven cultivars, and the best guess is that some or all of them are still on the property—somewhere! Robert has found the following Culpepper registrations: 'Yellow Sunset', 'Early Highness', 'February Bicolor', 'Golden Day', 'Golden Starlight', 'Hazel Brilliant', 'Novelty Crown', 'Red Sunrise', 'Snow Gem', 'White Gold', and 'White Magnolia'. Robert asks, "Does anyone grow these cultivars who might be able to photograph them for reference? Does anyone have a remembrance of Charles Culpepper who might share their information with us? Any information would be useful not only at the Culpepper Gardens but also for developing Award Cards for WDS shows. Any info would be appreciated." (Robert Darling, 1211 O Street NW, Washington, DC 20005; email: Darlingdaf@aol.com)

*

INFORMATION REQUESTED ON CHARLES DILLARD

Sandra Stewart writes, "I recently bought an old RHS register that had the name Charles Dillard of Gurdon, Arkansas in it. I found out that he died in 1973 when he was 81 years old. Have any of you ever heard of him? This book has some lists and daffodils blooming marked in it. His wife's name was Rosalie and she was in the ADS Miniature Robin in the 1970's. They were members of the Arkansas Daffodil Society. Their address was 204 W. Walnut St., Gurdon, AR 71743. We are wondering if they are related to the family who own Dillard's department stores? I thought it would be interesting to know more about them and whether anyone is still growing their daffodils." (Sandra Stewart, 1149 Wells Loop, Jasper, AL 35505; email: daffodilhunter@charter.net)

*

MEMORIAL CONTRIBUTIONS

Leslie Anderson..... Sandra Stewart
Deceased members of ADS..... Mrs. Kelly Shyro

SARA DODSON STANFORD

Sara Dodson Stanford of Hermitage and Lebanon, Tennessee died November 4, 2001. She is survived by a daughter, son, two step-children, and a sister.

Sally, as she was known to her friends, loved her daffodils. They were "rowed out" in her vegetable garden. Along with her summer annuals, she enjoyed sharing her daffodils with her friends and her church. Her daffodil blooms consistently won over others on the show bench. She was a master at grooming, a talent she also employed while helping her husband Harold prepare his cattle for out-of-town shows.



Sally Stanford with John Lea in her Lebanon, Tennessee garden

Her many years as a victim of Alzheimers have faded in our memories, but we happily recall traveling with her to national conventions or hearing about the adventures she and Louise Linton Hardison had at world conventions. Sally was one of the first members of the Middle Tennessee Daffodil Society. She was a show judge, gaining her certificate long before the Society was organized. She had a discerning ability to immediately recognize quality flowers.

Sally's quiet presence is sorely missed by her friends, the MTDS, and the ADS. We extend our loving sympathy to her family.

Sally's daughter, Susan Basham, adds that her mother was always proud of having won Best Flower in Show at the 1986 Memphis national show with 'New Penny' (see photo page 164).

Mary Cartwright, *Nashville, TN*

PAGES FROM THE PAST

(Highlights from *The Daffodil Journal*, March, 1965, Vol 1, No. 3)

Loyce McKenzie, *ADS Historian*

This issue contained seven pages of advertisements from Mrs. Lionel Richardson, Charles Mueller, P. deJager, the Daffodil Mart, Willy J. Dunlop, and a full-page back cover for Daffodil Haven, in which Grant Mitsch says, "Doubtless our most successful introductions have been the reverse bicolors, with pinks and species hybrids nearly as popular."

"From the President's Desk": John Larus, writing after a four-inch snowfall to meet a printer's six-week deadline, devotes two full pages to suggestions for the "longest possible season of bloom," and a listing of the earliest and latest in the seven weeks of bloom in his Connecticut garden. His season began with *N. asturiensis* and ended with Division 3 'Frigid'. "It might be of interest," he concludes, "if Tom Throckmorton would persuade 'George' [as the first data bank computer was cordially known] to print out a list of all those rated earliest and all those rated latest, for his accommodating robot naturally has records on many more than we grow."

Former executive director George Lee announced that *The Daffodil Handbook* for the AHS was due by early 1966 and a limited printing of 100 copies of the first Data Bank printout would cost \$2 or \$3.

"Correct Naming of Daffodils for the Show Table" by Helen K. Link, Brooklyn, Indiana: "Since the show rules of the American Daffodil Society disqualify unnamed varieties and well-trained judges should not give awards to specimens which are incorrectly named, it is imperative that all exhibitors learn the proper names for exhibiting blooms." She gives a brief, thorough history of the classification of species, from Linnaeus through Liberty Hyde Bailey, and Burbidge and Baker's *The Narcissus*, a revision of Haworth's 1831 monograph. She notes the resulting confusion when garden hybrids have and are exhibited under two or more names.

"Show Time Again Throughout the Country": Thirty-five shows were scheduled for the 1965 season, twenty-one of them held by garden clubs. [Birmingham's group did something we would like the liberty of doing—they set their date for "March 4 or 11, depending on the season."] Four regional shows were held, in the Northeast, the Midwest, and the Southwest, where two shows, two weeks apart, were held in Dallas. Georgia, Oklahoma, Tennessee, and Kentucky held state shows. The Maryland Daffodil Society held their 42nd show. And on May 4 the Northeast Region would stage its 6th annual Daffodil Day at Lib Capen's garden, "Springdale," in New Jersey.

"The Flight of the Robins" Dr. Glenn Dooley, Bowling Green, Kentucky: Helen Trueblood reports on the many old varieties growing in her garden in the hill country of southern Indiana. 'Van Sion' grows exceedingly well, so it has become one of her favorites. Ruth Johnson, of Leawood, Kansas, details great success with Bill Pannill's method of refrigerating daffodil blooms on a damp towel at the bottom of the refrigerator. Towel and blooms are sprayed twice a day. Ruth says she has kept blooms in good condition for two weeks, and "with this method they didn't go right down after judging, as so many times happens when the flowers are left in the refrigerator too long."

"How to Grow a Daffodil Society" by Joseph R. Nederburgh, Whittier, California: The story is told of the efforts of Mrs. Kenneth (Polly) Anderson and Mrs. Stewart Combs, on the west coast, beginning with a small show, followed by group get-togethers in their homes to plan better shows and staging. This began in 1957. The fourth show was moved to Descanso Gardens, and attracted 8000 visitors. In March of 1961, the group was organized as the Southern California Daffodil Society, "No charter, no registry, no Robert's Rules—just us."

"One Man's Way of Labeling His Daffodils," by Carl R. Amason, El Dorado, Arkansas: "The perfect label is yet to come along, but for my satisfaction, the best daffodil marker is an ordinary brick, and I have never heard of anyone else using it." The bricks, laid flat only one-fourth inch above soil level, are lettered when he places his orders; this method also makes mowing easy out of daffodil season.

"Hybridizers' Forum": Helen Grier wrote, "Pods almost ripe can be picked with full-length stems and placed in a jar of sweetened water to ripen indoors. Use half a teaspoon of sugar to one quart of water, preferably rainwater." Venice Brink wrote, "Most of my failures have resulted when pollination was followed within two hours by heavy rain." He concludes that it seems to take four hours for pollen tubes to get near the ovary.

Registrations for 1964: New daffodils on the list this year included 34 from nine hybridizers. Mitsch introduced 'Dickcissel', 'Pipit', 'New Song', and 'Quick Step', while Roberta Watrous registered 'Flyaway'.

"Daffodils in 3d? Who's for Trying?" by Walter Andress, Bethel, Delaware: Andress, noting that 'Green Elf', by Hancock (1955) is the only 3d (Division 3 reverse bicolors) listed in the RHS classification list, challenged others to move in this direction. [Dr. Bill Bender's magnificent five-stem entry of Division 3 reverse bicolors at the King of Prussia convention show in 1985 proved that at least one hybridizer rose to this challenge.]

**2004 CONVENTION:
A CALL FOR OLD PHOTOGRAPHS AND SLIDES**
Kathy Welsh, Oakton, VA

Plans are underway for the 2004 ADS Convention to be held outside Washington, DC from Friday, April 16 through Sunday, April 18. (Please note that the Convention dates have been shifted by one day in an effort to keep our hotel and other expenses down.) As most of you know, 2004 is the 50th anniversary of ADS. In 1954 the first ADS Convention was held in Washington, DC, so we look forward to holding this special celebration in the place where it all began. Mark your calendars and attend what we hope will be the best ADS convention ever.

The 2004 Convention will highlight the many people who have made contributions to the ADS over the years. In line with this theme, there will be an ADS museum, which will include a display of both personal and club scrapbooks. Remember all those pictures you've taken at shows and conventions over the years? Now is the time to take your pictures out of their envelopes and assemble them into a scrapbook so they can be enjoyed by others. The museum will be a secure room locked at night and manned during the day to ensure security of the photographs. This is a unique opportunity to share all those memories with your ADS friends. If there is enough interest, we may have a contest for the best or most creative scrapbook.

While you are going through your old photographs and slides, please consider setting some of the best ones aside. Our program at one of the banquets will be a trip down memory lane. We need your help putting this together. Print your name on the back of the photo along with the name of the person(s) in the picture. The more material we receive, the better our program will be. We'd also like to include video footage if anyone has any to contribute. Please send all photos and slides to Kathy Welsh 10803 Windcloud Ct., Oakton, VA 22124. All pictures will be returned after the convention. If you have any questions, I can be reached by email at kathywelsh01@aol.com or phone at 703-242-9783. Thanks for helping us make this celebration memorable!

(Editor's note: Loyce Mckenzie, ADS Historian, has asked that local societies prepare their histories by the time of the 2004 Silver Anniversary Convention. Local daffodil society spring and summer meetings offer the perfect time to begin compiling a history of each society. Interview founders, gather photographs, and pull documents such as by-laws, minutes of meetings, show schedules, and agendas out of storage.)

WHAT IS YOUR “DAFFODIL OF THE HALF CENTURY?”

Loyce McKenzie, *ADS Historian*

A pictorial focus in the upcoming book “The ADS: The First 50 Years” will be the daffodil, or the five daffodils, which are the top favorites of the American Daffodil Society membership today.

At your local shows and at the national conventions, both in 2003 and 2004, bright yellow ballots will be available for you to vote for your very top favorite daffodil of all time.

It may be a cultivar or seedling daffodil, standard, intermediate, miniature, historic daffodil, or even a not-yet-available 21st century introduction. It is just the one daffodil you cannot do without.

Ask your show chairman for your ballot, or look for it at the Cincinnati convention. If you won't be attending an ADS show or the 2003 convention, you may vote by mail or even email. Send your choice to Lmckdaffodils@aol.com, or mail to Loyce McKenzie, 249 Ingleside Drive, Madison, MS 39110.

This is not a secret ballot. You're not very smitten with your favorite if you won't stand up and be counted for it. Your ballot will ask you for your choice, your name, and your state, as well as the date you cast your vote.

The happy flip side is that you can change your mind. If you vote this month, and fall in love with a new introduction in May, and then return to your old all-time favorite next spring, that's fine. Only the latest vote will count.

Vote for your favorite *Daffodil of the Half Century*

Cultivar _____

Your name _____

Your state _____

Today's date _____

Any daffodil, standard, intermediate, miniature, #seedling, American or foreign, historic or brand new, is eligible.

Return to your show chairman or to Loyce McKenzie, 249 Ingleside Drive, Madison, MS 39110.

Voting open until June 1, 2003

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THE DAFFODIL SOCIETY



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

The Society issues two publications each year to all members and welcomes contributions from all growers on the complete range of topics. Subscription rates, which depend upon whether publications are mailed by air or surface, are:

By air: 1 year £9 or US\$12.60, 3 years £26 or US\$36.40

By surface: 3 years £7 or US\$9.80, 3 years £20 or US\$28.00

Payment in US\$ to be made to the ADS Executive Director. Payments in UK£ to The Daffodil Society, Membership Secretary, Hofflands, Bakers Green, Little Totham, Maldon, Essex, CM9 8LT, UK.

Services and Supplies

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Slide rental is \$15.00 per set, ADS members; \$20.00, non-members; checks payable to American Daffodil Society, Inc. Include phone number in your reservation and confirm dates 4 weeks in advance. Contact Tom Stettner, 3818 Drakewood Drive, Cincinnati, OH 45209. Fax and voice messages: 513-351-6071, anytime day or night.

Membership Brochures, No Charge

ITEMS FOR SALE

<i>Handbook for Growing, Exhibiting and Judging Daffodils (with binder)</i>	15.00
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RHS Yearbooks, other years.....	write for prices and availability

Ohio residents add 5.75% sales tax..... Prices subject to change without notice. Prices include postage in U.S.A. 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

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