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You can also join, renew and order publications and supplies at our ADS webstore: www.daffodilusastore.org

For a list of ADS publications and merchandise, see inside back cover.

ADS MEMBERSHIP DUES

(Effective November 2014)

DUES YEAR IS 1 Jul-30 Jun (or once every three years, same period)

Individual/Organization: \$30 annual or \$75 for three years Household/Family: \$35 annual or \$90 for three years Youth (through 20 years of age at time of application): \$10 annual

ADS Website: www.daffodilusa.org www.daffnet.org

Database: www.daffseek.org www.dafflibrary.org

The Daffodil Journal

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Front Cover: Jon Kawaguchi's miniature assortment winning the Roberta Watrous Award at Livermore, CA, March 7-8, 2015. Back row: 'Apollo Gold' 10Y-Y, Koopowitz seedling 15 7Y-Y (Narcissus aureus x Narcissus miniata), 'Xit' 3W-W, 'Golden Symphony' 5Y-Y; Middle row: N. bulbocodium var. tenufolius 13Y-Y, 'Sweet Leilani' 5Y-Y, 'China Gold' 10Y-Y, 'Diamond Ring' 10Y-Y; Front row: JBK seedling 07-04-02 10Y-Y (N. bulbocodium 'Long Form' x N. obesus), 'Canavenice' 8W-Y, 'Yellow Pearl' 7Y-Y, 'Connie Greenfield Late' 10Y-Y (Photo: Kirby Fong)

Back Cover: A first! Here is fifth grader, Robert Birch, winning the Youth Ribbon AND beating some formidable exhibitors to take the Gold Ribbon with his 'Magic Lantern' 1Y-O at Albany, OR, March 28-29, 2015. Robert is the grandson of Elise Havens and the great-grandson of the late Grant Mitsch. Robert's grandfather, Richard, who passed away on December 15, 2014, would be so proud! (Photo: Steve Vinisky)

President's Podium

By Harold Koopowitz

The recent ADS Fall Board Meeting, held in Minneapolis, was a great success, mainly due to the efforts of Edie Godfrey and Robert Darling. The theme was the American Daffodil Society in the year 2020. How much of the brainstorming will be translated into action remains to be seen, but hopefully, at a minimum, there will be some substantive changes.

Here are some changes to the way memberships in the ADS are characterized. Life memberships in the American Daffodil Society are no longer offered. Because of inflation, other associated costs, and difficulties associated with keeping track of aging members, Life Memberships have been discontinued. People who have already purchased or been awarded honorary Life memberships are grandfathered in.

Besides our normal \$35 yearly rates, we will also soon be offering several levels of supporting memberships. We envisage three levels: Supporting at \$100/yr, Friends at \$500/



year and the Patron level at \$1,000/ year. Supporting memberships will receive special recognition in the *Daffodil Journal*, and have an event at the annual convention. Because of the ADS 501(c)3 status, Supporting memberships are tax deductible. Other forms of membership will be affiliated society membership for local societies and industrial and/or corporate memberships. We will discuss these in greater detail in the future.

Our membership is now hovering close to the 1,100 mark. We need to set our sights on an even larger membership. But this is a great improvement over where we were a year ago and the budget has improved to the point where it is nearly balanced for 2016. In part, this is due to increases in our membership. We rely on dues to run our society. Please encourage friends to become members and give memberships as economical Christmas gifts to your gardening friends. I also think that our improved and very attractive *Daffodil Journal* plays an

important role in finding and retaining membership.

At the end-of-the-year, most nonprofit organizations remind their membership that financial gifts given to these societies can be used to lower one's taxable income. The ADS is no different. Please remember us with a tax deductible end-of-the-year donation.

America will be on display in April when the Greater St. Louis Daffodil Society hosts the World Daffodil Convention. This international meeting only comes to the USA once every sixteen years. The conveners have done a wonderful job of raising money beforehand so that meeting registration costs are remarkably affordable. Not only are the tours going to be interesting, but we will be offering a large and varied seminar program with international experts that we normally never get to see and hear. People are registering for this event already. Do not waste any time, go on line at our home page, daffodilusa.org, now to learn about the details.



From the Office of Your Executive Director...

Well, here it is almost Christmas. I am sure you have a few last-minute gifts to buy. The easiest way ever to do so....is to look at the inside covers of this *Journal*. We have memberships and lots of goodies listed there that will make perfect gifts for your gardener friends and relatives. If you give a gift of membership, the recipient will receive a gift card from you, a welcome letter and packet, and a couple of additional items. It is the gift that keeps on giving all year!

While you are at it, check the mailing label that accompanied your *Journal* inside the poly-wrap to make sure your dues are up to date as well. I'm very disappointed that I have to remove members for non-payment, as they will miss getting this wonderful *Journal*. Please make sure you don't become one of them; check the back the mailing label.

We had such a great time in Minnesota. The weather was perfect, and the events were outstanding. Edie Godfrey is to be commended. The dinner cruise was the best.

Be sure to make plans now to attend the World Daffodil Convention in St. Louis. Details can be found here in this *Journal*. I am so anxious to see our visitors from all over the world! The biggest advantages to being part of our wonderful Society are the people you meet and the friends you make. We always say "come for the flowers; stay for the people."

I have some wonderful news. Some of our overseas members have had trouble using our webstore so we now accept PayPal with any credit card. You are able to pay for everything available at the store, including your registration for the World Convention!!! You do not have to be a member of PayPal. Just click on the icon when checking out of the store.

I certainly hope Mother Nature is kinder to us this winter and keeps the snow in the West and not so much in the East!

Remember I am here to answer your questions or help in any way I am able to do so. I want to wish everyone a wonderful Holiday Season.

Your daffy friend, Phyllis Hess

Notes for the Newcomer

By Mary Lou Gripshover

Depending on where you live, winter is "down time" for daffodils. The bulbs are all planted and mulched, and all the garden work is over. Now you can sit by the fire and dream about all the beautiful blooms to come. After all, growing daffodils is 11 months of anticipation and one month of . . . well, hopefully not disappointment. Be sure to save those ashes to spread over your daffodil planting. The bulbs will love the potash.

Winter is a good time to catch up on your reading. You can find lots of things online, starting with the ADS online library, www.dafflibrary.org. For starters, click on ADS Pubs, then scroll down to ADS Regional Newsletters. Click on your region; you'll find information specific to your area. Go through the back issues. don't overlook the newsletters from the various local societies. There may be one near you which you'd like to join. It's a good way to meet others who share your love of daffodils, and they'll welcome you as a member.

Don't stop with the newsletters. Check out *The Daffodil Bulletin* to see what the ADS was like in the early days. See how we've grown from mimeographed pages to a printed

magazine with a few black and white photos, to a full-color magazine. Go through the back issues of The Daffodil Journal. The Symposium Committee, chaired by Harry Tuggle, published a list of the best daffodils for show and the best for gardens, in each division. Sometimes he would write about the novelties for the year: "Accent on Noveties." Hybridizers are doing great things with N. viridiflorus these days, but you might be surprised to learn that the December 1965 issue of The Daffodil Journal included an article by Carl Amason, "An Introduction to the Green Daffodil." That same issue includes an article on "What's Old—and Very Good—in Daffodils." For something a little different, check out the "Report of the First Annual Chambersburg Daffodil Bulb Show" in the March 1978 issue. Going through 50 years of the Journal might get you through to spring.

Then there are the historic publications. Peter Barr's *Ye Narcissus* or Daffodyl Flowre, and hys Roots, from 1884, is a good place to start. There are three Hartland publications, from Ireland, from the same time frame. There are photos and notes from the long-gone Oregon Bulb Farm dating

DaffLibrary - books, articles, and journals about daffodils

Sponsored by the American Daffodil Society



back to the early 1930s. See how daffodil farming used to be. The *Journal* of the California Horticultural Society devoted the entire July 1940 issue to the proceedings of its Daffodil Conference which was held on March 16, 1940.

If you want to know more about daffodil people, click on People, and then you can click on a name to learn more about those daffodil personalities who may be only a name to you now. There's a section on articles from various publications, and if you really want to learn about Pests and Diseases (you should, you know), there's a section on that, too. There aren't many things that bother daffodils, but you should know what to look for in your plantings. And what to do when you find something that doesn't look right.

If you're interested in historic daffodils, you can look through some of the older catalogs. Sometimes you'll find cultural information as well as descriptions, and it's interesting to see what daffodils were being grown a century ago.

You can go through your current catalogs making notes about what you might like to order next year. While most catalogs these days are illustrated with color photos, you can go to DaffSeek (www.daffseek.org), that wonderful database developed by Ben Blake, to see how different the flower looks when it's photographed in different areas. No reputable catalog producer uses photo shop to enhance the color of the flowers, but you can see that in photos taken of flowers grown in warmer climates, the color is paler than in those grown where springs are cool and damp. So knowing where the flowers were grown will give you a better idea of how they're going to look in your garden, so you won't be disappointed when that flaming orange cup pictured in the catalog turns out to be very pale in your garden. Look at the photos of 'Accent'. You'll see that the color is paler in photos taken in the South.

DaffSeek can tell you many things. For instance, some say 'Daydream' in a flower's parentage may make the

flower susceptible to basal rot. So you can go to DaffSeek, type in Daydream, and then when the page comes up, click on the family tree icon that says "Descendants." It will produce a list of all known descendants of 'Daydream'. I have trouble keeping 'Daydream', and I also have trouble keeping 'Altun Ha', one of its children. Coincidence? Maybe. Or maybe not. If you're interested in trying your hand at hybridizing, type in the name of one of the flowers you have, then click on Descendants, to see if your flower has produced any offspring.

Daffnet (www.daffnet.org) is a forum where you can ask daffodil questions and get answers from growers around the world. Anyone can view the posts, but you have to register with Daffnet to post a question or an answer. This is to help cut down on spam on Daffnet. During spring, there will be lots of posts, with photos, of show winners. And since spring "down under" is in September/October, and with the advent of many winter-blooming

daffodils, we get daffodil photos almost every month.

Dafftube (www.dafftube.org) is the newest of the ADS websites. you can find "slide programs" which have been converted to Power Point computer programs in PDF format. You can download a program and its accompanying script and have an evening's entertainment. Or show it to your garden club. You'll look like a pro. The newest addition to the site is a video, "Show Your Daffodils!" This is perfect for those who may be considering entering a show for the first time. You can cut a few of your daffodils and follow along with the narrator, Kirby Fong, as he prepares the blooms for showing.

Of course you don't want to overlook the main ADS website, www.daffodilusa.org. Here you'll find links to daffodil festivals, overseas societies in effect all things daffodil.

There you have it. Lots of things to keep you busy and learning about daffodils all winter long.

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ADS Net News

By Lynn Slackman, Kirby Fong and Nancy Tackett

In the last couple of years, ADS members have asked how they might support DaffSeek and other ADS Internet websites. Their explanation is that they are already ADS members but want to do more. Now, you can donate to support these valuable web resources. At the top of DaffSeek, Daffnet, and DaffTube pages you will see the phrase "Help Support Daffxxx - Donate". If you click on Donate, it will take you directly to the Webstore's Internet Donations Page. Your helpful donation will be used exclusively to support the ADS Internet resources, and will be greatly appreciated.

DaffodilUSA (daffodilusa.org)

A link to the 2016 World Daffodil Convention website has been added to the upper right-hand 'news area' of the ADS website. Reference this website for information about the 2016 World Daffodil Convention, scheduled for April 6 - 10. Learn more about making your hotel reservations, registering for the Convention, entering the 2016 Daffodil Show, tour planned for attendees, and opportunities to become a Convention sponsor.

During the long winter months, plan a spring vacation, and don't forget to include some 2016 daffodil shows and events in your travel plans. You can find this information on the 'Show and Events Calendar' on the website.

With the 2015 Judges Schools and Refreshers completed, the Daffodil Judging Schools page has been updated with 2016 Judges Refreshers and Schools. Judges and Student Judges, please review this page to help plan for your next refresher or judging school.

On the Youth webpage, check out the new school-based daffodil planting project developed by ADS Youth Chair Lisa Kuduk. This program includes activities beginning at the elementary level, continuing through middle school, up to and including high school.

ADS Webstore (stores.daffodilusastore.org)

Use the convenience of the ADS Webstore to pay, via a credit card, for your 2016 World Daffodil Convention registration! Please read all the selections

carefully, because there are exciting optional bus tours available on Thursday and the Monday following the convention. You can also pay for your judge's refresher course and, by adding an online donation, become a sponsor of the 2016 World Daffodil Convention. Take advantage of these options to make this convention a phenomenal experience you will not forget!

Paypal is now one of the options you can use to make your payments on the Webstore. The Webstore accepts payments using Visa, Mastercard, Discover and American Express credit cards.

The 2015 Royal Horticultural Society's Daffodil, Snowdrop, and Tulip Year-book is available for sale on the ADS Webstore under the Publications menu. There is a limited supply of these beautiful annuals, so buy your copy today.

DaffTube (dafftube.org)

The presentation "Let's Grow Daffodils!", previously available as PDF files and on DVD, is now available for online viewing in DaffTube.

Another new set of five videos is "2000 World Daffodil Convention." This is a digitization of a two-hour VHS tape of the convention in Portland in 2000, broken into five parts to keep each part under a half hour. VHS quality leaves something to be desired, but if you were at the Portland convention, you'll enjoy seeing your friends (or possibly yourself) there. Just click on the new "Video" button on the green menu bar to find both of these videos.

Daffnet (daffnet.org)

Daffnet's format has changed somewhat. You will now find the calendar and archives at the bottom of the webpage. This change was made to make more new posts visible on the top of the page.

Since October, fall (and now winter) blooming daffodils have been adorning Daffnet. These beautiful photos, along with late-blooming daffodils from the Southern Hemisphere, almost make you feel like spring has sprung! Many of these fall bloomers are seedlings, so there are quite a few hybridizer discussions about unique daffodils.

${\bf DaffSeek.} (daffseek.org)$

Southern Hemisphere photographers have been very helpful by contributing photos from their shows and gardens. Please read Ben Blake's article about new features that are now available in DaffSeek.

New Query Look for DaffSeek

By Ben Blake

In September, we put our new version of DaffSeek on the Internet. This new version improves the organization of the query menus, and also has much better support for mobile devices. A feature which is important to us is that it streamlines the maintenance to add new photos and update information. It is still located at the same name and place on the Internet http://daffseek.org/

The "Main Query" screen now displays the information most queried by DaffSeek users. To the right of this area are three boxes labeled "Other Queries", "Photos Queries" and "Tool Queries". These queries were previously located in the lower part of the query screen or on a second page that you had to click to expand the page to view. These three boxes include a collection of tools such as fertility and parentage as well as queries for awards, special classes and photographers.

The first screen image shows what DaffSeek looks like on your computer screen or iPad or tablet PC, for a query with a daffodil name of "dream." You see the main query



screen where you can enter a partial flower name or select an exact name from a drop down list that appears as you type in a name. For the purpose of this example, I pressed the enter key after entering the word "dream".

If you enter a name that has multiple matches, such as "dream," and press return/enter you will see a "list page" that enables you to select more precisely. In this second screen image, the "list-page" also gives you a way to view a set of query matches and enables you to sort the list by column title and to produce a pdf report of any query. In this example, I placed my cursor over 'American Dream' which is now highlighted and a hover box popped up with basic information and three photos for this daffodil.

Once you select an exact flower name, you will see a "Detail Page" just for that daffodil as shown in the third screen image. Like the previous version of DaffSeek, you will see a complete set of photo thumbnails at the bottom of the "Detail Page" when the queried daffodil has any photos.

The new DaffSeek displays larger



flower photos differently than before. Now if you click on any thumbnail, DaffSeek automatically displays a zoomed large photo for that particular thumbnail as shown in the fourth screen image. If available on the photograph, the camera type and settings are displayed below the zoomed image. By viewing this information, you can learn from some of the premiere photographers who contribute their photos to DaffSeek. This also starts the slide-show process so once you see a zoomed photo, you can mouse click to the right or left side of the zoomed image to see the next photos. You can also do this using your keyboard right and left arrow keys or for tablets or phones, swipe to move between photos.

One of the best features of this version of DaffSeek is that it is more usable and viewable on smart phones. For those of you who use your smart phones to view DaffSeek, the Main Query view is a little different than



on our computer or tablet. The main difference is that the classification input box is now one box versus three boxes (Division, Perianth Colors, and Corona Colors). The "Other" query boxes normally found on the right side of the computer screen can be found by scrolling down to the bottom of the screen. As you can see in the examples for 'American Dream' below, the detail page delivers the same view; you just need to scroll down to see all the information. Photos still zoom to a larger photo when touched and the slide show can be viewed by swiping



the screen.

Enjoy this new version of DaffSeek and as always, we welcome your comments and feedback.









THANK YOU FOR ALL THE SUPPORT THE PAST 35 YEARS!

Nancy R. Wilson

The Walter Blom Daffodils are now available from

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EMAIL ADDRESS: mogeura@aol.com



DaffSeek Updating and Member Contributions

By Ben Blake

On September 1, we updated DaffSeek to a new version. It improves the organization of the query menus and also has better support for mobile devices. DaffSeek is a daffodil database with information on about 32,000 daffodils and over 30,000 photos. It is available at http://daffseek.org/

Goal

Our primary data handling goals were to facilitate and speed up the Daff-Seek data updating process and to provide a way for members to add their own photos.

Previously, the updating process was very labor intensive and was performed about twice a month by pre-processing everything in "batches". Photo processing was extremely labor intensive because our photographers had to mail a CDROM or email photos to the DaffSeek manager. Each photo had to be named to fit a pattern that the processing programs could handle. We usually had to do each update several times to fix spelling errors and flower name mismatches.

New Updating Method

DaffSeek is now designed to do immediate updates. A "Cultivar Editor" can update cultivar data or add new cultivar records. A "Species Editor" can update any species information. We started the new updating process with just one or two people of each type of data editor.

The "DaffSeek Manager" assigns access roles for members, ranging from "cultivar photographer" to "species editor". He or she is actually a people manager and likely would adjust a member's role as the member becomes more accomplished or involved. Currently there are two ADS members assigned as "DaffSeek Managers". DaffSeek Managers may review all data and photo additions.

All transactions on the new system are logged to show which data items for a specific cultivar were updated. All photo additions or deletions or other changes are logged too.

There are specialty roles in the new DaffSeek. For example there is the "Daffodils To Show and Grow" (DTSG) team which has an editor who can update the DTSG list and team members who can view the working list. The next DTSG will be produced from extracted DaffSeek data.

A big feature is that our volunteer photographers will be able to upload their photos directly to the new DaffSeek. The photo upload process is very similar to typical content management systems, and we believe members will find the process familiar and easy to master.

The photo uploading process is optional and photographers that send just a few photos, or do not want to do any photo uploading, will not have to use the new process. Instead, continue to send your photos on a CD or via email. We expect to start small and enable photo uploading for just a few motivated individuals. So, if you have a dozen photos and want to add your own, you can do this, it's easy.

Photographers are members of DaffSeek

All photographers have DaffSeek accounts. If you already have photos in DaffSeek you already have a DaffSeek account.

For your first time to log-on, you must reset your password. Start by going to the DaffSeek login panel at http://daffseek.org/wp-login.php which looks like "Image 1". Then click the link "Lost your password?" Enter you email address and click the blue "Get New Password" button. If you receive an email from daffseek.org titled "[DaffSeek] Password Reset", you can click the link at the bottom of the message which will generate a new password. Note that you may use the auto-generated password by having your browser "remember it," or you can back up over that password and enter your own "strong" password.



Adding Your Photos to DaffSeek

Like Daffnet, you have a media library on your account. Photos can be uploaded in groups all at once into your media library, then later be linked with different daffodil names or can be uploaded and linked to a specific daffodil. We recommend at first you add photos for an individual daffodil until you are comfortable with the process. Personally, I like to do a query for a daffodil, and then upload my photo directly to that daffodil's name.

The first thing to do to add a photo is just a normal query for a flower name. You will see a main query screen where you can enter a partial flower name or select an exact name from a drop down list that appears as you type in a name.

If you enter a name that has multiple matches, a "list page" will be displayed that enables you to select more precisely.

Once you select an exact flower name, you will see a "Detail Page" just for that daffodil.

When looking at an individual daffodil, one or more thumbnail images will be displayed at the bottom of the "Detail Page" if the flower has any photos. This new version of DaffSeek displays large flower photos by "zooming" the photo to fit the custom size of your browser window. If your photo



Screen Detail of a Query for flower name "Cameo Charm"



Add or Link Media Button

has camera, exposure, or location data, DaffSeek will also display that data.

At this point, you may add or link a photo. While "add" means to upload and link a photo to the current flower name, the term "link" means to associate a photo that was previously uploaded to your media library. To add or link a photo click the blue button titled "Add or Link Media."

You will now see a panel called "Add or Link Media." Note the flower name is filled in, but the area next to the blue "Select Media" button is empty. Click the "Select Media" button to see the next screen. Here you may upload one or more photos by dragging the photos from your desktop computer to the Daff-Seek Upload panel, or you may select previously uploaded photos. After you have uploaded or selected images, click the blue "Select" button in the bottom right corner of either panel.

You will now be taken back to the add media panel with photo ID's (numbers) to the right of the blue "Select Media" button. The copyright with your name was placed on the photo during the upload process.

The final step to add a photo is to click the blue "Link Media" button. This button will take you back to the "Detail Page" where you can see the thumbnail photos for the current flower including the photos you just added.



Detail of Add or Link Media Panel





Select or upload images to Daffseek by dragging them to the upload panel.

Select Media "31015, 31016"

The select media Button on the details panel after an image is uploaded

Edit Media Screen

To Delete, Unlink, or Edit Media Details for a photo, start by doing a query for the flower name.

If you query for the same flower after you have added photos, you will now see a new button on the flower's details page called "Edit Media". When you click this button, all of your photos or "media" will be outlined in blue like you previously saw after you added your photos.

If you click one of the blue outlined thumbnails, you will bring up the edit screen specifically for that photo. This is the primary edit, delete, and unlink panel for all DaffSeek photos and media. When a photo is selected for editing, it is outlined in purple. When you "delete" a photo, it is gone forever, but if you "unlink" it, an asterisk symbol is added to the start of the photo's flower name so it can be linked to another flower name if it was incorrectly named.

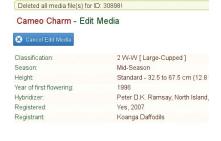
For example if you deleted a photo from "Cameo Charm", you will see one fewer thumbnails and a message above the flower name that said the photo was deleted.



Edit Media Button on Detail page



Edit Screen





Detail of Edit Media Panel

If a photo is misnamed, you can unlink it from that name and link it to the correct name. The easier method for correcting a misnamed photo is to skip the unlink step, query to the correct daffodil name and link the misnamed photo to the new daffodil record.

Edit Media Details

This is part of the "Edit Media" screen and is where you can add a photo caption, description or location.

Media vs. Photos

We often used the term "media" instead of "photos" in this article. That is because the new DaffSeek can handle many media types such as photos, videos, or other documents.

Photo Copyrights

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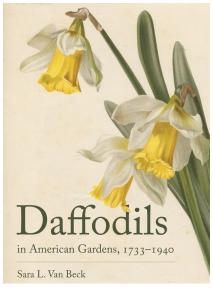


Review: Daffodils in American Gardens, 1733-1940

By George Dorner

What fun to review a book about your favorite flower, written by an acquaintance of some years, who herself has lived immersed in a home where that flower was the focus of much family time and attention! And it's an added joy to hold a book so beautifully produced, one which begs you to fondle it while you hope that the contents can come up to the anticipation it creates. It will be difficult to be objective in a review of such a book.

But that's the task. Let's get this out of the way first: This is really a gorgeous book. It is printed on fine paper with a beautiful illustration of a bi-color trumpet on the slip cover which would look good on your wall just about anywhere in the house. The layout allows good variation between text coverage of historical and horticultural background, illustrations, and photographs of both flowers and garden arrangements. Open the book at random, and you will likely see at least an illustration and often two on facing pages, many in color. (I just did that ten times with five doubles, five singles, and no strikeouts on illustrations. Remarkable!) Indeed, this is as



Daffodils in American Gardens, 1733-1940 Sara L. Van Beck. 2015 University of South Carolina Press www.sc.edu/uscpress

much a history of show gardens and their design as it is of the individual flowers. The sidebar notes on jonquils and tazettas underscore the importance of these divisions in gardens of previous eras, primarily of well to do estate holders. This seeming emphasis though is largely because those are the gardens of which there are remnants and plans to study and the possibility of gleaning the thinking behind garden planning. So many

daffodil plantings, especially those in more typical and more modest settings, have been lost to redeployment or even abandonment so that piecing together clues of what was done and why it is an archeological task requiring patience, skill, and scholarship.

There are two appendices which deserve close attention. Appendix A should be perused before reading much of the text for it contains excellent photographs of most of the heritage daffodils mentioned and followed throughout the text. Appendix B contains a list of daffodil catalogs which served as source documents for the book, and there is a lengthy bibliography, as well. You will want to refer to the over 30 pages of Notes to appreciate some intriguing fact which didn't quite fit in the text.

The major text of the book is in six chapters. After an interesting brief history of daffodils in Britain and the Netherlands, the history and role of daffodils in the U.S. is covered in three periods, 1733-1820, 1820-1860, and 1860-1940. The structure of these three chapters is each roughly the same, covering the types of garden in which daffodils appeared, listing sources and influences for garden planners, and tracing the rise of a culture and commercial setting which was becoming less dependent on European influences. The avid daffodil gardener of today will gain many insights and see contrasts with our

own practices in smaller residential lots, and may develop envy for gardens which are tended professionally.

The remaining two chapters record the search for daffodil clues in cemeteries and in historic gardens, mostly in the South, in leftover plantations, and on large estates in the East. The culture and sociology of the times become sources of clues for introspection and speculation here. Again, there's much for the reader/ gardener to digest that is probably different from the common present practice of most of the members of the ADS, namely the rapt attention paid to the appearance of new cultivars and the improvement of the individual flower, as opposed to its consideration as a tool in the crafting of a beautiful landscape.

When one reads a history book you may go back and forth between how things were then and how things now could be different if history had gone another way.

There's a lot of material to cover in this book. It is not always casual or light reading, but the author writes good sentences which are chock full of meaning, seldom with much unnecessary verbiage included. This book may well find a place on your night-stand or sitting room coffee table where you will dip into it periodically. It is a welcome addition to the scant number of daffodil publications which are readily available.

Daffodils in Germantown, 1711

By Sara Van Beck

When researching Daffodils in American Gardens, 1733-1940, I was unable to find written accounts of daffodils earlier than 1733. Naturalist John Bartram of Philadelphia wrote in 1763 that early Philadelphia colonists brought a double white poet with them around 1700, but that was too vague for my purposes. While many colonists gardened, not many were literate enough, scientific enough or ornamentally inclined enough to note daffodils in those early decades. But if such persons were to be found, one of the most likely places would be the scientifically inclined gardeners of Quaker, and German, Philadelphia.

As the digitization of archival collections continues apace, more first-person accounts become available to the public. Happily for daffodil enthusiasts, the day book of one such person has been uploaded to the internet courtesy of the University of Pennsylvania.

In 1694, German colonist Daniel Francis Pastorius put pen to ledger, embarking on a four volume



Francis Daniel Pastorius, bas-relief portrait (Photo by Louis A. Blaul, Courtesy of Library of Congress)

compendium ("commonplace book") of sayings, scientific observations, rhymes, parables and Quaker religiosity that lasted until his death in 1719. As a close associate of William Penn, he was the founding father of Germantown.

In these formidable volumes he practiced his English, but wrote too in German, Latin, Greek and a smattering of other languages. All of his entries are numbered and indexed, but few are actually dated. In his volume of rhymes, from around 1711 to 1719, he used flowers, herbs and trees as literary anchors. Only one of these is actually 'horticultural', and that details his observation of a tuberose growing in a Germantown garden in 1711. The other interesting tidbit for garden historians is his notation that Dr. Christopher Witt moved his garden next to Pastorius's fence in 1711. Dr Witt was a compatriot of Peter Collinson of England (and thus later with John Bartram) and one of the lesser-known "Brothers of the Spade" of early botanic trading - and was possibly one of the earliest growers of tazettas in the colonies.

But the suspicion is that Pastorius wrote about the flowers he grew, or at least those he was personally fond of and admired about town. A number of rhymes regarding tulips play upon "two lips", hers are frequent as are the Marvel of Peru (always in large script), heart's ease, flower du luc and roses. One rhyme on roses intimates what he may have grown in his garden.

Daffodils and narcissus appear twice. Daffodils, in English, appear in a half-page witticism on pet names based on flowers traded between lovers. But a more meaningful mention of Daffodil appears in a long entry strongly intimating Pastorius grew it in his garden. The entry is entitled "Some Herbal Emblems Here follows my Germantown Garden Eccke" ("eccke is thought to be "ecke" or "corner" in German). For daffodils, he wrote, "What does the Hiccouch stay? I think no Daffodil..." It was not uncommon for herbals of the 1600s to list one of the medicinal uses of daffodil as a remedy for coughs, although more enlightened herbalists, such Nicholas Culpeper, did not include daffodils for remedies at all.

Seven entries later, on the same page, is a stand-alone rhyme regarding "Narcissus." However, Pastorius wrote it in German – and in old Gothic script that is beyond the pale of the average young ex-pat German (I've asked a number at this point). As best as can be translated at this point, the entry Pastorius wrote is thus:

"Smart/intelligent people know that daffodils greet? this? world around you and me/I, and decorate? the forest?, that is why we are grateful? that you/we? shed tears"

No date appears for the entry,

but the very next entry, regarding the flowering of a tulip, is specifically dated April 12, 1711.

And lest we dismiss the gardening legacy of the Quakers and Germans of Germantown and Philadelphia, we would do well to remember that John Wister was a direct descendant of this Germantown gardening heritage, for whom the ADS awards its honor of garden merit.

To read the original, please see:

http://dla.library.upenn.edu/dla/medren/record.html?id=MEDREN_2487547&

Membership Corner

It is a pleasure to write this membership column because I have recently returned from a productive Fall Board Meeting, having had an experience that has given me much to ponder and to think about as we move forward with "Planting Seeds for Our Future," the focus of that FBM. I feel more hopeful and encouraged about the future of ADS than ever before and a stronger connection is growing within me. There was much delicious food for thought, and I was enthralled with the eye level multitude of continuous quotes that surrounded our meeting room and the hallway leading into the room. The following are two that especially caught my eye, and I want to share them with you:

"Leave your footprints not just in the garden but in the hearts and minds of young people."

Ruth Pelouch, Indiana

Our vision...."Making America a Nation of Gardeners, a Land of Gardens."

American Horticultural Society

It occurs to me that we have a gold mine of attributes regarding the daffodil that could be more widely promoted; we know that their needs are few, requiring sunshine and good drainage, that they are easily grown and give us pleasure year after year, and that they are critter resistant due to two poisonous alkaloids. These are very significant, good reasons for growing daffodils, but I wonder how often we present to the public what we take for granted?

I have been exploring ways to help our new members connect with

ADS and to feel included within the organization. New members receive The Daffodil Primer according to their USDA growing zone. This is an educational booklet intended for the novice grower that has a wealth of information. Suzy Wert is the author of Zones 3-7, Loyce McKenzie assisted her with Zones 8-9, and Bob Spotts assisted with Sunset Zones 9, 14, 18, 19, 20, and 21. Jim Wilson is the editor for all three versions, and Harold Koopowitz underwrote the cost of printing the first two rounds of these booklets. Feedback has been positive, and the effort that knowledgeable ADS members gave to this project is commendable, especially Harold who listened, suggested, and then financially made it happen. This booklet could be offered through the web store for \$5, but has not yet been listed there.

Another way of connecting with our new members has been an offer of three cultivars of their choice, chosen from a list of ten. This contact is made via an email along with a suggestion to view pictures of the offered daffodils at the DaffSeek website. Their response seems to be prompt, enthusiastic, and appreciative. this time the bulbs are donated by the Indiana Daffodil Society and come from their bulb sale stock.

The last connection with our new members must come from you established ADS members. Established means you joined before 2015. firmly believe that if we give our recruits something useful, something of value, we are setting the stage for involvement, and thus, potential membership renewal. The most valuable thing we can offer is a connection to an experienced member. Please reach out and do your part; our new people are listed in each Journal issue and we need you to look for the names in your region. A telephone call or an email letting them know you live in their region, an invitation to come see your daffodils in bloom season, a willingness to assist in answering questions about daffodils, anything that might break the ice, acknowledge and welcome this person with an interest in daffodils. Ask if they would like to help pick flowers in the spring for nursing home bouquets, retirement centers, libraries, even grade schools. In The Daffodil Primer, the correct way to snap a stem to minimize the possible transfer of disease is discussed, but wouldn't a demonstration be significantly more instructive along with a description of those diseases that concern us? Teachable moments abound and we need you to do the teaching and sharing. I think I will be having a flower picking party in the spring and give 4-pack or 6-pack carrier cartons with individual plastic juice bottles with water to our local members. They can distribute the flowers they pick from my pasture around town as the bouquets will be in free standing disposable vases. I already have a number of these bottles clean with labels removed for the World Daffodil Convention hoping we can assemble bouquets for whatever purposes the St. Louis people deem appropriate. I think the biggest gift in allowing someone to pick flowers for self and others is the thrill to be in a beautiful setting and to share in the bounty of nature. Here are the current membership numbers as I write this in mid-October:

We have 1,051 members, which includes a total of 116 families; a family membership is counted as

two people.

In March, 2015 we had 1,133 members which included 114 families

The decline in the current membership number reflects approximately 100 non-renewals in June. Our RVPs are in the process of finishing contacting these people at which point I will do what I can.

Please remember to promote ADS and our fantastic websites and to consider giving a gift membership to any like-minded people on your gift-giving list.

I am open to ideas.

Sincerely, Sara Kinne, Membership Chairman



The American Daffodil Society Would Like to Welcome New Members

Edward Bennett

petvet121@verizon.net

Charlton's Miniature Bulbs and Chrysanthemums

3 Ashleigh Gardens Sunderland, SR6 7QA, UK facharlton@btinternet.com

James E. Cooper

Root 5 Family Farms 1421 John Tyler Memorial Highway Charles City, VA 23030 202-550-2219 root5familyfarmsinc@gmail.com

David Evans

509-786-3038 dwdevans@embargmail.com

Gloria Gash

508 Vassar Point St. Simons Island, GA 31522 912-638-7193 gloriagash@yahoo.com

Dottie Hendricksen

4901 Mountain Laurel Drive Lynchburg, VA 24503 434-384-6900 dorahen@aol.com

George Hicks III

5808 North Meridian Street Indianapolis, IN 46208 317-257-5725 ghicksiii@indy.rr.com

Chris Kinney

24 Proctor Street Manchester, MA 01944-1446 978-526-7613 chriskinn7@gmail.com

Kathy Larson

312 West High Street Marshalltown, IA 50158 641-752-2264 m.k.larson55@gmail.com

Jay and Jolene Laughlin

6897 Highway 103 Washington, LA 70589

David Maltby

11 Nelson Street, Brantford, Ontario N3T 2M6 Canada 519-753-4118 dmaltby64@gmail.com

Suzanne Raymond

16301 Autumn Crest Court Ellisville, MO 63011-1997 636-458-6393 autumnrays@att.net

Mary Ann Underwood

681 Nelson Drive Mooresville, IN 46158 317-831-2936 maunderw@ivpui.edu

Barbara L. Williams

4679 NW 37th Court Bell, FL 32619-3729 352-507-2756 angusranch07@yahoo.com

Barbara Zimmer

19644 Spring Creek Road, Hagerstown, MD 21742 301-733-7277 bzdogsledder@myactv.net

Thank you to Bobbi Oldham and Annette Parker Kahn for giving the gift of membership to the American Daffodil Society in recent months.

Youth Members

Robyn Husband Brielle Moreland Charlotte Moreland Logan Moreland Lucas Moreland

Thank you to Mary Ann Moreland (4) and Annette Parker Kahn (1) for gifting youth memberships to the ADS in recent months.

In Memoriam

Sadly, the American Daffodil Society has seen the passing of several friends of late. Our thoughts and prayers go out to those who mourn.

Mitch and Kate Carney recently informed the *Journal* of Mary Koonce's passing, thusly:

Mary E. Koonce of Summit Point, West Virginia, passed away on October 4, 2015. She was a past Mid-Atlantic Regional Vice President and an ADS and National Garden Club Council accredited judge. She also served as the ADS Judging School Chair. In 2001, she received the Mid-Atlantic Regional Award for leadership and service. Her many jobs for the Washington Daffodil Society include President, Show Chair, Membership Chair and the Bulb Order Chair. She was the past District

Director of the Shenandoah-Potomac Garden Council, and was also an active member of the Dolley Madison Garden Club and Windflower Garden Club. Mary, a good mentor, offered all encouragement and advice from her deep store of knowledge and experience. She lovingly touched each and every bulb as WDS Bulb Order Chair looking for any signs of decay, maintaining high standards for every order. Memorial contributions can be made to the Washington Daffodil Society or the Shenandoah-Potomac Garden Council at 54 Jonquil Lane, Martinsburg, WV 25402.

Jaydee Ager recently shared the following:

Greg Gripshover, the 55 year old son of Mary Lou Gripshover, died in Columbus, Ohio on July 26, 2015 after a lengthy illness. ADS expresses our heartfelt sympathy to our member, Mary Lou, and her family.

Fredrica Lawlor informed us of the passing of Tom Ragouzis, who often accompanied his wife, Liz, to ADS conventions. "He always treated her with much respect and affection, often referring to her as 'my Liz'," Fredrica adds. And the Editor has also learned of the passing of Margie Roehr of Kansas, but further information had not been received at press time.

Acknowledgment of Special Gifts

The American Daffodil Society acknowledges contributions from Janet Hickman and the Maryland Daffodil Society in memory of Mary Koonce. Becky Fox Matthews contributed to the ADS an honorarium given her by the National Flower Show Judges Council for a talk she gave recently in Memphis. The Georgia Daffodil Society made a contribution to the 2016 World Daffodil Convention. And gifts in memory of Greg Gripshover were given by the Central Ohio Daffodil Society and Dave & Phyllis Hess.

Heat Tolerant Tazettas: Israel and the Coastal South

By Linda Van Beck

The Florida Daffodil Society (FDS) differs from other daffodil societies as the focus of the society is gardener education and not sanctioned flower shows. As part of that mission, the FDS makes available for resale to Master Gardeners and garden clubs appropriate bulbs that are in commercial trade for the coastal South. The FDS stresses that early blooming tazettas that tolerate hot soils are the best *Narcissus* for the region, including both historic cultivars and new hybrids.

Unsurprisingly, tazettas from coastal Mediterranean regions are happy in the coastal South. These include the paperwhite clan and *N. italicus* from Italy and southern France, and the species *N. tazetta* subsp. *tazetta* from Israel and its hybrid offspring. (The other species *Narcissus* of note from Israel is *N. serotinus*, which is not a tazetta.)

The most reliable hybrid tazettas for gardeners in the coastal South were hybridized by Mrs. Herut Yahel of the Volcani Center in Israel. They are 'Nony' 8W-Y, 'Omri' 8Y-Y, 'Galilee' 8W-W and 'Yael' 8W-Y. Per

Barbara Fry ("Grand Soleil d'Or ex Scilly," *The Daffodil Journal*, 1976), when Yahel sent Fry bulbs of the Israeli "Soleil d'Or" to the RHS Rosewarn Experimental Station, Fry realized it was in actuality *N. tazetta* subsp. *aureus*, not the same "Soleil d'Or" as grown in France and the Scilly Isles. Interestingly, it may be that Yahel's use of *N. tazetta* subsp. *aureus*, with its yellow perianth and deep yellow-gold corona, in her bicolor breeding program is the secret to her cultivars' success in the coastal South.

Yahel's commercial landmark creation is the paperwhite, 'Ziva' 8W-W, widely sold for Christmas forcing, which survives the sands of Miami, but surprisingly not in the regular garden soils of Tallahassee where it breaks down. A recent successor to 'Ziva' is 'Nir', which has the same short, predictable "internal clock" that permits a short forcing window for holiday bloom times. Coastal South gardeners have shown little interest in any of the improved paperwhites, be they midseason bloomers 'Ariel' 8W-W and 'Inbal' 8W-W or the fall blooming 'Sheleg' 8W-W.

An Overview of Bulb Behavior

Harold Hume's book Gardening in the Lower South (1929) is an excellent starting point for understanding bulb botany in hot climates. He explains how bulb behavior may be understood by viewing the bulb as a carbohydrate. At the point in the bulb's cycle when the bloom has faded, sunlight falling on the leaves and flower stem is transformed by chlorophyll into chemical energy (photosynthesis). In the course of photosynthesis, the hydrogen of water is used by the bulb to transform carbon dioxide into a carbohydrate starch, which in turn is stored in the leaves inside the bulb. The water molecule's oxygen is then released into the atmosphere. Hume discusses the need for water and the assistance of potash in starting this cycle after blooming, and then again in October when the bulb changes the stored starch into sugar - the bulb's usable "food."

Should the cycle be interrupted by weather extremes (temperature, drought), flowering and growth will be impacted or even halted. Without sufficient sunlight, there will not be enough starch created to then change into sugar to support the growth cycle. As a result, the bulb will absorb the flower bud to maintain sufficient energy to stay alive.

A process important to any plant's metabolism and survival is

respiration. In warm climates, all plants must adapt to high temperatures and humidity, particularly nighttime temperatures. In general, for every 16°F increase in temperature, the rate of respiration more than doubles. When nighttime temperatures remain above 70°, respiration is not "turned off" but continues, competing aggressively for the carbohydrates produced by daytime photosynthesis. Consequently, by the end of the growing season, the plant does not have the carbohydrate stores necessary for winter survival. Too, it suffers from inhibited chlorophyll synthesis and does not develop second cell walls in its structure. The end result is reduced vigor, weak stunted plants and small foliage (Allan M. Armitage, Herbaceous Perennial Plants, 1989). Thus a plant may not have sufficient reserves to survive its dormancy. Unabated respiration in warm weather saps the reserves of cold-adapted daffodils as well, leading to their eventual demise.

Tazettas that thrive in Israel and the coastal South share characteristics which originated in the arid regions of the Mediterranean basin. These characteristics include low chilling hour requirements and continued growth long after blooming for the development of large bulbs to offset drought conditions. To support the development of such large bulbs, the plants need high light intensity for maximum photosynthesis, warm winter temperatures (i.e., are cold-tender) and well-drained soils to avoid rot problems during dormancy in hot (and wet) conditions.

Month	Soil	Morphology	What's Going On
July August	Soil is hot and dry with intermittent heavy rain	Terminal apical meristem turns to the reproductive state.	Bulbs are dormant.
September	Soil is hot and dry with intermittent heavy rain	A new vegetative apex appears at the axil of the youngest leaf, forming the renewal bud for the next year.	In late September early bloomers start breaking ground.
October	Soils start to cool in early October		Leaves elongate slowly after heavy rain or drenching.
November - January	Soils cooler and wet. More water in soil makes bigger bulbs which make bigger flowers.		Flower bud develops within the bulb
February March	Soils cooler and wet but start warming at end of February.		N. tazetta subsp. tazetta in bloom. After flowering, all tazettas continue to grow both bulb and foliage.
April May	Warmer air temperatures initiate senescence and induce dormancy	Flower differentiation starts. While the bulb is differentiating, the new vegetative apex also appears	Warmer air temperatures are a signal for bulbing and dormancy induction.
June	Full dormancy	The terminal apical meristem turns to the reproductive state	

Chart Modeled on *N. tazetta* subsp. *tazetta*

Narcissus in Israel: Breeding, Research and Production

By Rina Kamenetsky Goldstein and Dorit Sandler Ziv

Institute of Plant Sciences, ARO, the Volcani Center, Bet Dagan, Israel Tel. 972-3-9683511, E-mail: vhrkamen@agri.gov.il

Introduction

For many years, the cultivation of flower bulbs was a prerogative of the developed ornamental horticulture in countries with moderate climates. Four centuries of bulb production, breeding, development of new products and bulb trade led to the clear leadership of the Netherlands in this domain, and a large public sometimes regards Holland as a primary center of bulb origin and diversity. However, as a result of globalization of the horticultural trade, transfer of knowledge and economic progress of the developing countries, bulb production is no longer limited to countries with a moderate climate. The production of bulbs and flowers of high quality in regions with warm climates has become important during the last decade, and is encouraged by relatively cheap land and low labor costs, and the expansion of international trade. With the development of landscape architecture and private gardening in warm-climate regions,

bulbs became popular in the southern parts of the USA and Europe, as well as in Asian countries and Australia.

Species, originated from the Mediterranean and arid regions, do not require chilling for flowering, and therefore are suitable for commercial bulb production in warm-climate areas. Many of the native Mediterranean bulbous plants were introduced into cultivation in Europe and Asia hundreds of years ago. Today these species are successfully grown for flower bulb production. The best known examples are Mediterrenean Narcissus tazetta, Anemone coronaria, Hyacinthus orientalis, Ranunculus asiaticus, and Cyclamen persicum. Ornithogalum dubium, O. thyrsoides, and Bulbinella latifolia are originated from South Africa, Leucocoryne purpurea, Eucrosia aurantiaca from South America, Anigozanthos from Australia.

As a significant center of ornamental horticulture in a warm-climate region, Israel invests considerable efforts in development of flower crops suitable for cultivation under warm conditions, as well as in the development of new technologies for crop cultivation, storage and transportation. Ornamental bulbs are one of the central elements of the ornamental industry in Israel, which serves as a good example of the development of special strategies for warm climates.

One of the most prominent examples of the Israeli floriculture is *Narcissus* 'Paper White'— a group of species and cultivars which was developed in Israel and brought the world-renowned success to the Israeli ornamental industry. While most narcissus are hardy and require low temperatures for flowering, those of



Israeli Paperwhite Narcissus Field (Photo: Asa Flower Bulbs, Bitzaron, Israel)

section Tazettae are non-hardy and have no chilling requirements. Currently, some 150ha (ca. 250 acres) of narcissus are grown commercially in Israel.

Natural Habitats and History of Cultivation of Narcissus in Israel

Two species of Narcissus Tazetta group are found in the native habitats in Israel: *N. tazetta* and *N. serotinus*, but large assortment of interspecies hybrids and cultivars can be found in gardens and professional nurseries.

Narcissus tazetta (common narcissus) with a white perianth and a yellow corona is widespread throughout the Mediterranean region. In the native habitats, blooming of N. tazetta lasts from November to February. This species has significant ecological plasticity. In desert and on dry, rocky

slopes, plants flower in November-December and survive because of their large bulbs. Others occur as large populations of 'swamp narcissus' in a number of flooded sites and flower later. The main difference between the two ecological types is their adaptation to specific environmental conditions; otherwise they are similar in morphology, can easily be crossed, and both can be commercialised. *N. tazetta* is protected in Israel, but populations are still decreasing due to construction and other human activity.



Herut Yahel and Rina Kamenetsky Goldstein, 2010 (Photo: Dorit Sandler Ziv)

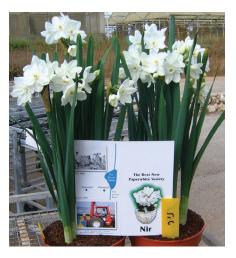
Herut Yahel, born in 1927, studied in the Agricultural High School the Hebrew University in Jerusalem. In 1954, Herut graduated her M.Agr. studies, and in 1956 started her work as a researcher at Agricultural Research Station. In 1958, she joined the Department of Ornamental Hortuculture of the Agricultural Research Organization (ARO, the Volcani Center), where she worked until her retirement in 1992.

Main scientific interests of Herut Yahel included flower bulbs, especially Narcissus and Lilium, their development, propagation and production methods. In the 1960s, she was leading a large breeding program of new narcissus varieties, resulted in the series of new varieties – 'Ziva', 'Noni', 'Yahel', 'Sheleg', 'Omri' and 'Tom'. The most popular variety - 'Ziva' is still leading the international market of Paperwhite narcissi.

Work of Herut on *Lilium longiflorum* resulted in two commercial varieties 'Osnat' and 'Shovav', as well as development of new methods of vegetative propagation. Fruitful collaboration with Dutch breeding companies led to the promotion of new varieties in the international markets, and new varieties such as 'Snow Queen' were registered in The Netherlands. Herut published more than 40 scientific papers, and participated in numerous symposia and growers' meetings, to report the results of the breeding and research programs.

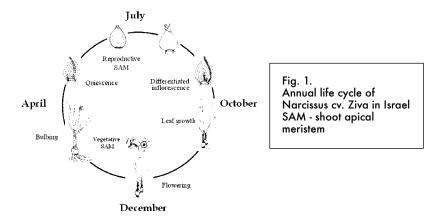
Narcissus serotinus (autumn narcissus) is found in the rocky regions of Northern Israel. Flowering of this rare and endangered species October-December, in occurs before elongation of green leaves, and each stalk bears one or two relatively small white flowers with a delicate fragrance. Although wild populations of N. serotinus are currently diminishing, its genetic variability is preserved by cultivation in the Botanical Gardens in Ierusalem and ARO, The Volcani Center.

One of the most popular ornamental crops in the country, \mathcal{N} . papyraceus (paperwhite), is not found in wild flora of Israel. It is originated from western Mediterranean locales (Greece, Portugal, Morocco), and was introduced to Israel in 1958-1962. This species with small white flowers and a strong, not always pleasant fragrance was included in breeding programs for new commercial varieties. From a large pool of crosses between genotypes of various origins, improved cultivars were selected by Herut Yahel and her group at the Volcani Center, resulting in a series 'Ziva' - well-known trade name in international flower markets. Numerous cultivars of this group - 'Ziva', 'Galilee', 'Noni', 'Yael', 'Sheleg', 'Omri' and 'Tom' are adapted to the Mediterrenean climate and are considered a resounding economic success in



'Nir' 8W-W (*Photo: Dorit Sandler Ziv*)

Israel. Millions of bulbs are exported each year to the USA, Europe and elsewhere. Ten years ago, improved cultivars 'Ariel', 'Nir' and 'Inbal', suitable for cut-flower and pot-plant production were released. flowers and pleasant scent make these cultivars highly desirable to consumers, and they are expected to complement and partially replace older cultivars like 'Ziva'. The introduction of new cultivars and expansion of the international markets called for the development of suitable production protocols and means for flowering manipulations. In the commercial practice, crop quality is determined by the number of inflorescences per bulb, number of flowers per inflorescence, flowering percentage and morphology of the flowers. In 2007-2012, research projects on narcissus physiology and genetic aspects of flowering



were carried out at the Volcani Center in Israel. These projects resulted in several scientific papers, one PhD and one MSc thesis and practical recommendations for production and forcing of new Narcissus cultivars. We hereby provide short results of this research.

Annual Cycle and Flowering Physiology

The Mediterrenean climate with dry and hot summers and mild winters is favorable to many bulbous species. The Israeli flora are blessed by more than 200 geophytes, mostly summer-dormant. Some are hysteranthous, i.e. flowering in a leafless state during autumn, like Urgenia, Pancratium and Scilla species. N. serotinus also belongs to this type: it blooms in October and the leaves elongate in November when flowering is almost finished. A second type – the synanthous habit - is more common, and in these, e.g. N. tazetta, hyacinth or tulip, leaf elongation preceeds flowering in spring. The geophyte habit of these plants helps them to survive drought in summer and respond rapidly to

increasing moisture in autumn.

In a flowering-size bulb of \mathcal{N} . tazetta, terminal and lateral shoots develop once a year (Fig. 1). During summer dormancy (quiescence), the vegetative meristems inside of bulb produce leaves, which slowly elongate. In July, the vegetative terminal meristem in the axil of the youngest leaf turns to the reproductive state and the differentiation of the flowers takes place from July to September. This process consists of several stages (Fig. 2). As the inflorescence begins to differentiate, a new vegetative apex appears at the axil of the youngest leaf. This apex forms the renewal bud for the next year. When temperature decreases, the foliage leaves elongate

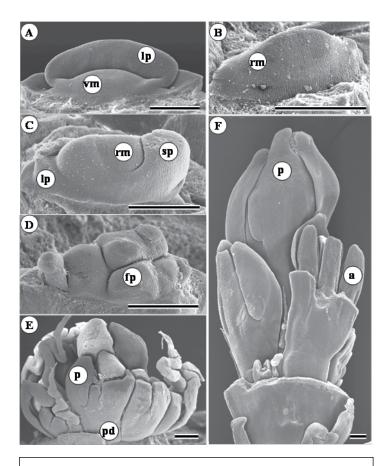


Fig. 2. Scanning electron photomicrographs during the developmental stages of the apical meristem and the growing inflorescence in *Narcissus tazetta*, cv. 'Inbal'. Bar = 0.5 mm (adapted from Cohen et al., 2009).

- A Stage 1: Vegetative meristem (vm) and a differentiating leaf primordium (lp) are visible.
- B Stage 2: Reproductive meristem (rm).
- C Stage 3: Reproductive meristem (rm); spathe primordium (sp) is visible on the periphery of meristem. Leaf primordia removed.
- D Stage 4: Differentiation of flower primordia (fp) in a reproductive meristem; spathe (sp) removed.
- E Stage 5: Differentiation of individual flowers; perianth lobes (p) are visible, pedicels (pd) elongate.
- F Stage 6: Differentiation of flower organs in the individual flowers: perianth lobes (p) and anthers (a) are visible.

in October, after the first rains. Temperatures during the Mediterranean winter average 8°C (46°F) at night and 17°C (63°F) in the day, suiting the plant's flowering in December to February. After flowering, leaves remain green through winter and spring. Warmer spring temperatures provide the signal for bulbing and dormancy induction. In May- June temperatures increase and the leaves wilt and die.

In commercial production in Israel, bulb stocks are planted in October-November, when the soil temperatures decrease, and are harvested in June-July.

Post-harvest storage temperatures of the bulbs during summer significantly affect plant development. After harvest, storage at high temperatures is required for full differentiation of inflorescence and flower. Bulbs stored in July and August at 25°C (77°F) had a faster floral development in comparison to those kept in ambient conditions in an open shed. Hence, 90% of the 'Ariel' bulbs and 100% of 'Inbal'

and 'Ziva' bulbs had fully differentiated inflorescences by the beginning of August and August 15, respectively (Stage 6, Fig. 2), whereas under ambient conditions significantly lower rates of bulbs with advanced inflorescences were counted. At the end of August, all inflorescence buds reached Stage 6, irrespective of genotype and/or storage conditions. To delay flowering, the warm period can be extended to $2^{1/2}-3^{1/2}$ months, and temperature can be increased to $28-32^{\circ}\text{C}$ ($82-90^{\circ}\text{F}$) to slow flower differentiation further.

Following warm storage and prior to planting, the bulbs can be stored at relatively low temperatures. This treatment promotes fasted scape elongation. In our experiments, 'Ziva', 'Inbal' and 'Ariel' were exposed to 9, 13, 25°C (48, 55 or 77°F) or ambient conditions for two weeks prior to planting. Storage at lower temperatures resulted in significant elongation of the inflorescence within the bulb, as compared with bulbs stored either at 25°C or in an open shed (Fig. 3).

After planting in the beginning

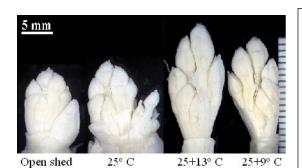


Fig. 3. Effect of two weeks pre-planting storage temperature on intrabulb inflorescence length in 'Ariel'. Following two months storage at 25°C, bulbs were placed in 9 or 13°C cold rooms for two weeks. Storage under ambient conditions in an open shed or in a 25°C chamber served as controls (adapted from Cohen et al., 2009).

of September, early flowering was recorded on October 7-9 in plants after chilling treatment 16–18 days before those from ambient conditions, shortening the time in the glass-house. Plants from the 25°C (77°F) treatment reached anthesis 7–9 days before those from ambient conditions. But too long a cooling period, or too low storage temperatures can decrease the number of florets in the inflorescence and even cause flower abortion. Bulbs stored in an open shed with

no temperature control cannot be planted later than November without a decrease in flower quality.

Knowledge of the temperature requirements of each stage of flower development facilitates both manipulation of flowering time and cut-flower quality. Appropriate scheduling for various cultivars can be established for each bulb forcer. Successful flowering can be achieved over at least a six- to seven-month period, from November to May.

Genetic Regulation of Flowering

For in-depth research of plant molecular genetics, the scientific community agreed to select a few 'model plants', in particular Arabidopsis thaliana, a small Brassicaceous plant that has one of the smallest genomes (relatively low numbers of base-pairs and chromosomes) and therefore makes an ideal subject. The knowledge gained using model plants is now used to research plants of economic However, the genetic importance. regulation of the flowering processes has been studied in only a few species. Bulbous plants represent a very special group with very large genomes and complex physiology, so understanding their molecular mechanisms is a rather challenging task and only a few species, mainly of high economic value, are currently included in molecular research. At present,

onion, garlic, tulip, lily and saffron are being studied by various research groups.

Our research group used tazetta narcissus as a model for genetic studies of flower development in bulbs, and we discovered two genes involved in the flowering process. The expression of these genes was measured in various plant organs during the annual cycle and under different temperature regimes (Fig. 4). The first gene, called NtFT, was not expressed in bulb scales, roots or foliage leaves, but was detected in the apical meristems and leaf primordia. Under high temperatures (25-30°C) (77-86°F) in the dark, NtFT expression occurred simultaneously with the timing of floral induction (leading to floral initiation and change to the reproductive state) (Fig. 5a). This indicated

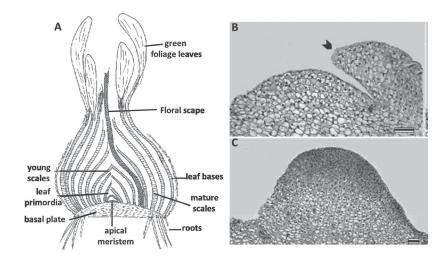


Fig. 4. Schematic representation of bulb structure in April–May. Leaf bases of the foliage leaves function as storage scales after leaf blade senescence. Mature scales were differentiated directly as storage organs within the bulb. The indicated organs were collected for the molecular analysis (adapted from Noy-Porat et al., 2013).

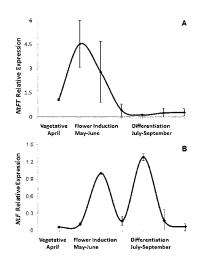


Fig. 5.

Differential expression of NtFT and NLF during florogenesis of Narcissus tazetta cv. Ziva under ambient conditions

(adapted from Noy-Porat et al., 2013).

Relative expression of NtFT at the various stages of florogenesis.

Relative expression of NLF at the various stages of florogenesis.

that floral induction is affected by high temperatures, but is probably not stimulated by day-length or low temperatures.

The expression of the second gene, called NLF, was also observed only in the apical meristem and leaf primordia in the bulb, but its expression did not coincide with that of $\mathcal{N}tFT$ during the meristem's transition to the reproductive state. NLF expression was not induced directly by ambient temperature (Fig. 5b). The lack of NtFT and NLF expression in foliage leaves suggested that the control of flower initiation in tazetta narcissus differs from that in model plants such as Arabidopsis. These findings open up the use of tazetta narcissus as a perennial model plant for studies of flowering.

The results of our research suggest

that floral initiation in Narcissus Tazetta group is probably not stimulated by photoperiodic signal or low temperatures (vernalization). High temperatures at the end of the growth period induce expression of the gene NtFT in leaf primordia and the apical meristem inside the bulb, followed by floral initiation and meristem transition to the reproductive stage. Another flowering gene, NLF might be regulated differently from NtFT, and does not act in the same signalling cascade. *NLF* expression is not induced directly by ambient temperature, and under this pathway might not regulate floral transition but acts in later stages. However, it might regulate floral transition under an endogenous signalling cascade (Fig. 6).

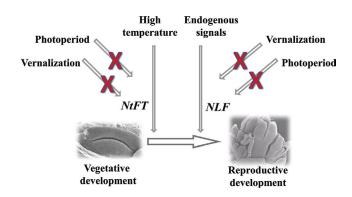


Fig. 6. Proposed scheme for environmental and molecular control of floral transition in Narcissus tazetta (Noy-Porat et al., 2013).

Acknowledgments

The author would like to thank Dr. Tal Noy-Porat, Dr. Moshe Flaishman, Prof. Amram Eshel, Doron Cohen and Yitzak Forer for their contribution in recent research on Israeli Narcissus. We are grateful to Dr. Ori Fragman-Sapir, Jerusalem Botanical Gardens, for information on threatened species.

Further Reading:

Benschop, M., Kamenetsky, R., Le Nard, M., Okubo, H., De Hertogh, A. 2009 The Global Flower Bulb Industry: Production, Utilization and Research *Horticultural Reviews*, 36, pp 1-115

De Hertogh, A.A. and Le Nard, M (Editors). 1993. The Physiology of Flowering Bulbs. Elsevier, Amsterdam.

Kamenetsky, R. and Okubo, H. (Editors). 2012. Ornamental Geophytes: From Basic Science to Sustainable Production. CRC Press, Taylor&Fransis Group, Boca Raton, London, New York

Cohen D., Sandler Ziv D., Fintea C., Ion A., Forer Y., Rabinowitch H. D. and Kamenetsky R. 2009. New varieties of Paperwhite Narcissus: florogenesis and forcing requirements. *Israel Journal of Plant Science* Vol. 57, No. 4, 335-346

Noy-Porat T., Flaishman M. A, Eshel A., Sandler-Ziv D. and R. Kamenetsky (2009) Florogenesis of the Mediterranean geophyte *Narcissus tazetta* and temperature requirements for flower initiation and differentiation. *Scientia Horticulturae*, 120, pp. 138–142.

Noy-Porat, T., Kamenetsky, R., Eshel, A. and Flaishman, M. 2010. Temporal and spatial expression patterns of the leafy homologue *NLF* during florogenesis in *Narcissus tazetta*. Plant Science, 178:105-113

Noy-Porat T., Cohen D., Mathew D., Eshel A., Kamenetsky R. and Flaishman M. A. 2013 Turned on by heat: differential expression of FT and LFY-like genes in *Narcissus tazetta* during floral transition. *Journal of Experimental Botany*, Vol. 64, No. 11, pp. 3273–3284

2016 Daffodil Shows Schedule

Bob Spotts

ADS Awards Committee Chair

February 20-21, 2016, Corona Del Mar, California

Roger's Gardens, 2301 San Joaquin Hills Rd, Corona Del Mar, CA, 92625. Small show. Contact: Steve Hampson, 14081 Brenan Way, Santa Ana, CA, 92705, 714 838-4826, shhampson@earthlink.net

March 5-6, 2016, Livermore, California

Northern California Daffodil Society, Alden Lane Nursery, 981 Alden Lane, Livermore, CA, 94551. Contact: Kirby Fong, 790 Carmel Ave., Livermore, CA, 925 443-3888, kfong@alumni.caltech.edu

March 11, 2016, Dallas, Texas

Texas Daffodil Society, Dallas Arboretum & Botanical Gardens, 8525 Garland Rd, Dallas, TX. Contact: Karla McKenzie, 13325 Private Rd 5155, Prosper, TX 75078, 972 333-4337, Wdm116@gmail.com

March 12, 2016, Roswell, Georgia

Georgia Daffodil Society, Chattahoochee Nature Center, 9135 Willeo Rd., Roswell, GA 30075. Contact: Darrin Ellis-May, darrinsdaffs@gmail.com, 678 634-2282

March 12, 2016, Clinton, Mississippi

Central Mississippi Daffodil, Mississippi College, Alumni Hall Gymnasium, Clinton, MS, 39058. Contact: Loyce Mckenzie, 249 Ingleside Drive, Madison, MS 39110, 601 856-5462 or 601 497-0550 (cell), Lmck-daffodils@aol.com or Ted Snazelle 601 924-7959 (cell), daffyted@bellsouth.net

March 12-13, 2016, Julian, California

Julian Chamber of Commerce, Julian Town Hall in the town center. Contact: Sally Snipes P.O. Box 775, Julian, CA 92036, 760 522-8244, sallyasnipes@gmail.com, or Anne Garcia, beekagarcia@gmail.com (not yet an approved ADS show)

March 19-20, 2016, Murphys, California

Northern California Daffodil Society, Ironstone Vineyards, 1894 Six Mile Road, Murphys, CA. Contact: Bob Spotts, 409 Hazelnut Dr., Oakley, CA 94561, 925 625-5526, robert_spotts@comcast.net

March 19-20, 2016, Pacific Regional Show, Albany, Oregon

Oregon Daffodil Society, Albany Library, 2450 14th Avenue SE, Albany, OR 97321. Contact: Peggy Tigner, 27861 Pine View Rd., Brownsville, OR 97327, 541 466-3429, tigner@centurytel.net or Margaret Pansegrau, 541 730-5829, jmpanse0@hughes.net

March 19-20, 2016, Nashville, Tennessee

Middle Tennessee Daffodil Society, Cheekwood Botanical Garden, 1200 Forrest Park Drive, Nashville, TN 37205. Contact: Becky Fox Matthews, becky@lostfrogs.com, 615-838-1359 (cell)

March 26, 2016, Barco, North Carolina

Northeastern North Carolina Daffodil Society, NC Agriculture Cooperative Extension Facility, 120 Community Way (at US Rt 158 & Avion Pkwy) Barco, NC. Contact: Clay Higgins, P.O. Box 369 Harbinger, NC 27941, 252 491-9268 or 252 207-7992 (cell), clayhiggins@centurylink.net

March 26-27, 2016, Knoxville, Tennessee,

East Tennessee Daffodil Society, Ellington Plant Science Auditorium, University of TN campus. Contact: Lynn Ladd, 1701 Westcliff Dr., Maryville, TN 37803-6301, 865 984-6688, lladd1701@bellsouth.net

March 26-27, 2016, Fortuna, California

Fortuna Garden Club, Fortuna River Lodge Conference Center, 1800 Riverwalk Dr., Fortuna, CA. Contact: Janean Guest 707 498-3241, janean@shovelcreek.com

March 30-31, 2016, Hampton, Virginia

Garden Club of Virginia sponsored by the Huntington Garden Club, the Hampton Roads Convention Center, 1610 Coliseum Drive, Hampton, VA 23666. Contact: Rebecca Fass, 311 Woodroof Road, Newport News, VA 23606, 757 599-3909, rebecca@yahoo.com or BoBo Smith 757 930-2964, scotchy51@verizon.net.

April 2-3, 2016, Memphis, Tennessee

The Mid-South Daffodil Society, Dixon Gallery and Gardens, Winegardner Auditorium, 4339 Park Avenue, Memphis, Tennessee 38117. Contact: Buff Adams, 901 834-0479, mredbirds@gmail.com or Ruthie Taylor, 901 351-4503, ruthie4220@comcast.net.

April 2-3, 2016, Gloucester, Virginia

Gloucester Daffodil Festival Show sponsored by the Gloucester County Daffodil Festival, Botetourt Elementary School, 6361 Main Street, Gloucester, VA 23061. Contact: Petie Matheson, 5951 Five Gables Drive, Gloucester, VA 23061, 804 815-2288, rabbithill@cox.net or Ceci

Brown, 804 693-3663, ccbzanoni@aol.com.

April 2-3, 2016, Richmond, Virginia

Virginia Daffodil Society, Lewis Ginter Botanical Garden, Edu. Bldg., 1800 Lakeside Ave., Richmond, VA 23228. Contact: Skip Ford, 804 200-1346, sford3115@gmail.com

April 2-3, 2016, Princess Anne, Maryland

Somerset County Garden Club, St. Andrew's Episcopal Church Parish Hall, 30513 Washington Street, Princess Anne, MD 21853. Contact: Mary Ann Peterman, 30174 Hudson Corner Road, Marion, MD 21838, 410 623-8473, dallyone@aol.com

April 2-3, 2016, Winchester, Kentucky

2745 Boonesboro Rd., Winchester, KY 40391. Contact: Michael Kuduk, 1110 McCann Dr., Winchester, KY 40391, 859 556-0897, kuduk@earthlink.net or Jim Wilson, 2303 Stonybrook Ct., LaGrange, KY 40031, 502 222-2210, wilsonjh@twc.com

April 2-3, 2016, Portland, Oregon

Oregon Daffodil Society and the Portland chapter of the American Rhododendron Soc., Crystal Springs Rhododendron Garden, SE Woodstock Blvd. and SE 28th Ave. Contact: Steve Vinisky, 21700 SW Chapman Road, Sherwood, OR 97140, 503 625-3379, stevev@cherry-creekdaffodils.com

April 7-9, 2016, ADS National Show, St. Louis, Missouri

Greater St. Louis Daffodil Society, Sheraton Westport Chalet Hotel, 191 Westport Plaza, St. Louis, MO 63146. Contact: Kirby Fong 925 443-3888, kfong@alumni.caltech.edu or Lynn Slackman, 314 570-1136, dslackman@aol.com

April 12, 2016, Upperville, Virginia

Upperville Garden Club, Buchanan Hall, 8649 John S. Mosby Hwy, Upperville, VA. Contact: susan grayson sgrayson5555@gmail.com

April 12-13, 2016, Severna Park, Maryland

Dist. II, Federated Garden Clubs of Maryland, Our Shepherd Lutheran Church, 400 Benfield Road, Severna Park, MD. Contact: Marie Coulter, 342 Prestonfield Lane, Severna Park, MD 21146-1512, 410 647-8971, FrankandMarie@verizon.net or Liz Williams, mliz_williams@verizon.net

April 15-16, 2016, Indianapolis, Indiana

Indiana Daffodil Society, Nature Center at Holliday Park, 6363 Spring Mill Road, Indianapolis, IN 46260. Contact Sue Luken, chemocurl@

hotmail.com, 812-794-3675 or Diane Cockerham, monawatusi@icloud.com, 317-225-6854

April 16-17, 2016, Columbus, Ohio

Central Ohio Daffodil Society, Franklin Park Conservatory, 1777 East Broad St., Columbus, OH 43203. Contact: Phyllis Hess, 3670 E Powell Rd, Lewis Center, OH 43035, 614 882-5720, daffyphyll@hotmail.com

April 16-17, 2016, Devon, Pennsylvania

Delaware Valley Daffodil Society, Jenkins Arboretum & Gardens, 631 Berwyn-Baptist Road, Devon, PA 19333. Contact: Don Caton, 1257 Shadyside Road, Downingtown, PA 19335, 610 269-0794, aldomaca@verizon.net

April 16-17, 2016, Granville, Ohio

Granville Garden Club, Bryn Du Mansion, 537 Jones Road, Granville, OH 43023. Contact: Nancy Eucker, neucker@windstream.net, or Mary K. Piras, mkpiras@gmail.com (not an ADS-approved show)

April 19-20, 2016 Towson, Maryland

Maryland Daffodil Society, The Shops at Kenilworth, 800 Kenilworth Drive, Towson, MD 21204. Contact: Hilles Whedbee, 13626 Falls Road, Cockeysville, MD 21030, 410 771-1341, hwhedbee@ix.netcom.com

April 19-20, 2016, New England Regional Show, Greenwich, Connecticut

Greenwich Daffodil Society, Christ Church, 254 East Putnam Ave., Greenwich, CT, Contact: Susan Schieffelin, 42 Bruce Park Dr., Greenwich, CT, 203 861-4130, sustps@aol.com

April 21-22, 2016, Middle Atlantic Regional Show, Fairfax, Virginia

Washington Daffodil Society, The American Legion Fairfax Post No. 177, 3939 Oak Street, Fairfax, VA 22030. Contact: Mary Ann Barton, 3707 Burrows Ave., Fairfax, VA 22030, 703 273-8641, wbill@bellatlantic.net

April 23, 2016, Pittsburgh, Pennsylvania

The Daffodil and Hosta Society of Western PA with the Allegheny County, Penn State Gardeners Garden Marketplace and Symposium, Shadyside Academy Ice Rink, 423 Fox Chapel Road, Pittsburgh, PA 15238. Contact: Stephen Plato, 415 Canterbury Trail, Cranberry Twp., PA 16066, 412 478-7865, splato46@gmail.com

April 23-24, 2016, Youngstown, Ohio

Fellows Riverside Gardens Daffodil Show, Fellows Riverside Gardens,

Mill Creek MetroParks, 123 McKinley Ave., Youngstown, OH 44509. Contact: Norma Roden, 330 740-7116 x 206, norma@millcreekmetroparks. org

April 23-24. 2016, Chambersburg, Pennsylvania

Chambersburg Garden Club and Tuscarora Daffodil Group, First Lutheran Church, 43 West Washington St., Chambersburg, PA 17201. Contact: Richard Ezell, 334 Baltimore St., Gettysburg, PA 17325, 717 334-2304, brownezell@earthlink.net or Mitch Carney 301 432-4728, mca1062357@aol.com

April 23-24, 2016, Washington, Pennsylvania

Western Pennsylvania Daffodil Growers South, Joe Hamm's Barn, 99 Maple Road, Buffalo Village, Washington, PA 15301. Contact: Joe Hamm, 724 345-3762, joehamm1@juno.com

April 30-May 1, 2016, Glencoe, Illinois

Midwest Daffodil Society, Chicago Botanical Garden, 1000 Lake Cook Road, Glencoe, Illinois 60022. Contact: George Dorner, 20753 Buffalo Run, Kildeer, Illinois 60047, 847 438-5309, george@dorners.net

April 30-May 1, 2016, Nantucket, Massachusetts

Nantucket Garden Club, Bartlett's Ocean View Farm, 33 Bartlett Farm Road, Nantucket, MA 02554. Contact: Bee Gonnella 508 221-1883, b_gonnella@hotmail.com

April 30-May 1, 2016, Beavercreek, Ohio

Southwest Ohio Daffodil Society, venue to be determined. Contact: Linda Wallpe, 513 221-4140, lwallpe@gmail.com

May 3-4, Boylston, Massachusetts

Seven States Daffodil Society, Tower Hill Botanic Garden, 11 French Drive, Boylston, MA 01505. Contact: Dianne Mrak, 603 502-1672, diannemrak@aol.com

May 7, 2016, Sheboygan, Wisconsin

Town and Country Garden Club and Midwest Daffodil Society, Maywood Environmental Park Ecology Center, 3615 Mueller Road, Sheboygan, WI 53083. Contact: Ray Rogers, 920 889-3466, ray-rorayro185@gmail.com

May 14-15, 2016, Minneapolis, Minnesota

Daffodil Society of Minnesota, Bachman's Heritage Room, 6010 Lyndale Ave. South, Minneapolis, MN 55419. Contact: Margaret Macneale, 612 581-3426 (cell), macdaff1@gmail.com (home) or mmacneale@jfcsmpls.org



Photo by Becky Fox Matthews

2016 Wister Award Winner

'Geranium' is a rugged standout in the garden. It has strong tall stems, very white petals and a bright orange corona with multiple blooms on a single stem. This combination makes it a bright beacon on dreary days or a sparkling coquette on sunny spring days. It grows and flourishes in a variety of geographic locations and doesn't sulk in the shade. 'Geranium' received very high marks in multi-year records kept by MOBOT (Missouri Botanical Garden) on both bloom and bulb count. It can be shown in Historic classes, but perhaps is better left in the garden or picked and brought inside since the fragrance is heavenly. 'Geranium' blooms late mid-season, and was bred by J.B. van der Schoot of the Netherlands. It is already highly decorated, having received the AGM 1995, *FCC(p) 1977, *AM(p) 1975, *FCC(g) 1952, and AM Haarlem 1931, and we are pleased to add one more award in her honor, the 2016 ADS Wister Award.

Statement of Ownership, Management and Circulation

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As of the 1 October 2015 filing date, *The Daffodil Journal* is published quarterly at 3670 East Powell Road, Lewis Center, OH 43035-9530, with general offices of the publisher at the same address. The name and address of the publisher is the American Daffodill Society, Inc., 3670 East Powell Rd, Lewis Center, OH 43035-9530; Editor, Greg Freeman, 509 Old Wagon Rd., Walhalla, SC, 29691-5821. Owner of the publication is the American Daffodil Society, Inc.

There are no bondholders, stockholders, or mortgagees.

The purpose, function, and nonprofit status of this organization, and the exempt status for federal income tax purposes, has not changed during the preceding 12 months.

Total number of copies printed (average for preceding 9 months), 1116, paid circulation 995; sales through dealers and carriers, street vendors and counter sales, 0; free distribution, 6; total number of copies distributed, 1001. The percent paid and/or requested circulation is 99%.

I certify that the statements made by me are correct and complete.

Phyllis L. Hess, Executive Director

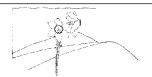
THE DAFFODIL SOCIETY



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.

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For additional details visit our website at www.TheDaffodilSociety.com



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Actions of the Board of Directors, October 3, 2015

The ADS Board of Directors met in Bloomington, Minnesota, on October 3, 2015, with 37 people present. Reports of Officers, Regional Vice Presidents, Standing Committees, Special Appointments Committees and Ad Hoc Committees were posted on the Members Only page of the ADS website in advance of the meeting and may be viewed on that site.

Prior to the formal Board meeting, the Board and other ADS members participated in an active visioning and strategic planning workshop led by Robert Darling, professional facilitator and ADS Photography Chair.

President Harold Koopowitz opened the meeting by thanking all who participated in the workshop. He reported that the Executive Committee approved eliminating the Life Membership category, though those who are already Life Members will continue to receive this benefit.

The minutes of the spring Board meetings were approved.

Treasurer Mary Darling reviewed the ADS finances, noting that 2015 income and expenses are close to budget with a smaller deficit projected than expected. She presented the details of the budget for 2016 which was approved.

Suzy Wert announced that this year's Wister Award recipient is 'Geranium' 8W-O. Members voted between 'Tuscarora' 1Y-Y and 'American Classic' 2Y-WYY for the Pannill Award. The winner will be announced at the World Convention in April.

The Board approved a motion to remove the word 'standard' from the definition of the ADS Small Growers Ribbon so that it reads "SMALL GROW-ERS RIBBON- for the best cultivar or species exhibited in the Horticulture Division by a small grower. A small grower is defined as a person growing 50 or fewer cultivars and/or species. The Show Committee may impose a limit lower than 50 for this award if desired." Beginning with the 2016 show season, the Small Growers Ribbon may thus be awarded for a miniature or standard entry. Show Chairmen may choose to add miniatures classes to the Small Growers Section.

The Board also approved the Indiana Daffodil Society's sponsoring an experimental Fall Daffodil Show during the weekend of the November 2016 Fall Meeting of the ADS Board. This Show will be under the oversight of the ADS Awards Chairman. It will be open to all exhibitors, not just the Board.

A motion arising from the workshop to establish categories of Sustaining Members with higher dues donations was referred for more study.

Kirby Fong, Show Chair for the World Convention, announced that there will be a special class at the show for a collection of five, each from a different country. Lynn Slackman encouraged sponsorship donations for the World Convention

Janet G. Hickman, ADS Secretary

Judges' Forum

ADS Student Judges

Three ADS judging school students from Texas have completed and passed two courses, and are now Student Judges. They are Leigh Booth, Judy Brewster and Lisa Egner. Congratulations to all.

Following are judging schools scheduled for 2016:

School I ADS National Convention & Show, St. Louis. Wednesday, April 6, 2016

Contact Cathy Felton, ADS Judging Schools Chairman camafelton@comcast.net or 978-729-8990

School II Dallas, Texas

Saturday, March 12, 2016. Contact Mary Ann Moreland *geray@aol.com* or 214-801-6777

School I

In conjunction with Garden Club of Virginia Flower Show

Tuesday, March 29, 2016. Contact Janet Hickman hickmanderm@aol.com or 434-384-0314

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ADS Approved List of Miniature Cultivars, October 2015

'Alec Gray'	1W-W(v)	'Cupid'	12 Y-Y
'Angel o' Music	5Y-Y	'Curlylocks'	7Y-Y
'Angel's Breath'	5Y-Y	'Cyclataz'	12Y-O
'Angel's Whisper' 5Y-Y		'Dainty Monique'	
'Apollo Gold'	10 Y-Y	5Y-Y	
'April Tears'	5Y-Y	'Dandubar'	7Y-Y
'Arrival'	1W-Y	'Demure'	7W-Y
'Atlas Gold'	10Y-Y	'Diamond Ring'	10 Y-Y
'Atom'	6Y-Y	'Douglasbank'	1Y-Y
'Aviva'	1W-W	'Drop o' Gold'	5Y-Y
'Baby Boomer'	7Y-Y	'Edgedin Gold'	7W/Y-Y
'Baby Moon'	7Y-Y	'Elfhorn' '10Y-Y	7
'Baby Star'	7Y-Y	'Elka'	1W-W (v)
'Bagatelle'	1Y-Y	'Endearing'	7Y/W-Y
'Beejay'	6Y-Y	'English Garden'	7Y-Y
'Bebop'	7Y-Y	'Exit'	3W-W
'Bird Flight'	6Y-GYY	'Eye Spy'	10W-W
'Bird Music'	1Y-Y	'Eystettensis'	4Y-Y
'Blynken'	6Y-Y	'Fairy Chimes'	5Y-Y
'Bow Bells'	5Y-Y	'Fenben'	7Y-Y
'Bumble Bee'	1Y-Y	'Ferdie'	6Y-Y
'Camborne'	1W-W(v)	'First Kiss'	6Y-Y
'Canaliculatus'	8W-Y	'Flomay' 7W-W	WP
'Candlepower'	1W-W (v)	'Flore Pleno'	4Y-Y
'Cedric Morris'	1Y-Y	'Flute'	6Y-Y
'Chamber Music'	6Y-Y	'Flyaway'	12 Y-Y
'Chappie'	7Y-O'	'Fresh Season'	10 Y-Y
'Charles Warren'	1Y-Y	'Fyno'	10W-W
'Chit Chat'	7Y-Y	'Gadget'	10 Y-Y
'Chiva'	7Y-Y	'Galligaskins'	10 Y-Y
'Clare'	7Y-Y	'Gambas'	1 Y-Y
'Coo'	12 Y-Y	'Gipsy Queen'	1YYW-
'Cornish Cream'	10Y-Y	WW (v)	
'Crevette'	8W-O	'Golden Quince'	12 Y- Y

'Green Ginger'	7Y-Y	'Medway Gold'	7Y-Y
'Gumnut'	6Y-Y	'Mickey'	6Y-Y
'Haiku'	9W-GYR	'Midget'	1Y-Y
'Hawera'	5Y-Y	'Minnie'	6Y-Y
'Heidi'	6Y-Y	'Minnow'	8W-Y (v)
'Heidi's Sister'	6Y-Y	'Miss Klein'	7 Y-Y* **
'Hors d'Oeuvre'	1Y-Y	'Mite'	6Y-Y
'Hummingbird'	6Y-Y	'Mitimoto'	10W-Y
'Hy-Brasil'	7Y-Y	'Mitzy'	6W-W (v)
'Icicle'	5W-W	'Moncorvo'	7Y-Y
'Idol'	7Y-Y	'Mortie'	6Y-Y
'Itsy Bitsy Splitsy'	11Y-O	'Muslin'	10W-W
'Jessamy'	10W-W	'Mustardseed'	2Y-Y
'Jim Ladd'	2Y-Y	'Nanty'	6Y-Y
'Joy Bishop'	10Y-Y	'New Charm'	10 Y- Y
'Julia Jane'	10 Y- Y	'Niade'	2Y-Y
'Jumblie'	12 Y-O	'Northam'	2W-W (v)
'Junior Miss'	12W-Y	'Norwester'	6Y-Y
'Kawa Kawa'	12 Y-Y	'Oakwood Sprite'	1 Y-Y
'Kehelland'	4Y-Y	'Oakwood Tyke'	1W-W
'Kholmes'	10W-W	'Odile'	7Y-O
'Kibitzer'	6Y-Y	'Odaratus'	8W-Y
'Kidling'	7Y-Y	'Opening Bid'	6Y-Y
'Laura'	5W-W (v)	'Orclus'	10W-W
'Likely Lad'	1Y-Y	'Pacific Coast'	8Y-Y
'Lilliput'	1W-Y	'Pakotai'	12 Y-Y
'Little Beauty'	1W-Y	'Pango'	8W-Y
'Little Becky'	12 Y-Y	'Paula Cottell'	3W-GWW
'Little Bell'	5Y-Y	'Peaseblossom'	7Y-Y
'Little Cuda'	6Y-Y	'Pequenita'	7Y-Y
'Little Darling'	1Y-Y	'Petit Beurre'	1 Y-Y
'Little Emma'	12 Y-Y	'Piccolo'	1 Y-Y
'Little Flik'	12 Y-Y	'Picoblanco'	2W-W
'Little Gem'	1Y-Y	'Pixie'	7Y-Y
'Little Kibler'	9W-GYR	'Pixie's Sister'	7Y-Y
'Little Lass'	5W-W	'Platinum Legend'	6W-W
'Little Missus'	7Y-Y	'Pledge'	1W-W (v)
'Little Oliver'	7Y-Y	'Poplin'	10W-W
'Little Rusky'	7Y-GYO	'Quince'	12 Y-Y
'Little Sentry'	7Y-Y	'Raindrop'	5W-W
'Little Star'	6Y-Y	'Rikki'	7W-Y
'Little Sunshine'	6Y-Y	'Rockery White'	1W-W
'Loyce'	7Y-YYO	'Rosaline Murphy'	2Y-Y
'Mary Plumstead'	5 Y- Y	'Roundita'	1Y-Y

'Rupert'	1W-Y	'Sunny Maiden'	6Y-GYY
'Sabrosa'	7Y-Y	'Sunny Sister'	6Y-Y
'Sassy'	12 Y-Y	'Suzy Q'	10Y-Y***
'Second Fiddle'	6W-Y	'Swagger'	6W-W (v)
'Segovia'	3W-Y	'Taffeta'	10W-W
'Sewanee'	2W-Y	'Tanagra'	1Y-Y
'Shaw's Gift' 9W-G	YR***	'Tarlatan'	10W-W
'Shaw's Legacy' 9W-G	YO***	'Tête-à-Tête'	12 Y-Y
'Shebeen'	6Y-Y	'The Dansart'	6Y-Y
'Shillingstone'	8W-W	'Three of Diamonds'	3W-GWO
'Shrew'	8W-Y	'Tiffany'	10Y-Y
'Shrimp'	5Y-Y	'Tiny Bubbles'	12 Y-Y
'Sir Echo'	1Y-W(v)	'Tosca'	1W-Y
'Skelmersdale Gold'	1Y-Y	'Towai'	12 Y-Y
'Small Talk'	1Y-Y	'Treble Chance'	10 Y-Y
'Smarple'	10W-W	'Twinkle Boy'	12 Y-Y
'Smidgen'	1Y-Y	'Wee Bee'	1Y-Y
'Snipe'	6W-W (v)	'Wideawake'	7Y-Y
'Snook'	6Y-Y	'Wilma'	6Y-Y
'Spider'	6Y-Y	'Woodstar'	5Y-YWW (v)
'Spoirot'	10W-W	'Wren'	4Y-Y
'Spring Overture'	6Y-Y	'Wyandot'	1Y-Y
'Spring Serenade'	5Y-Y	'Wynken'	7W-W
'Sprite'	1W-W (v)	'Xit'	3W-W
'Stafford'	7Y-YYO	'Yellow Fever'	7Y-Y
'Star Music'	6Y-Y	'Yellow Pearl'	7Y-Y
'Star Song'	6Y-Y	'Yellow Pet'	10 Y-Y
'Stella Turk'	6Y-Y	'Yellow Xit'	3W-Y
'Stocken'	7Y-Y	'Yimkin'	2Y-Y
'Sun Disc'	7Y-Y	'Zeals'	8W-Y
'Sundial'	7Y-Y	'Zip'	6Y-Y

***Denotes new addition for 2015



Want to Learn more about lilies?

Join the North American Lily Society! Membership includes four full color Quarterly Bulletins and a color hard bound Yearbook loaded with information about lilies.

Dues are just \$20 per year for US members. For more information and to join, visit www.lilies.org.

NALS, Executive Secretary, PO Box W, Bonners Ferry, ID 83805

Changes to Classification

'Frontier Halo', change color code to Y-Y
'Peseta' change color code to W-Y
'Hello Georgeous' alter name to 'Hello Gorgeous'
'Laura G', change to Division 2
'Dream Team', change color code to Y-O
'Francisca Drake', add to checklist as unregistered,
and Syn. of 'Franciscus Drake'
'Franciscus Drake', change color code to WWY-YOO
'Mrs. Barton', add color code, 2 W-YYO
'Orono', change color code to W-Y
'Sunray', change color code to Y-YOO
'Waneta', change color code to W-P

U.S. Registrations, 2014 - 2015

RAISER	NAMES REGISTERED
William Bender	'Clown's Ruff' 11a Y-Y (David Burdick, Registrant)
Walter J.M. Blom	'Courtyard Gold' 6 Y-Y, 'Golden Winslow' 6 Y-Y, 'White Heaven' 10 W-W
Larry Force	'Strawberry Ruffles' 3 W-GYR
Mary Lou Gripshover	'Eden Park' 2 W-Y, 'Olentangy' 3 W-GYY
B. C. Heath	'Golden Compass' 7 Y-Y (C.G. van den Berg & Zn., Registrant)
Brent and Becky Heath	'Green Eyed Lady' 3 W-GWW
Dr. John Reed	'Adalee' 6 Y-Y, 'Florida Orange' 2 W-O, 'Lemon Creek' 3 Y-GGY, 'Oakwood Glen' 2 O-O, 'Red Wine' 3 W-R, 'Rural King' 1 Y-P
Eve Robertson	'Dressed for Dinner' 2 Y-YYO (David Burdick, Registrant)
Robert Spotts	'Willie Mae' 8 Y-O
Charles Wheatley	'Sunshine Lollipop' 2 YYW-Y (Suzy Wert, Registrant)

2016 Nominees for ADS Offices

The following individuals have been nominated by the National Nominating Committee, and will stand for election at the ADS Membership Meeting during the 2016 ADS Convention in Saint Louis. (Exception: The incoming Regional Vice President and Regional Director from the Midwest Region were *elected* by vote of the membership in that Region and are exempt from affirmation by the ADS membership.)

President: Michael Berrigan, Minnesota

First Vice-President: Nancy Tackett, California Second Vice President: Fredrica Lawlor, Ohio

Director at Large (2016-2019 term): Glenna Graves, Virginia

Regional Vice Presidents (2016-2017 term):

Central Region: Kathy Julius, Minnesota (3rd term)

 ${\bf Middle\ Atlantic\ Region:}\ Julie\ Minch,\ Maryland\ (3rd\ term)$

Midwest Region: Michael Kuduk, Kentucky (1st term)

New England Region: Peter Timms, Massachusetts (3rd term) Northeast Region: Rebecca Brown, Pennsylvania (1st term)

Pacific Region: Jon Kawaguchi, California (1st term)

Southeast Region: Andrew Buhler, Jr., Tennessee (2nd term)
Southern Region: Annette Parker Kahn, Louisiana (1st term)

Regional Directors (2016-2019 term)

Central Region: Beth Holbrooke, Missouri

Middle Atlantic Region: Pat Parker, Maryland

Midwest Region: Betty Kealiher, Ohio

New England Region: Gabrielle Hall, Connecticut Northeast Region: Barbara Peshkin, Pennsylvania

Pacific Region: Steve Hampson, California

Southeast Region: Lynn Ladd, Tennessee Southern Region: Keith Kridler, Texas

National Nominating Committee (2016-2017 term)

Central Region: George Dorner, Illinois (1st term)

Middle Atlantic Region: Karen Cogar, Virginia (2nd term)

Midwest Region: Tom Stettner, Ohio (2nd term)

New England Region: Sally Nash, Massachusetts (2nd term) Northeast Region: Richard Ezell, Pennsylvania (2nd term) Pacific Region: Harold Koopowitz, California (1st term) Southeast Region: Bonnie Campbell, Georgia (2nd term) Southern Region: Loyce McKenzie, Mississippi (2nd term)

Respectfully submitted,

Bob Spotts, Chairman 2015 National Nominating Committee





Join us for the 2016 World Daffodil Convention

St. Louis, Missouri, USA 06-10 April 2016

- Engage in educational opportunities, listen to thought-provoking presentations, and have fun with regional and daffodil-themed events.
- Observe and participate in a fabulous on-site daffodil show including horticulture, artistic design, and photography sections.
- Visit the world-renowned Missouri Botanical Garden, a National Historic Landmark and the oldest public botanical garden in the United States. Tour the grounds and visit the Garden's Peter H. Raven Library, one of the largest botanical libraries in the world.
- Tour the historically significant Bellefontaine Cemetery and Arboretum,
 St. Louis' 166 year-old grand cemetery featuring magnificent architectural finery and a Level II accredited arboretum.
- Visit Haeffner Farm's extensive daffodil collection of over 2,500 varieties and tour historic downtown Hermann, Missouri for a day and evening of fun in Missouri's wine country.
- Visit PHS Daffodils in Flora, Illinois where numerous varieties are grown for small scale commercial production, breeding, and evaluation, and view the family's award-winning collection of antique farm implements.
- Visit the historic naturalized plantings of daffodils at Shaw Nature Reserve in Gray Summit, Missouri, a showpiece for native Missouri plants and Ozark ecosystem restoration.

Registration, hotel reservations, and more can be found at http://stldaffodilclub.org/wdc2016/

2016 World Daffodil Convention Registration

Wednesday evening, 06 April through Sunday evening, 10 April St. Louis, Missouri, USA

(Please complete a separate form for each attendee.)

Name:	
Street address:	
City, state, country, zip/postal code:	
E-mail (for confirmation):	
Telephone:	
Name or nickname for nametag:	
To help us plan the convention, please check all	that apply:
☐ This is my first ADS convention	I plan to exhibit photos (About how many?)
I plan to exhibit blooms	I have special dietary needs (Please specify below.)
l'II mentor first-timers	, , , ,
Describe any special dietary needs or preference (e.g. Vegetarian, Gluten Free, Allergies, etc.)	es:
The 2016 World Daffodil Convention registration	on fee includes the following:
•	•
 Dinner with Awards Banquet on Thursday Lunch and dinner with Annual Meeting in 	
Lunch and dinner on Saturday	Termanii on i maay
Lunch in Flora, and dinner on Sunday	
(Please note: Each meal will meet any spec	cial dietary needs listed above.)
Entry to symposium sessions on Saturday	,
World Convention daffodil show	
Bus tours to Hermann on Friday, to Misso	uri Botanical Garden on Saturday,
and to Flora on Sunday	
Registration Fee:	
Postmarked on or before 01 March	\$287
Postmarked after 01 March (or paid at the do	
Optional items available are:	
A convention program session as Judging Ref	resher\$5
Tour of Missouri Botanical Garden Herbariur	
(Please note: This tour is only open to the first	st 40 registrants.)

Tour of Bellefontaine Cemetery on Thursday morning		۰
(Please note: This tour is only open to the first 55 registrants.)		
Tour of Shaw Nature Reserve on Monday	\$35	_
(Twenty registrants required for tour.)		
À la carte pricing for friends, family, and guests not registered for conven	tion activities:	
Awards Dinner only on Thursday evening	\$55	
Lunch and tour only at Haeffner Daffodil Farm		
Dinner only at Hermannhof in Hermann	\$45	
Lunch only at hotel on Saturday	\$30	
Dinner only on Saturday evening		
Lunch and tour only at PHS Daffodils		
Dinner only on Sunday evening		
Additional donation to the 2016 World Daffodil Convention (optional)		
TOTAL ENCLOSED	\$	
Please indicate payment method: Check & Mail Credit Card (ADS V	Vebstore)	

Please send your completed registration forms and checks payable to:

"American Daffodil Society" Bill Carter, 2016 World Daffodil Convention Registrar 6800 Daffodil Terrace Ferndale, WA 98248 USA

OR

Pay online at the ADS Webstore

http://stores.daffodilusastore.org/2016-world-daffodil-convention-st-louis/ and email your completed registration form to DaffodilBill@outlook.com



Sheraton Westport Chalet Hotel 191 Westport Plaza, St. Louis, MO 63146 Telephone: (314) 878-1500

Reservations can be made by calling toll free 1-800-325-3535 or click on the HOTEL RESERVATION button found throughout our website at http://stldaffodilclub.org/wdc2016/hotel.html

If you plan to call for reservations, mention "2016 World Daffodil Convention" for a special group rate of \$119 US Dollars per night. Our group rate is available until March 14, 2016.

The group rate also applies 3 days before and 3 days after the convention dates.

If you are arriving by air, the Sheraton Westport offers free Airport Transportation to our hotel. Just call the hotel at (314) 878-1500 to have them pick you up. Car rentals are available at the airport, or the Sheraton also offers a Car Rental Desk at the hotel.

The hotel also offers complimentary free covered and uncovered parking facilities for guests arriving by automobile.

Welcome to the 2016 World Daffodil Convention!

The American Daffodil Society (ADS) is extending an invitation for you to join us in St Louis, Missouri, USA from 06-10 April for the 10th World Daffodil Convention. This is an international event that is held every four years to bring together daffodil enthusiasts from around the world. Every sixteen years the American Daffodil Society has the honor of hosting the prestigious World Daffodil Convention. This convention is an opportunity to make new friends and renew old friendships among the worldwide daffodil community.

The 2016 World Daffodil Convention will be held at the Sheraton Westport Chalet Hotel, which offers complimentary shuttle service to and from Lambert International Airport (which also connects to the St. Louis Metrolink light-rail system), as well as complimentary free covered and uncovered parking facilities. The hotel has newly renovated rooms, excellent meeting and exhibit facilities, and a commitment to first-class service. Hotel reservations have already begun—don't miss the opportunity to make your reservation at our special group rate.

Judging School I, Convention Registration, and Staging of Flowers

For Judging School I, plan to arrive on the evening of Tuesday, 05 April as Judging School I begins early Wednesday morning. Contact Catherine Felton, ADS Judging Schools Chairman, at camafelton@comcast.net for more information. The main daffodil show staging begins at 2:00 p.m. on Wednesday, 06 April and continues until 9:00 a.m. on Thursday, 07 April.

Show us your design skills in the "Show Me Daffodils" artistic design division of the daffodil show. We have seven creative classes to choose from. Let our design team help you bring out your creative spirit. Artistic designs may be entered from 2:00 p.m. – 11:00 p.m. on Wednesday, 06 April and from 7:00 a.m. – 9:00 a.m. on Thursday, 07 April.

Have an eye for photography? During the winter, review your archive

of photos and plan to exhibit them in one of our seven photography classes. We encourage you to exhibit in our new "Daffodils through the Gateway" class which asks photographers to celebrate daffodils through gateways, arches, or entrances. Photography exhibits will be accepted until 9:00 p.m. on Wednesday, 06 April.



We will also be hosting a welcome reception for our first-time attendees and international guests. After selecting refreshments, we will take a tour of the daffodil show staging area to review flowers and to learn about the finer points of flower staging. Be sure to let us know if this is your first convention or you are willing to be a mentor. We wish to provide each first-time guest with a mentor for the convention.

Show Judging and Thursday's Optional Tours to the Missouri Botanical Garden Library and Bellefontaine Cemetery and Arboretum

Daffodil Show judging for the horticulture division begins at 10am on Thursday morning, 07 April. Be sure to check in with Bob Spotts and Richard Ezell for judging and clerking instructions.

If you are not judging or clerking the daffodil show on Thursday morning, there are two optional tours available for our guests.

Our first optional tour is a visit to the Missouri Botanical Garden's Peter H. Raven Library. The Library began as a small collection of horticultural books owned by the Garden's founder, Henry Shaw, in the 1800s. Shaw augmented the collection through his friendships with leading 19th century naturalists, botanists and other scientists. Today, the Library is globally recognized as one of the most comprehensive libraries of botanical literature in the world.



In 2011, the library was formally dedicated in honor of Dr. Peter Raven's legacy in science, conservation and botany by the Missouri Botanical Garden's Board of Trustees. The dedication memorializes the tenure of Raven who transformed the Missouri Botanical Garden in his nearly four decades as president and director.

The Library is a research facility, and its holdings do not circulate. Those interested in using the collection are encouraged to make an appointment. Also, the Library's Imaging Lab has digitized more than 3,300 volumes—approximately 1.5 million pages—and made them available to researchers around the world at the Biodiversity Heritage Library.

The collections are divided into two major components: the general collection and special collection. The special collection includes a vast collection of rare books and the Garden's Archives, while the general collection includes 200,000 volumes of monographs and periodicals and more than 3,000 volumes of reference works.

Our second optional tour is a visit to the 314-acre Bellefontaine Cemetery and Arboretum. Established in 1849, Bellefontaine Cemetery was St. Louis' first rural cemetery. In addition to being a cemetery, Bellefontaine has since become a Level II Accredited Arboretum, and is listed in the Morton Register of Arboreta. The Arboretum supports and

enhances the cemetery as a place of perpetual commemoration, as well as a gorgeous garden that is both inspirational and of historic significance. Bellefontaine has a diverse horticultural collection, and is an important natural sanctuary and habitat for wildlife in an



urban environment. It is the only accredited arboretum in St. Louis. Grand, ornate mausoleums and monuments throughout the cemetery memorialize famous individuals buried within, such as General William Clark, William Burroughs, Adolphus and Lily Busch, Frank Tate, George Engelmann, Irma Rombauer, and many more.

Show Opening and Thursday's Events for All

After the judging is completed, the daffodil show will open to the public. Relax and enjoy a fabulous daffodil show comprised of horticulture, artistic design, and photography sections. Our show is free to the public, so please invite and encourage your friends to visit.

The ADS's outgoing board meeting will be held during Thursday afternoon, and dinner will include the Awards Ceremony for the daffodil show.

Friday's Tours of Haeffner Farm and Hermann, the Annual Bulb Auction, and the Annual Meeting of the American Daffodil Society

On Friday we will visit the historic town of Hermann, Missouri and tour the private daffodil collection of Cindy and Joy Haeffner.

Founded by German settlers in 1842 along the steep banks of the

Missouri River, Hermann's oldworld charm attracts visitors today in search of the quiet pleasures of an earlier era. Much of downtown is a historic district where brick homes from the 1800s hug the sidewalks in the traditional German style. More than 150 buildings are on the National Historic Register of Historic Places.

The Haeffner Farm is located in the foothills that surround Hermann where Cindy and her



husband, Joy, have lived for 35 years. Both work for Money Concepts Capital Corporation, and both actively raise cattle farms in a progressive, conservation-minded manner.



As it often does, daffodil growing and collecting began rather innocently for Cindy. In the early 1980s, a family friend introduced her to daffodils that were fragrant, such as 'Cheerfulness', and she was entranced. She officially began showing daffodils in 2004, and won her first national

award, the Olive Lee Trophy Award, for 'Avalanche' at the 2005 ADS convention in St. Louis. At the 2009 ADS convention in Chicago, she won the English Award and the Silver Ribbon. As the years have progressed, Cindy now grows approximately 2,500 varieties and in 2009 she began hybridizing.

After daffodil tours and lunch at the Haeffner Farm you will have the opportunity to stroll and shop the historic Hermann riverfront and sample beverages from the local vineyards.

In the late afternoon, we will gather at the Inn at Hermannhof Festhalle to participate in a rousing daffodil bulb auction followed by a delicious dinner. The ADS Annual Meeting will follow, and for the evening's entertainment you will have an opportunity to demonstrate your polka skills as the Loehnig German Band provides a festive finale to the day.

Saturday's Educational Symposium, the Missouri Botanical Garden Tour, and the Dinner Keynote

On Saturday morning, relax and learn as you enjoy our educational symposium. Our sessions will cover the topics of species and conservation, miniature daffodils, historic and classic daffodils, and daffodils from around the world. These sessions will be led by a global body of expert speakers addressing their areas of comprehensive knowledge. (A full lineup of the speakers and their topics will be available in the March 2016 issue of *The Daffodil Journal*.)

After lunch we will spend the afternoon at the Missouri Botanical Garden, the oldest public botanical garden in the United States and a United States National Landmark. This garden is a leader in botanical research, science, and conservation. It is comprised of 79 acres of horticultural beauty that includes an extensive bulb collection, one of the largest Japanese Gardens outside of Japan, and large collections of rare and endangered flora. For more details and to plan your route of exploration, please visit www.mobot.org.

Saturday's keynote dinner speaker is Eric Breed, from Lisse, the Netherlands. Eric was born in 1964, quite literally into a world filled with flower bulbs: Eric's parents, Kees and (the late) Fia Breed, hold what may be the largest collection of narcissi, tulips, and colchicums in the world; famed bulb expert Wim Lemmers is his uncle; and his grandfather's former growing fields, Zandvliet, are now part of a world-renowned park that attracts over one million visitors annually to see the flower bulb displays—we know this park as Keukenhof.



Eric received his formal horticultural training at the State Horticultural School in Lisse (alongside his classmate, friend, and eventual colleague, Carlos van der Veek). From 1983-1988, Eric's first job in the commercial flower bulb industry was in the United States as a sales representative and buyer for van Eeden Brothers, a subsidiary of Konijnenburg & Mark (the Dutch flower bulb powerhouse that produced,

among others, 'Ice Follies'). Notable companies to whom Eric supplied bulbs were John Scheepers, Inc., van Engelen, White Flower Farm, The Daffodil Mart, and Charles Mueller Bulb Company. During his time in the States, Eric also attended his first ADS shows in Valley Forge, Greenwich, and in New Jersey. After returning to the Netherlands, Eric worked at Hobaho from 1988-2007 as a broker connecting growers with exporters, and from 1997 onward he also managed Remarkable Tulips and Markglory breeding companies, introducing new flower bulb varieties into the world market. Since 2008, Eric has worked on a part-time basis as client service director for Fluwel, owned by Carlos van der Veek. Eric's role at Fluwel is providing client interface for United States mail order customers like John Scheepers, Inc., van Engelen, White Flower Farm, Old House Gardens, and Colorblends, and he also provides support for Fluwel's European webshop market.

When not at Fluwel, Eric is behind the camera for his photography business, Eric Breed Tulip Pictures (www.tulippictures.eu), including freelance photography for Visions Pictures and Photography, the largest horticultural photo stock company in the Netherlands. Eric is a chairman of the Royal General Bulb Growers (KAVB) association's bulb committee and a chairman of the subcommittee for tulips, and he sits on the advisory board for the committee of Dutch national and European Plant Breeders' Rights. In his free time, Eric travels to remote regions of Kazakhstan, Tibet, Greece, Spain, Georgia, Portugal, and France in search of wild flower bulbs; he has an integral role coordinating the annual digging and planting, maintenance, publicity, and marketing of his father's legendary bulb collection; and he has also found time to publish three books, Lost Tulips, Going Wild for Tulips, and Tulip Fields of Holland. Eric appreciates a fine single malt, has a sense of humor as colorful as the flower fields surrounding his home, and enjoys family time with his dear wife and son, Welmoed and Bastiaan. Eric will enlighten us on his travels into the wild, his family's legendary bulb collection, and criteria the Dutch use when seeking new flower bulb varieties for the industry.

Sunday's Tour of PHS Daffodils, the Incoming American Daffodil Society's Board Meeting, and the Closing Dinner Keynote

On Sunday we will visit Jason Delaney's PHS Daffodils, located in Flora, Illinois. Flora, a small rural community founded in 1859, is approximately 110 miles east of the St. Louis on the prairies of Southern Illinois. With its annual County Fair and popular regional bluegrass music festival, Flora offers culture and entertainment for its residents and the surrounding farming community.

Jason's curiosity-turned-obsessive collecting of daffodils began while he was seven months in utero when his mother, Jane, planted the family's property with daffodil bulbs liberated from the surrounding countryside. Not long after, at the age of six, he placed his first bulb order. Since,



Jason has spent the last twenty years at the Missouri Botanical Garden specializing in bulbous plants. PHS Daffodils maintains its collection of daffodils for small-scale commercial production, breeding, and evaluation on three acres of family land, focusing on novel, decorative, and historic varieties. Perhaps collecting is genetic: Jason's father, Don, has amassed a fine collection of award-winning antique Ford tractors and farming-related items that will also be on tour. During lunch on the farm we will enjoy live bluegrass and folk music from the musical trio Downstream.

As we return to the St. Louis for the evening's dinner, the incoming ADS board meeting will be held on a designated Board of Directors bus.

Sunday's closing keynote dinner speaker is Jaydee Atkins Ager, from Hawkinsville, Georgia, USA. Jaydee attended her first daffodil show in Atlanta, in



1972, "with a Coke bottle full of 'Mount Hood' daffodils in one hand and a pacifier in her mouth." Knowing absolutely nothing, she was met with kindness and tolerance that March day, and won two Honorable Mention ribbons. Jaydee joined the Georgia Daffodil Society and the ADS in 1973. At her first convention in 1974, she just happened to bump into the legendary Bill Pannill as she came through the front door of the hotel. Her "training" began on the spot.

At the 1976 ADS Bicentennial Convention in Philadelphia, Bill introduced Jaydee to the many international attendees at a private party. Thus began 40 plus years of wonderful international daffodil friendships. Jaydee fondly says, "My world expanded exponentially that evening."

Jaydee has served ADS in various capacities. She was the 1990 ADS Convention Chair, ADS President 1996-1998 and ADS Executive Director 2005-2013. She was honored with the ADS Silver Medal in 2005. Jaydee continues trying to grow daffodils in the daunting heat and humidity in the heart of her home state, Georgia. She enjoys an active outdoor lifestyle with her husband, son, and a cantankerous older male Labrador Retriever named Sandy... named in memory of an international daffodil friend, the late Sandy McCabe of Northern Ireland.

Jaydee admits to having far too many hobbies and interests. She is currently working on a book, a personal memoir and creative non-fiction compilation titled *Ain't No Regular Kind of Woman*. Join Jaydee for an evening of humor and reminiscing about her many daffodil friends around the world, past and present. Hear about her trek through the Netherlands with Matthew Zandbergen, how John Lea picked her up at the train station in Worcester, England, sporting a smoking jacket and a colorful silk ascot, and learn about Ian Tyler's immersion into Southern U.S. culture. These and many more tales will be shared.

Optional Monday Post-Convention Tour to Shaw Nature Reserve

On Monday, 11 April, consider joining us for an optional tour of the 2,441-acre Shaw Nature Reserve in Gray Summit, Missouri. Originally set up as a refuge for the Missouri Botanical Gardens' plant collections

from the city's smoke pollution in the 1920s, its role has evolved considerably through the years. Today, Shaw Nature Reserve is a nature reserve, a place to walk and hike, and a good spot for relaxing and for studying nature. It has become a premier national-level educational, research, and habitat restoration and reconstruction site.

There are likely millions of daffodils flowering around the Shaw Nature Reserve's Pinetum Lake and the one-mile road encircling it, from late March through early April each year; yet more are planted beyond, into the wilds of the property. Hundreds of historic varieties were originally planted and, over time, many naturally cross pollinated resulting in, among others, the famous "Shaw Poets", seen below.

Daffodils got their start at the Shaw Nature Reserve through the efforts of Mr. John Rowe who lived and farmed close to the town of Pacific, Missouri. He was an amateur propagator of daffodils as well as of nuts, fruits, vegetables, and other flowering bulbs. Mr. Howe brought a bushel of daffodil bulbs to the Reserve to share during its fledgling years when the earliest planting was being done. Upon seeing Mr. Rowe's basket of bulbs, Dr. Edgar Anderson, then Curator of Useful Plants at Missouri Botanical Garden, wanted to know who produced these masterpieces.



Dr. Anderson was especially fond of daffodils and devoted much time and energy to both the botanical garden's and the Shaw Nature Reserve's collections. At regular intervals after Mr. Howe's bulbs were first put in place, hundreds of additional varieties from the newest to the classic standards of the day were planted. The plantings were carefully studied, especially during the period of 1938 through 1942. The goal was to have a continuous display of color lasting for a full two months using a mixture of early to late blooming varieties. Decades later, unfazed by time, the daffodils still continue their annual display. We encourage each of you to join us to visit this beautiful site and its many lovely, naturalized daffodils.

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Our convention tours, entertainment, and educational activities would not be possible without generous contributions from businesses, daffodil organizations, and our tribute sponsors. We greatly appreciate the support for this convention! Contributions help us reach our goal of an affordable convention fee for our guests without compromising our offerings. If you haven't already, please take time to review our current sponsors and learn how you, too, can support the 2016 World Daffodil Convention. Visit the sponsors tabs on the 2016 World Daffodil Convention website at stldaffodilclub.org/wdc2016. We still need your support!

To register for the convention, mail a registration form downloaded from the Convention section of our website or taken directly from this December issue of *The Daffodil Journal*. You may send your registration fees with your registration form to our Registrar, or you make your registration selections and pay by credit card online through the ADS Webstore. Make this convention an extraordinary experience you will not forget! We look forward to seeing each of you next April.

Sincerely,
Lynn Slackman
2016 World Daffodil Convention Chairperson
WDC@stldaffodilclub.org, wdc2016.stldaffodilclub.org





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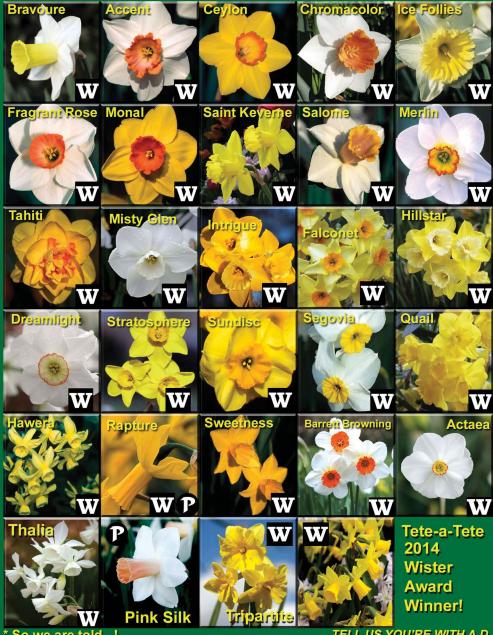
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Presentation Web Site—dafftube.org

DaffTube.org hosts various presentations that you can download for free. This site has many PowerPoint programs accompanied with scripts in an easy to use PDF format. A video titled "Show Your Daffodils" is an excellent resource to prepare you for your next daffodil show. The majority of these presentations can also be purchased on CDs on the ADS Webstore: http://stores.daffodilusastore.org/

Daffodil Library Web Site—dafflibrary.org

DaffLibrary.org website hosts PDF files and web links of historic catalogues, notes, newsletters, journals, and other written material related to daffodils. Files on the site are available for free downloading; furthermore, the more voluminous documents are also sold on DVDs that you can order from the Executive Director or from the ADS web store.

Publications ~ Services ~ Supplies

Available from the ADS Office of the Executive Director Please allow a minimum of three weeks for orders to be processed and sent to you.

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