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T H E
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Articles and photographs (glossy finish for black and white, transparency for color) on daffodil culture and related subjects are invited from members of the Society. Manuscripts should be typewritten double-spaced, and all material should be addressed to the Editor. Request "Writing for the Journal" for more detailed information.

DEADLINE FOR THE NEXT ISSUE IS OCTOBER 15, 1996

SCHEDULE OF MEMBERSHIP DUES IN THE AMERICAN DAFFODIL SOCIETY

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Front Cover: 'Chippewa' 3W-YYR. White Ribbon winner in Albany, OR 1996. Kirby Fong photo.

Back Cover: '*Odoratus* at Grammy's in North Carolina' Bill Ticknor Photo

ADVERTISING RATES

Advertising rates for the *Journal* are as follows: full inside page, \$100.00; one-half page, \$60.00; one-quarter page, \$45.00. Prices for color advertisements available upon request. For additional information, write the Chairman of Publications, Mrs. Martha Kitchens.

SITUATION AVAILABLE

If anyone has a recommendation of a person interested in filling the position of Editor of the *Journal*. Please contact President Jaydee Ager.



'Rainbow'
2 W-WWP
Gold Ribbon,
Richmond 1996
Petie Matheson



'Gold Bond' 2 Y-Y
Gold Ribbon
Albany, OR 1996
Bob Spotts



N. rupicola 10 Y-Y
Mini Gold Ribbon
Albany, OR 1996
Marianne Burr

1996 SHOW REPORT

Leone Y. Low, *Yellow Springs, Ohio*



Ted Stettner's Throckmorton Winner, Indianapolis, 1996

There were 41 daffodil shows scheduled, but the very cool and late season allowed only 38 of these shows to be held. Almost all of these had lower bloom counts than last year. Surprisingly, the number of exhibitors was not similarly affected. In spite of the chilly Canadian air masses that came south for the winter, and wouldn't depart, exhibitors staged nearly 29,000 gilt-edged blooms. New shows in Shelter Island, NY; Louisville, KY; and Hillsboro, OR were all successful.

'Gull' was NOT the top winning daffodil this year. 'Segovia' held on to its miniature crown, but had a surprising challenger. The gold and white ribbon winners are presented this year in charts. The ADS Gold Ribbon is awarded to the flower which, in the opinion of the judges, is the best standard daffodil in the show. The ADS Miniature Gold Ribbon is awarded to the best miniature daffodil in the show. The White Ribbon is presented to the best vase of three stems in the show.

'Pops Legacy', always dependable for early season collections, was awarded three Gold Ribbons and one White. 'Pops Legacy' originator is William Bender, the 1996 ADS Gold Medal recipient. Could there be a better year for it to lead the list of top winners? 'Trena', originated by New Zealand's Miss Verry, wore the white ribbon three times.

'Williamsburg' had three top wins; 'Homestead' and 'New Penny', both originated by Bill Pannill, had a pair. Bill received the National Show's Gold Ribbon for his own 'Peggy White'.

Other dual ribbon winners were Dubose's 'Nob Hill', and Mitsch/Havens' 'Gull', 'Oregon Pioneer', 'Resplendent' (also particularly useful in collections this late season). Two poets, 'Vienna Woods', and Murray Evans' 'Starlet' also garnered two ribbons.

Inexpensive 'Minnow' with five top wins fell short in its challenge to 'Segovia's' seven miniature awards. 'Clare' also had five visits to the miniature awards table, while 'Mite' and 'Yellow Xit' each had three.

Winning two miniature Gold and/or White Ribbons were widely available, 'Jumblie', 'Little Gem', and 'Sun Disc'. Also winning two were graceful 'Snipe', cheerful 'Hummingbird', late 'Stafford', minute 'Stella Turk', sunny 'Pequenita', and versatile 'Kokopelli'. Narcissus species *rupicola*, *jonquilla* and *bulbocodium* were also multiple winners.

In the following charts you will find the results of the thirty-eight ADS shows held in 1996. The winners of all the Gold, White, Mini-Gold and Mini-White ribbons are shown, along with the total number of blooms in each show. The four charts after that present the complete reports from four shows across the nation: Clinton, Mississippi, which will host the 1997 National Convention next year; Richmond, Virginia which will host the 1998 National Convention; Amity, Oregon, to give you a look at the West Coast shows; and Columbus, Ohio to give you a look at the Mid-American shows. For the complete results for other shows, we refer you to your local regional newsletters. If you need a report for a show that is not covered, please contact the Regional Vice President and request a copy of their newsletter.

The Usual Suspects

The flowers win the awards, but some of their chauffeurs carried home three or more ADS ribbons from a single show. Particularly outstanding exhibitors in 1996 were Bob Spotts with 27 ADS awards, Naomi Liggett with 21, Bill Pannill with 7 in the National Show, Naomi with 7 in the Adena Show, and Beverly Barbour with 8 ADS awards in the Nashville Show.

Want to Add to Your Collection?

One of several ways to build a collection of relatively dependable exhibition daffodils is to observe what does well in areas with more or less similar growing conditions to your own. In addition to geographical considerations, cost, time and effort concerns must be considered. All outstanding daffodil chauffeurs expend a lot of the latter two, but the degree varies. Observe the flowers of persons on these lists or others who are at the cost/effort level that is right for you, and add bulbs of the flowers that you like best to your own collection.

R.H.S. Gold Medal for Trade Displays

Engleheart Cup - 1985, 1986, 1990 and 1993

American Hybridizers Trophy - 1988, 1991, 1992 and 1993

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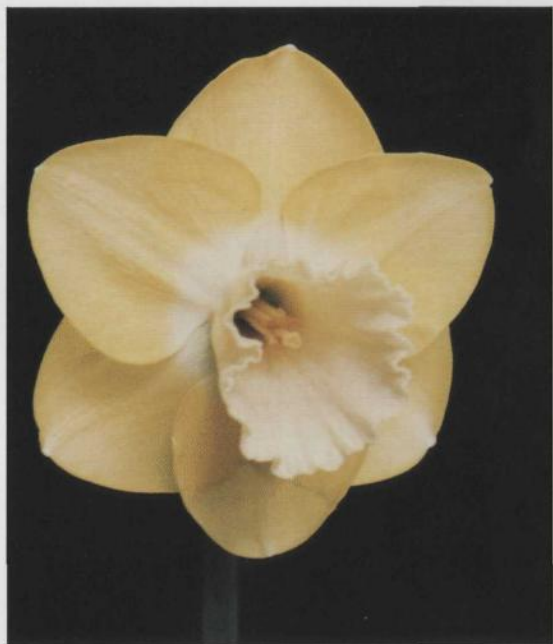


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Telephone: 0662 242931



'Altun Ha' 2 Y-W, Gold Ribbon.
Indianapolis, 1996. Tom Stettner.



'Oregon Pioneer' 2 Y-P
Best Pink. Livermore, 1996
Kirby Fong



'Corbiere' 1 Y-YYO
Gold Ribbon. Livermore, 1996
Wayne Steele

1996 Quinn Winners

1996 Carey Quinn winners are: Bob Spotts, with three (almost entirely with his own seedlings), James Russell, Steve Vinisky, Ruth Pardue, Kathy Welsh (Gold Quinn at the National Show), Donna Dietsch, Anne Donnell Smith, Helen Haskell (two), Peg Newill (first time winner), Sally Winmill, Nancy Gill, G.A.L. Bender, and Dan Bellinger.

1996 Roberta Watrous Winners

1996 Roberta Watrous award winners are Kirby Fong (first time), Martha Anderson, Steve Vinisky, Leslie Anderson, Mary Koonce, Beverly Barbour, Helen Link, Delia Bankhead, Naomi Liggett (three), Liz Ellwood (two), Kathryn Andersen, and Nancy Pilipuf.

Congratulations to all the above and to everyone who was an exhibitor, judge, or visitor to a daffodil show.

Please NOTE:

In the report on the ADS National show in Baltimore, Maryland on April 18, 1996, please add to the list of winners the following:

Grant and Amy Mitsch Trophy

William Bender

Bonnie Brae Gardens

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standard · intermediate · miniature

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Corbett, Oregon 97019
(Telephone 503-695-5190)



1996 ADS GOLD RIBBON WINNERS

Show		Blooms Cultivar	Exhibitor
Sutter Creek, CA	432	'Corbiere'	Wayne Steele
Clinton, MS	465	'Falstaff'	Elizabeth Entrikin
Livermore, CA	457	'Nob Hill'	Wayne Steele
Dallas, TX	370	'Resplendent'	Andrew Armstrong
Fortuna, CA	511	'Williamsburg'	Wayne Steele
Conway, AR	579	'Resplendent'	Sandra Sheppard
Atlanta, GA		**Cancelled for Weather	
Amity, OR	1139	'Buchan'	Steve Vinisky
Chapel Hill, NC	312	'Suede'	Christine Kemp
Hernando, MS	769	'Oregon Pioneer'	Leslie Anderson
Albany, OR	1868	'Gold Bond'	Bob Spotts
Princess Anne, MD	285	'Cassata'	Joanna Tamplin
Wichita, KS		**Cancelled for Weather	
Knoxville, TN		**Cancelled for Weather	
Danville, VA	703	'Foundling'	Jenny Cheesborough
Onley, VA	278	'Salome'	Mrs. George Coulbourn
Gloucester, VA	902	'Foundation'	Petie Matheson
Louisville, KY	397	'Pop's Legacy'	Peggy Macneale
Nashville, TN	534	'Lapwing'	Lois Van Wie
Upperville, VA	449	'Pop's Legacy'	Delia Bankhead
Edgewater, MD	513	'At Dawning'	Mrs. Phillip Lines
Hillsboro, OR	1166	'Colonial White'	Stephen Vinisky
Dayton, OH	811	'Pop's Legacy'	Donna Dietsch
Washington, DC	1010	'Homestead'	Joanna Tamplin
Scottsburg, IN	806	'High Church'	Mary Rutledge
Richmond, VA	1069	'Rainbow'	Petie Matheson
Baltimore, MD			
(ADS National Show)	3008	'Peggy White'	Bill Pannill
Chillicothe, OH	839	'Oregon Pioneer'	Grace Baird
Kennett Square, PA	1149	'Royal Marine'	Richard Ezell
Greenwich, CT	1223	'Arrowhead'	Helen Haskell
Indianapolis, IN	770	'Altun Ha'	Tom Stettner
Morristown, NJ	718	'Gay Kybo'	Liz Ellwood
Pittsburg, PA	365	'Lemon Sails'	Steve Hampton
Columbus, OH	613	'La Paloma'	Linda Wallpe
Shelter Island, OH	325	'Golden Aura'	Sandra Frank
Chambersburg, PA	876	Bender 96/26	William Bender
Nantucket, MA	298	'Elizabeth Ann'	Liz Ellwood
Peterboro, NH	1158	'Vienna Woods'	Nancy Mott
Akron, OH	630	'Red Aria'	Doug & Joy Fuhrmeyer
Glencoe, IL	317	'Drumboe'	Laurie Skrzenta
St. Paul, MN	190	'Williamsburg'	Myrna Smith

1996 ADS WHITE RIBBON WINNERS

Show	Cultivar	Exhibitor
Sutter Creek, CA	Dubose C26-37	Sid Dubose
Clinton, MS	'Innisbeg'	Maxine Rankin
Livermore, CA	'Trena'	Wayne Steele
Dallas, TX	'Pop's Legacy'	Rod Armstrong
Fortuna, CA	'Nob Hill'	Sid Dubose
Conway, AR	'New Penny'	Gerald and Beth Horton
Atlanta, GA	** Cancelled for Weather	
Amity, OR	'Suede'	Christine Kemp
Chapel Hill, NC	'New Penny'	Elise Olsen
Hernando, MS	'Limbo'	James Russell
Albany, OR	'Chippewa'	Wayne Steele
Princess Anne, MD	'Broomhill'	Mrs. George Parsons
Wichita, KS	Cancelled for Weather**	
Knoxville, TN	** Cancelled for Weather	
Danville, VA	'Dell Chapel'	Elise Olsen
Onley, VA	'Rapture'	Joanna Tamplin
Gloucester, VA	'Misty Glen'	William Power
Louisville, KY	'Phalarope'	Libby Frey
Nashville, TN	'River Queen'	Beverly Barbour
Upperville, VA	'Trena'	Kathleen McAllister
Edgewater, MD	'Lennymore'	Joanna Templin
Hillsboro, OR	'Stratosphere'	Bill Hesse
Dayton, OH	'Gull'	Ruth Pardue
Washington, DC	'Homestead'	Joanna Tamplin
Scottsburg, IN	'Glad Day'	Mary Rutledge
Richmond, VA	'Vienna Woods'	Mr & Mrs George Bragdon
Baltimore, MD (ADS National)	'Trena'	Anne Donnell Smith
Chillicothe, OH	'Homestead'	Nancy Gill
Longwood Gardens, PA 6	Bender 94/14	William Bender
Greenwich, CT	'Mary Quarles,	Helen Haskell
Indianapolis, IN	'Gull'	Leone Low
Morristown, NJ	'Cultured Pearl'	Kathryn Andersen
Pittsburg, PA	'Starlet'	Libby Frey
Columbus, OH	'Dunley Hall'	Nancy Gill
Shelter Island, OH	'Lemon Lyric'	Charles Brush
Chambersburg, PA	Bender 88/238	William Bender
Nantucket, MA	'Dove Wings'	Mrs. Robert Noyes
Peterboro, NH	'Tripartite'	Sally Winmill
Akron, OH	'Mexico City'	Dan Bellinger
Glencoe, IL	'Starlet'	Libby Frey
St. Paul, MN	'Williamsburg'	Myrna Smith

1996 ADS MINIATURE GOLD WINNERS

Show	Cultivar	Exhibitor
Sutter Creek, CA	Blanchard 7225D	Nancy Wilson
Clinton, MS	'Gipsy Queen'	Leslie Anderson
Livermore, CA	'Mickey'	Kirby Fong
Dallas, TX	'Cyclataz'	Rod Armstrong
Fortuna, CA	Dubose T-36-10	Sid Dubose
Conway, AR	'Angel's Whisper'	Martha Anderson
Atlanta, GA	** Cancelled for Weather	
Amity, OR	'Stella Turk'	Stephen Vinisky
Chapel Hill, NC	<i>N. cyclamineus</i>	Elise Olsen
Hernando, MS	'Segovia'	Martha Anderson
Albany, OR	<i>N. rupicola</i>	Marianne Burr
Princess Anne, MD	'Jumble'	Mrs. Thomas Larsen
Wichita, KS	** Cancelled for Weather	
Knoxville, TN	** Cancelled for Weather	
Danville, VA	'Mite'	Mrs. John James
Onley, VA	'Stella Turk'	Mrs. David Corson
Gloucester, VA	'Junior Miss'	Mrs. David Corson
Louisville, KY	'Hummingbird'	Libby Frey
Nashville, TN	'Flyaway'	Pat Bates
Upperville, VA	'Snipe'	Kathleen McAllister
Edgewater, MD	'Segovia'	Mrs. E.T. Cato
Hillsboro, OR	'Clare'	Marianne Burr
Dayton, OH	'Mite'	Naomi Liggett
Washington, DC	<i>N. rupicola</i>	Kathryn Anderson
Scottsburg, IN	'Paula Cottell'	Helen Link
Richmond, VA	'Pequenita'	Mrs. E.H. Welbourne III
Baltimore, MD(ADS National)	'Folmay'	Anne Corson
Chillicothe, OH	'Segovia'	Naomi Liggett
Kennett Square, PA	<i>N. bulbocodium gra.</i>	Kathryn Andersen
Greenwich, CT	'Yellow Xit'	Liz Ellwood
Indianapolis, IN	'Clare'	Naomi Liggett
Morristown, NJ	'Pease Blossom'	Liz Ellwood
Pittsburg, PA	'Kokopelli'	Dianne Mrak
Columbus, OH	'Stafford'	Nancy Gill
Shelter Island, OH	'Minnow'	Esther Hunt
Chambersburg, PA	<i>N. rupicola ssp rup.</i>	Kathryn Andersen
Nantucket, MA	'Segovia'	Mrs. Henderson Inches
Peterboro, NH	'Skiffle'	Liz Ellwood
Akron, OH	Low A3	Leone Low
Glencoe, IL	'Sewanee'	Nancy Pilapuf
St. Paul, MN	'Jack Snipe'	Dave Karnstedt

1996 ADS MINIATURE WHITE WINNERS

Show	Cultivar	Exhibitor
Sutter Creek, CA	'Candlepower'	Nancy Wilson
Clinton, MS	'Angel's Breath'	Martha Anderson
Livermore, CA	'Minnow'	Kirby Fong
Dallas, TX	'Hummingbird'	Andrew Armstrong
Fortuna, CA	'Minnow'	Bob Spotts
Conway, AR	'Xit'	Steve Hurd
Atlanta, GA	** Cancelled for Weather	
Amity, OR	'Minnow'	Donna Elder
Chapel Hill, NC	'Quince'	Jo Earp
Hernando, MS	'Sabrosa'	Martha Anderson
Albany, OR	'Snipe'	Marianne Burr
Princess Anne, MD	'Wee Bee'	Joanna Tamplin
Wichita, KS	** Cancelled for Weather	
Knoxville, TN	** Cancelled for Weather	
Danville, VA	'Little Gem'	Kathi Marshall
Onley, VA	<i>N. jonquilla</i>	Mrs. David Corson
Gloucester, VA	<i>N. jonquilla</i>	Mrs David Corson
Louisville, KY	'Jumblie'	Libby Frey
Nashville, TN	<i>N. bulbocodium</i>	Beverly Barbour
Upperville, VA	'Segovia'	Catherine Gillespie
Edgewater, MD	'Mite'	Sally Winmill
Hillsboro, OR	'Hawera'	Marianne Burr
Dayton, OH	'Spoirot'	Naomi Liggett
Washington, DC	'Pequenita'	Delia Bankhead
Scottsburg, IN	'Little Gem'	Helen MacPherson
Richmond, VA	'Yellow Xit'	Petie Matheson
Baltimore, MD(ADS National)	'Flomay'	Anne Corson
Chillicothe, OH	'Clare'	Naomi Liggett
Kennett Square, PA	'Stafford'	Kathleen McAllister
Greenwich, CT	<i>N. bulbocodium</i>	Eileen Whitney
Indianapolis, IN	'Yellow Xit'	Naomi Liggett
Morristown, NJ	'Kokopelli'	Sally Winmill
Pittsburg, PA	'Segovia'	Diane Mrak
Columbus, OH	'Sun Disc'	Margaret Baird
Shelter Island, OH	'Minnow'	Janet Rescigno
Chambersburg, PA	'Clare'	Kathleen McAllister
Nantucket, MA	'Canaliculatus'	Mrs. Henderson Inches
Peterboro, NH	'Sun Disc'	Ruth Crocker
Akron, OH	'Clare'	Naomi Liggett
Glencoe, IL	'April Tears'	Libby Frey
St. Paul, MN	'Segovia'	Dave Karnstadt

1996 SHOW WINNERS
Mississippi State Show, Clinton, MS
March 9-10, 1996

465 Blooms 265 Exhibits 19 Exhibitors

Gold Ribbon*Elizabeth Entrikin*

'Falstaff' 2 Y-R

White Ribbon*Maxine Rankin*

'Innis Beg' 2 W-GWW

Silver Ribbon*Ted Snazelle (16 Blues)***Purple Ribbon***Weldon Childers*'Lough Bawn' 2Y-R; 'Loch Hope'
2Y-R'Forge Mill' 2Y-GOO; 'Ace' 2W-
PPW

'Edge Grove' 2W-Y

Red-White-Blue Ribbon*Maxine Rankin*

'Sea Foam' 2W-W

'Conestoga' 2W-GYO

'Berceuse' 2W-P

'Veery' 7Y-Y

'Repose' 2YW-YYW

Green Ribbon*Ted Snazelle*

Robertson #534 2Y-O; 'Ricom' 1Y-Y

'Tamar Fire' 4 Y-R; Scamp 278
4Y-O

'Young American' 1YW-WWY

'Oregon Beauty' 4Y-R; 'Pink Silk'
1W-P'Lemon Silk' 6YW-W; 'Corbiere'
1Y-YOO'Gin and Lime' 1Y-W; 'Forge Mill'
2Y-GOO

'Pop's Legacy' 1Y-W

Junior Ribbon*Allison Redding*

'Loophole' 2 W-W

Miniature Gold Ribbon*Leslie Anderson*

'Gypsy Queen' 1 YW-WWY

Miniature White Ribbon*Martha Anderson*

'Angels Breath' 5 Y-Y

Lavender Ribbon*Leslie Anderson**N. jonquilla henriquesii* 10 Y-Y

'Minnow' 8 Y-Y

N. jonquilla 10 Y-Y

'Tete-a-Tete' 10 Y-Y

'Jumblie' 12 Y-O

Watrous Award*Martha Anderson**N. jonquilla* 10 Y-Y

'Tete-a-Tete' 10 Y-Y

'Minnow' 8 Y-Y

'Quince' 12 Y-Y

'Jumblie' 12 Y-O

'Angel's Breath' 5 Y-Y

N. jonquilla henri. 10 Y-Y

'Cyclataz' 8 Y-O

'Midget' 10 Y-Y

'Bagatelle' 1 Y-Y

'Little Sunshine' 6 Y-Y

'Minnie' 6 Y-Y

Small Grower award*Judy Barham*

'Rapture' 6 Y-Y

1996 SHOW WINNERS**Albany, Oregon Show****March 30-31, 1996**

1868 Blooms

Gold Ribbon*Bob Spotts*

'Gold Bond' 2 Y-Y

White Ribbon*Wayne Steele*

'Chippewa' 3 W-YYR

Rose Ribbon*Bob Spotts*

96-691-5 2 Y-Y

Purple Ribbon*Bob Spotts*

'Gwinear' 2Y-Y, 'Gold Bond' 2Y-Y,

'Lemon Sails', 2Y-Y, 'Lee Moor' 1Y-Y,

'Fresh Lime' 1YYW-Y

Red-White-Blue Ribbon*Elise Havens*

'Berceuse' 2W-P, Havens UH17/6,

Havens UH17/6 2W-P,

Lemon Brook 2YYW-W,

'Freedom Rings' 2Y-P,

Havens RH7/1A 3Y-R

Maroon Ribbon*Elise Havens*

'Young American' 1YYW-WWY

'Lemon Brook' 2YYW-Y

'Trumpet Warrior' 1YYW-WWY

'Wheatear' 6Y-WWY

Havens WH166 6YW-WWY

Green Ribbon*Bob Spotts*

12 of his own seedlings

Small Grower award*Annabelle Forster*

'Oryx' 7Y-W

Miniature Gold Ribbon*Marianne Burr**N. rupicola* 10 Y-Y**Miniature White Ribbon***Marianne Burr*

'Snipe' 6W-W

Miniature Rose Ribbon

Not Awarded

Lavender Ribbon*Kirby Long*

'Sundial' 7Y-Y, 'Wren' 4Y-Y,

'Xit' 3W-W, 'Pixie's Sister' 7Y-Y,

N. bulbocodium 10Y-Y**Miniature Red-White-Blue**

One entry, no award

Roberta Watrous Award

One entry, no award

Tom Throckmorton Award*Steve Vinisky*

'Nakajima' 3Y-R, 'Wychavon' 2W-

YRR, 'Flying Colors' 4Y-Y,

'Homestead' 2W-W, 'Finchcocks' 2Y-

R, 'Cataract' 1W-W, 'Crackington' 4Y-

O, 'Brighton 1Y-Y, 'Mareeba' 1W-

Y, 'New Penny' 3Y-Y, 'Abby Elizabeth'

4Y-P, 'Silent Pink' 2W-P, 'Uncle

Duncan' 1Y-O, 'Graduation' 2W-

WWP, 'Ambercastle' 2YYW-WYY

Cary E. Quinn Award *Steve Vinisky*

'Creag Dubh' 2O-R, 'Broomhill' 2W-W, 'Brighton' 1Y-Y, 'Cinder Hill' 2W-O, 'No Peer' 2Y-R, 'Panache' 1W-W, 'Androcles' 4W-W, Reed 88-27-60 1Y-Y, 'Wychavon' 2W-YYR, 'Tuscarora' 1Y-Y, 'Nexus' 2W-P, 'Redlands Too' 2Y-R, 'Crackington' 4Y-O, 'Bundy' 1W-P, 'Ambercastle' 2YYW-WYY, 'Siberian Pink' 4W-P, 'Parnell's Knob' 1Y-Y, 'Homestead' 2W-W, 'Belle Moon' 2W-Y, 'Buchan' 1Y-Y, 'Night Music' 4W-P, 'New Penny' 3Y-Y, 'Roberta Watrous' 7Y-GYP, 'Craig Stiel' 2Y-R.

1996 SHOW WINNERS**Richmond Show****April 13-15, 1996**

1069 Blooms 537 Exhibits 36 Exhibitors

Gold Ribbon*Petie Matheson*

'Rainbow' 2W-WWP

White Ribbon*George & Patty Bragdon*

'Vienna Woods'

Silver Ribbon*Petie Matheson***Purple Ribbon***Petie Matheson*

'Puma' 2Y-P 'Pink Delight' 2W-YYP

'Honey Pink' 2Y-P 'Delta Queen' 2W-P

'Rainbow' 2W-WWP (Gold Ribbon)

Red-White-Blue Ribbon*Elizabeth Brown*

'Conestoga' 2W-GYO; 'Gull' 2W-GWW

'Whirlaway' 3Y-GYO; 'Bit O'Gold' 2W-

WWY; 'Irristible' 2Y-P

Maroon Ribbon Not Awarded**Green Ribbon***Skip & Margaret Ford*

'Evesham' 3W-GYY 'Actaea' 9W-GYR

'Fragrant Rose' 2 'Sabine Hay' 3

'Conestoga' 2W-GYO 'Goldfinger' 1Y-Y

'Vernal Prince' 3 'Rim Ride' 3

'New Penny' 3 'Colly Gate' 3

'Estrella' 3 'Golden Aura' 2Y-Y

Junior Ribbon*Kristi Sadler*

'Stainless' 2W-W

Small Grower award

Not Awarded

Miniature Gold Ribbon*Olivia Welbourn*

'Pequenita' 7Y-Y

Miniature White Ribbon*Petie Matheson*

'Yellow Xit' 3W-Y

Miniature Rose Ribbon

Not Awarded

Lavender Ribbon*Olivia Welbourn*

'Hummingbird' 6Y-Y 'Pequenita' 7Y-Y

'Kibitzer' 6 'Snipe' 6W-W

N. asturiensis 10Y-Y**Rose Ribbon**

Not awarded

Maroon Ribbon

Not awarded

Miniature Red-White-Blue-

Not awarded

Roberta Watrous Award

Not awarded

Tom Throckmorton Award*Not awarded***Cary E. Quinn Award***Not awarded*

1996 SHOW WINNERS**Columbus, Ohio Show****April 27-28, 1996**

613 Blooms 306 Exhibits 27 Exhibitors

Gold Ribbon*Linda Wallpe*

'La Paloma' 3W-GYR

White Ribbon*Nancy Gill*

'Dunley Hall' 3W-GYY

Silver Ribbon*Naomi Liggett (14 Blues)***Purple Ribbon***Nancy Gill AUZ/NC Collection*

'Janelle' 3W-YYR, 'Deckare' 2W-P

'Scipio' 2Y-Y

'Glamour Girl' 3W-YYR

'Twilight Zone' 2YW-WWY

Red-White-Blue Ribbon*Nancy Gill*

'Top Notch' 2Y-Y; 'River Queen' 2W-

W; 'La Paloma' 3W-GYR; 'Tyson's

Corner 3W-GYR; 'Homestead' 2W-W;

Maroon Ribbon*Leone Low*

'Intrigue' 7Y-W; 'Altun Ha' 2Y-W

AL-C 2Y-WWY; QE 287 1YYW-

WWY; QE C32 2YYW-GWW

Green Ribbon*Cindy Hyde*

'Foundling' 6W-P; 'Motmot' 8Y-R

'Dailmanach' 2W-P; 'Yellowtail' 2W-Y

'Elizabeth Ann' 6W-GWP; 'Kelanee'

7YW-P; 'Moon Shadow' 3W-GYY;

'Declare' 2W-P; 'Limbo' 2O-R; 'Sunday

Chimes 5W-W; 'Indian Maid' 7O-R;

'Bravoure' 1W-Y

Junior Ribbon*Brandon Dean*

'Eyecatcher'

Miniature Gold Ribbon*Nancy Gill* 'Stafford' 7Y-O**Miniature White Ribbon***Margaret Baird* 'Sun Disc' 7Y-Y**Lavender Ribbon** *Nancy Gill*

'Xit'; 'Clare'; 'Segovia' 'Flomay'

'Little Rusky'

Small Grower award*Heather McCoy* 'Clumber' 3W-Y**Watrous Award***Naomi Liggett*

'Stafford' 7Y-O; 'Three of Diamonds'

3W-GWO; 'Xit' 3W-W; 'Angel's

Whisper' 5Y-Y; 'Yellow, Xit' 3W-

Y; *bulbocodium* var. 10 Y-Y; 'Segovia'

3W-Y; 'Rikki' 7W-Y; 'Minnow' 8Y-

Y; 'Clare' 7Y-Y; 'Oz' 12Y-Y

Throckmorton Award*Linda Wallpe*

'Ambergate' 2O-O; 'Sheer Joy' 6W-W;

'Verdant Meadow' 3W-GWW;

'Goldfinger' 3W-GYO; 'Fairmile' 3W-

GYO; 'Loch Roag' 3W-P; 'Woodland

Prince' 3W-Y; 'La Paloma' 3W-GYR;

'Twilight Zone' 2YW-WWY; 'Glowing

Ember' 2W-R; 'Sandy Cove' 2Y-GWP;

'Dreamboat' 2W-YYO; 'Rosegold'

1YYW-GPP; 'Tuesday's Child' 5W-Y;

'Riverqueen' 2W-W

Quinn Award *Nancy Gill*

'Ocean Breeze' 6W-W; 'Dunley Hall' 3W-GYY; 'Poet's Way' 9W-GYR; 'Janelle' 3W-

YYR; 'La Paloma' 3W-GYR; 'Cormandel' 2Y-Y; 'Triple Crown' 3Y-YYO; 'Hazzle' 2W-

Y; 'Touch of Silver' 2W-GWW; 'Top Notch' 2Y-Y; 'Glamour Girl' 3W-YYR;

'Dailmanach' 2W-P; 'Declare' 2W-P; 'Gold Convention' 2Y-Y; 'Intrigue' 7W-Y; 'Tyson's

Corner' 3W-GYR; 'Centre Ville' 3Y-R; 'Cherry gardens' 2W-GPP; 'Homestead' 2W-

W; 'Inverpolly' 2W-W; 'Cinder Hill' 2W-O; 'Bee Mabley' 3W-YYO; 'New Penny' 3Y-Y;

'Trudie May' 3Y-OOR

The Terminology of Daffodil Breeding

or

GENETICS 101

Dr. Frank B. Galyon

GENERAL GENETICS INFORMATION

Within the nuclei of cells there are a number of thread-like bodies known as *chromosomes*. Chromosomes occur as *pairs*. *Genes* are the hereditary factors that are located on the chromosomes. Genes also occur in pairs. Mendel discovered that some genes are *dominant* and others are *recessive*. A dominant gene overpowers the expression of its recessive *allele*. *Alleles* are pairs of genes which occur at the same *locus* or site on the *same* chromosome. *Dominant* genes are designated by *capital* letters. Their *recessive* allelic genes are designated by *lower case* letters. In a pair of *allelic* genes, one always comes from the female parent (ovum) and the other comes from the male parent (pollen grain). In *mitosis* (somatic cell division) the chromosome number in the daughter cells *remains constant* through *successive generations* of cell divisions. The somatic condition is designated as the " $2n$ " condition. In *meiosis* (reduction division or formation of *gametes*) the resulting sex cells or *gametes* have only *half* the number of chromosomes as the parent cells. Such resulting *gametes* are called *haploid* (having *half* the original genetic factors). The haploid condition is designated by the single lower case letter *n*. In diploids each resulting gamete has exactly one member of each chromosome pair. The fusion of the ovum and the pollen grain at fertilization results in the formation of a *zygote* restoring again the somatic chromosome number ($2n$). In the formation of gametes the allelic genes are *segregated* so that only *one* of the allelic pair is transmitted to a particular gamete. The *ovum* (egg cell) and the *pollen grain* are *gametes*.

Ploidy refers to the number of sets of chromosomes in cells. Most *Narcissus* species are *diploids*, having *two* sets of chromosomes. If *three* sets of chromosomes are present, the plant is called a *Triploid*. If four sets are present, it is called a *Tetraploid*. Collectively the conditions above the level of diploid are spoken of as *Polyploids*.

To digress for a moment most present-day daffodils in divisions 1, 2, 3, 4, and 11, are tetraploids, having four times seven = 28 chromosomes. Some daffodils remain as diploids having 14 chromosomes. Others are triploids having 21 chromosomes. *Euploidy* refers to the true or expected ploidy of a plant. A daffodil having exactly 14, 21, or 28 chromosomes would be called *EUPLOID*. *ANEUPLOIDY* refers to the condition in which the actual number of chromosomes present in the cultivar deviates from the expected number. *Aneuploid* triploids might have e.g. 20 or 22 chromosomes instead of the expected 21. *Aneuploid* tetraploids might have 26, 27, 29, or 30 chromosomes instead of the expected 28.

The *somatic* condition of any plant is referred to as the " $2n$ " condition. In diploid daffodils $2n = 14$. In triploid daffodils the somatic condition would be $2n = 21$. This could also be further designated as $3x = 21$ where *x* refers

to the actual number of sets of chromosomes present. Similarly in tetraploid daffodils $2n = 28$ or $4x = 28$. *Homologous* chromosomes are pairs of chromosomes that associate during meiosis resulting in *functional gametes*. *Non-homologous* chromosomes are chromosomes that fail to associate in pairs during meiosis resulting in *sterility* (lack of functional gametes.)

In daffodils it is a fortunate occurrence that the chromosomes of the section NARCISSUS (poeticus species) are *homologous* with the sect. PSEUDONARCISSUS (trumpet [ajax] species). The homologous chromosomes of these two sections of daffodils are represented by a capital N (narcissus). It is due to the homology of the Trumpet and Poeticus chromosomes that we have fertile cultivars of Divisions 2 and 3.

All other sections of Narcissus are *Non-homologous* to the combined sections Narcissus (Poeticus) and Pseudonarcissus (Trumpets). In daffodils the chromosomes of all other sections including JONQUILLAE, APODANTHAE, GANYMEDES (Triandrus) TAZETTAE and BULBOCODIUM are non-homologous to the combined N. (poeticus + pseudonarc). These other sections are likewise also *Non-Homologous to each other*. In daffodils the first generation cultivars in Division 5 (N + Triandrus), Division 7 (N + Jonquilla) and Division 8 (N + Tazetta) are normally sterile due to the *non-homologous* chromosomes involved.

The *GENOTYPE* consists of the sum total of all the genes present in an individual cultivar. The *PHENOTYPE* is the observed *physical appearance* or Trait of a cultivar as contrasted with the *GENOTYPE* (its genetic makeup). One *phenotype* may consist of *more than one genotype* e.g. YY, Yy (two genotypes with the *one yellow* phenotype).

MUTATION. Genes are normally stable, but in quite rare instances a gene may change or *MUTATE* to an allelic gene. Such a mutation may occur as a *SOMATIC* mutation (without involving gametes) or it can be a *GERMINAL* mutation involving a gamete and show up as a mutant *seedling*.

PROBABILITY (chance or odds). The classic example of probability is the tossing of a coin to get either heads or tails. A coin-toss *always* results in *either heads or tails*; yet if one makes only a small number of coin tosses, one might get four or five consecutive occurrences of 'heads' before getting 'tails' once. On the other hand if one were to make 100 coin tosses, the sum total of heads and tails would approach 50 'heads' to 50 'tails'; e.g. one might obtain 48 "heads" vs 52 "tails". Such a ratio approaches the expected or *probable* 50:50, or 1:1 ratio.

SEGREGATION. Mendel's first law is the law of *SEGREGATION*. In *forming gametes*, one chromosome (gene) of an allelic pair of chromosomes (genes) goes to *one* gamete while its allelic chromosome (gene) goes to *another* gamete. This is the usual occurrence when a single pair of allelic chromosomes is considered.

Mendel's second law is the law of *INDEPENDENCE*. It deals with the inheritance when two different pairs of genes are considered. It states that members of one pair of genes segregate *independently* of other pairs of genes. This is true so long as the pairs of genes are on *different* chromosomes. When the pairs of genes are on the *same* chromosome they tend to stay *together* in inheritance. This phenomenon is known as *linkage*.

GENE INTERACTION: "When two or more genes on different chromosomes act on the same character, one gene may mask the effect of the other, in much the same way as a recessive gene effect is masked by its dominant allele. The phenomenon of one gene masking the effect of a *non-allelic* gene is called *EPISTASIS*. These non-allelic genes acting on the same character are referred to as being either *EPISTATIC* (if they mask) or *HYPOSTATIC* (if they are being masked.)

MODIFYING GENES are genes which have the effect of *somewhat* altering the expression of another gene without having the full effect of being an *EPISTATIC GENE*.

So far we have only been considering *QUALITATIVE GENES*. *QUALITATIVE* traits are usually the result of the effect of *one single gene*.

On the other hand there are *QUANTITATIVE* traits which result from more than one gene affecting the same trait: Examples are the height of the stem and the dimensions of the perianth in daffodils.

In crossing diploids with diploids most seedlings will be diploids. In crossing diploids with tetraploids, most seedlings will be *triploids*. In crossing fertile triploids with fertile triploids it is possible to get *tetraploids*, *triploids*, or *diploids*. In crossing tetraploids with tetraploids most seedlings will be tetraploids.

All of us who are breeding daffodils are doing what is known as *SELECTIVE* breeding. We *select* the parents we use for the cross; then we further *select* the best of the progeny from that cross.

INBREEDING consists of crossing individuals that are more closely related than the average pair chosen at random from the population. The effect of *INBREEDING* is to increase *HOMOZYGOSITY* and decrease *HETEROZYGOSITY*. Hidden genetic damage due to previously unexpressed recessive genes can show up when *harmful* recessive genes become expressed in the *HOMOZYGOUS* condition.

OUTBREEDING increases *HETEROZYGOSITY* which tends toward an increase in plant vigor. This phenomenon is called *HETEROSIS*. The extreme example of *INBREEDING* is to self-pollinate a cultivar and raise its seedlings.

LINE-BREEDING more or less consists of breeding "like to like". A good example of line breeding would be to cross 2 Y-R's to other 2 Y-R's. In doing line breeding, greater heterosis would come from crossing *unrelated* 2 Y-R's together.

It is known that the yellow gene e.g. in *N. obvallaris* is a *dominant* gene. Since it is dominant we give it the capital letter Y. In diploid poeticus cultivars there is an allelic gene that is *recessive*. It stands for the *lack* of yellow coloring. This *recessive* gene for *whiteness* (lack of yellowness) in *poets* is thus characterized by a small letter y.

In crossing *N. obvallaris* with a diploid poet, we show that the Y-gene in *N. obvallaris* is present twice; thus YY. This condition is called *HOMOZYGOUS* (same). Likewise the recessive allele in poets is present in a double dose: thus; yy.

Since all the possible gametes for this one trait of yellowness from *N. obvallaris* are the single capital Y, and all the possible gametes for this trait

from poeticus are the single small *y*; then all the resulting seedlings (zygotes) will be the *HETEROZYGOUS* *Yy*. The resulting seedlings will all be the phenotype *yellow* due to the presence of the dominant *Y*-gene. This would be an example of a *1st Hybrid generation* (F1)

obvallaris gametes →		Y	Y	zygotes (seedlings)
poeticus	y	Yy	Yy	
gametes	y	Yy	Yy	

To get the *2nd Hybrid generation* (F2) it is necessary to self-pollinate or sib-cross the F1 progeny.

Now we first have to figure out all possible *gametes* and then combine them. To diagram the resulting 2nd generation, the gametes *Y* or *y* from the first generation hybrid *Yy* are placed both horizontally and vertically *Y* and *y*.

Gametes →	Y	y	At the junction of the squares Are the resulting zygotes.
Y	YY	Yy	
y	Yy	yy	

Yielding one *YY* to two *Yy* to one *yy*.

There are *three* yellow (PHENOTYPE) seedlings to one white seedling, but among the PHENOTYPE of yellow seedlings there are two different GENOTYPES viz. *YY* and *Yy*. These are the expected *diploid ratios* in the F2 generation.

(In giving this *hypothetical* example, I must admit that I have not made this cross myself.)

In crossing trumpets with poets, the resulting seedlings will be neither trumpets nor poets, but will be *intermediate* between trumpets and poets. This is an example of *INTERMEDIATE* (or *blending*) inheritance.

Since we are mostly dealing with *TETRAPLOID* daffodil cultivars, we will now discuss *TETRAPLOID genetics and ratios*.

In tetraploids the chromosomes exist in *quartets* instead of in *pairs* as in diploids. If all four sets are HOMOLOGOUS, the tetraploid is called an AUTOTETRAPLOID. If one or more of the chromosome sets is not homologous to the other sets, the tetraploid is called an ALLOTETRAPLOID.

Amphidiploids are a special instance of allotetraploids having two sets of chromosomes from *one* species along with two sets of chromosomes from *another non homologous* species. Gametes from amphidiploids contain one complete set of chromosomes from each species. Amphidiploids are generally fertile and follow *diploid* rather than *tetraploid* ratios.

The genetics of tetraploids is very much more complicated than the genetics of diploids. Its fine points are beyond the scope of this paper. For those who wish to delve into this matter further, I refer you to the excellent treatise by Dr. Kenneth Kidd in *The World of Irises 1978*, edited by Bee Warburton. The pertinent parts by Dr. Kidd are found from pp 388—397.

DOSAGE is a term used to signify the number of given genes at a single locus on the chromosomes.

SPECIFIC DAFFODIL GENES

While the great majority of daffodil genes remain unknown, I have chosen to consider a few known daffodil genes.

While the total effect of yellowness in daffodils is likely to be a *quantitative* effect of more than one gene, there certainly is a single *dominant qualitative* gene for *gold color* in perianth and corona. We call it capital Y. Its recessive allele is a small y.

The W-gene is the *dominant* gene for white perianths in daffodils. If one were to cross a self-colored gold daffodil with a daffodil containing the dominant-W-Gene, then some of the resulting progeny would have white perianths. The recessive allele to the dominant W-gene is the small w. If the W-gene is present in a dosage of one, then it would be written Wwww. It takes only a dosage of one to make perianths white. The W-gene is thus a qualitative gene for flower color. The W-gene is also an *inhibitor* gene. It inhibits expression of gold color in the perianth.

The L-gene is the *dominant* gene for *lemon* flower color. It is a qualitative gene in that it takes only one dose of the L-gene to produce the lemon flower color. It is also an inhibitor gene in that it inhibits the expression of gold flower color in both perianth and corona. If one crossed a dominant lemon flower with a gold flower, some of the progeny would have lemon color. One would write Llll for the presence of the L-gene in a dosage of one. It takes only a dosage of one of the L-gene to make the color of the perianth and the corona lemon.

The C-gene is the *dominant* gene for reflexed perianths derived from the species, *N. cyclamineus*. It is a qualitative gene requiring only a dosage of one for reflexed perianths. Its recessive allele is *small-c* for non-reflexed perianths. In most first generation hybrids of *N. cyclamineus* the C-gene is present in a dosage of one. Since most F1 cyclamineus hybrids are triploids they would be characterized as Ccc for this particular gene.

Apparently double daffodils originally arose as mutations of single daffodils. Many occurred as *somatic* mutations, e.g. the 4 Y-Y 'Dick Wilden' is a mutation from 2 Y-Y 'Carlton'. Occasionally a *germinal* mutation occurs as a double seedling from the cross of two single parents e.g. 'Swansdown'

from 'Mitylene' x 'Smyrna'. The character of doubleness is the result of a single qualitative *dominant* gene, D. Its recessive allele is a small *d*. For a dosage of one, it would be written Dddd. In crossing a double daffodil of genotype Dddd with a single daffodil about half of the progeny would be doubles.

The species *N. poeticus* is the ultimate source for red-orange color as seen in Y/R's and W/R's. Professor V.H. Booth found that "beta-carotene is present in extremely high concentration in poeticus and nowhere else in the species of the genus *Narcissus*. In *N. poeticus recurvus* the narrow red fringe of the cups has 500 times as much beta-carotene as plants such as carrots or apricots."

The percentage of the *concentration* of beta-carotene in the flower determines whether the corona will be red-orange, orange, yellow-orange or yellow.

Back in the days before World War II, it was illegal to sell margarine in any but its original white color. But since people wanted it to look yellow like butter, a small packet of a deep red-orange dye was furnished to color the margarine yellow. This probably in most instances was a highly colored concentration of Beta-Carotene from the fruit of the shrub, BIXA. This *one pigment* presents different HUES from red-orange to yellow purely dependent on its concentration in the flower.

At this point it would be instructive to quote from "Origin of Red Trumpets" by W.O. Backhouse in *RHS Daffodils and Tulip Yearbook 1963*, pp 47—48. "It is not difficult to cross a plain yellow daffodil with a coloured 2a [2Y-R]. The result is a plain yellow, three-quarter length 2a [2 Y-Y]. In the 1930's I did in fact make this cross, plain yellow trumpet daffodil and a red 2a [2 Y-R]...I was not able to self these [apparently due to self-sterility] and therefore inter-pollinated the sister plants originating from this, the first cross. These gave me just over 400 plants which, though many of them were trumpet daffodils, had not a trace of [orange] colour....I then numbered each of the original first-generation plants and back-crossed them with coloured 2a's [2 Y-R's], keeping the progeny of each separate, and raising between twenty and forty plants of each....Now at last colour appeared, not by any means 50 per cent, as might have been expected, but from 2 to 15 per cent....there remained only the problem of obtaining the desired recombination, [red-orange] colour and Ajax trumpet [dimension].

"In the beginning, when a breeder finds a new break, he has as a rule no option but to cross the new break with the old varieties obtained in the preceding years, and when the first red trumpets appeared, this had to be done. In no case was it possible to get viable seed from selfing as properly understood....Only very recently has it been possible to raise batches of seedlings where both parents were red-trumpeted 1a's [1 Y-R's]. There undoubtedly are some [cultivars of daffodils] which give plenty of [viable] seed when selfed....but in my experience the great majority of red cups are self-sterile, though at the same time perfectly fertile with any other pollen....".

From his experience and that of subsequent breeders we have to conclude that the red-orange coronas are certainly not dominant in daffodils. On the

other hand there are insufficient data and progeny ratios to conclude that red-orange color is the result of a simple qualitative recessive gene either, although there is some suggestion that that is the case. At present it had best be left as an open question with the statement that the presence of red-orange color in daffodil coronas is a function of the *concentration* of *beta-carotene* ultimately from *N. poeticus*. Perhaps this red-orange trait may be a *quantitative* trait involving more than a single gene. At this point its genetics is not definitely known. Perhaps we should use the small 'o' to designate the orange recessive gene. Its dominant allele would be the capital 'O'.

With respect to *pink* corona color, we can be more definite than we could with red-orange corona color. Pink corona color is definitely a *qualitative recessive* trait. We must let a small p stand for this recessive trait. In tetraploids for pink color to be expressed the p-gene must be present in a dosage of four, thus: pppp. If even one dose of the dominant P-allele is present, the corona will be yellow-colored. (Thus a cultivar of genetic makeup of Pppp would have a yellow corona instead of the pink corona when the genetic makeup is pppp.) Also another element must be present in order to have a pink corona; it is that at least one dose of the dominant W-gene or one dose of the dominant L-gene must be present in the cultivar in order to get the expression of pink color. The W-gene and the L-gene obviously *inhibit* the gold perianths of gold selfs, for there are presently no daffodils with full gold perianths showing pink coronas. All the cultivars that we call "yellow-pinks" are genetically *lemon-pinks* carrying at least one dose of the dominant L-gene with four doses of the recessive p-gene.

The *dominant S-gene* for split coronas (Division 11 flowers) originally arose as a dominant *mutation* of cultivars without the split corona. Its recessive allele is designated by a small s. If a division 11 flower has only one dose of the dominant S-gene, then it is written Ssss. The S-gene is a *qualitative* gene in that if one were to cross a division 11 flower having *one* dose of the *dominant S-gene* with a flower totally lacking the dominant S-gene, then some of the progeny will have split coronas. (There may be at least two different genes involved — one for papillon forms and the other for collar-forms of split-coronas. I have had no experience with the papillon type so far as its inheritance is concerned.) The collar-type of split coronas has at least one dose of the dominant S-gene.

HIERARCHY OF DAFFODIL GENES

With respect to the known genes for *color* it is now possible to establish a hierarchy.

The dominant *W-gene* for dominant white perianths is the "top dog" in this hierarchy.

Just below that is the dominant L-gene for lemon perianths.

Third down is the *dominant Y-gene* for gold color in perianths. Below these are the *recessive white poeticus* situation in which four doses of the recessive allele of the dominant Y-gene are present; viz

yyyy = lack of yellow = recessive white.

Since the W-gene, the L-gene, and the Y-gene are apparently on different chromosomes, we can now state that the W-gene is *epistatic* to the L-gene, which in turn is *epistatic* to the Y-gene. Full Red-orange color can be present

when either the W-gene or the Y-gene is present. The L-gene has an inhibitory action against the full expression of red-orange in the corona but cultivars with the L-gene can have partial expression of a very pale reddish-orange in them. e.g. 'Lemon Sails'.

The red-orange corona color seems to depend on the *concentration of beta carotene* in the cultivar, and while suggestive of recessive inheritance, its probabilities defy being categorized as a strict recessive trait at present.

Also further down the line is the recessive pink color.

It remains to state the ratios one can expect in dealing with *tetraploids* in general:

A Wwww crossed with a gold self (Yyyy) yields approximately 50% of the progeny with the dominant W-gene present. The other 50% would lack the dominant W-gene.

Wwww crossed with another Wwww cultivar will yield approximately 75% with dominant white perianth color. Some of these will have the genotype WWww.

A cultivar with genotype WWww when crossed with one lacking dominant W-gene, i.e. wwww, will again yield about 75 to 80% of progeny with dominant-white perianths.

A cultivar with genotype WWWw or WWWW when crossed with a wwww genotype will result in essentially 100% of the progeny carrying at least one dose of the dominant W-gene, and they would all have essentially dominant white perianths. (The above ratios would be the same when any dominant gene is used in place of the dominant W-gene.)

When one crosses a Wwww with an Llll, then approximately 50% will have white perianths and the other 50% will lack white perianths. Some of those lacking the dominant W-gene will be dominant lemons.

In regard to pink crosses: when crossing two pinks (pppp) together, essentially 100% of the progeny will be recessive pinks. In crossing a recessive pink to any non-pink having no more than one dose of the recessive pink gene (e.g. PPpp), one would not expect to get any recessive pinks in the first generation. One would, however, obtain some recessive pinks in crossing a PPpp with a pppp. Approximately 1/6 (to 1/4) of the progeny would show pink in their coronas. As an example, 'Green Island' has to be at least PPpp, for it yields pinks in the first generation when crossed to pinks. The non-pink progeny from such a cross would have the Pppp or the PPpp genotype.

In selfing a PPpp such as 'Green Island' one would expect a *minimum* of one out of 36 of the progeny to be recessive pinks. (This ratio could be as high as 1 out of 16).

I personally suspect that the pink coloration in daffodils is the result of the pigment *lycopene*, but I must point out that this is not known for sure inasmuch as it has not been studied chemically.

During 1994 I was fortunate to get to count ratios of phenotypes among unselected progenies at the Havens'. Here are my conclusions:

In the cross of 'At Dawning' x 'Glissando' out of a total of 9 seedlings, 8 had white perianths and only 1 had a yellow perianth.

Conclusion: 'At Dawning' has the dominant W-gene in a dosage of 2; thus WWww.

In the cross of 'Chiloquin' x 'Heidi' out of a progeny of 5 seedlings there were three with the dominant L-gene from 'Chiloquin' and two had gold perianths. While a sibship of only 5 seedlings is really insufficient to be sure of the dosage of the dominant L-gene in 'Chiloquin', it is suggestive that the L-gene in 'Chiloquin' is present in only a dosage of one: thus Llll.

In a progeny of 24 seedlings from the cross of 'Camelot' x 'Tropic Isle', 20 of the seedlings had the white perianth of 'Tropic Isle' while the remaining 4 seedlings had gold perianths. The nearest tetraploid ratio implies that 'Tropic Isle' has the WWww genotype.

Among my own crosses I have been crossing 'Pay Day' with late flowering gold 1 Y-Y's in an effort to get better late blooming golden 1 Y-Y's. While I can't cite exact numbers, it has been my observation that such crosses yield approximately 50% lemon seedlings and 50% gold seedlings.

Conclusion: 'Pay Day' has a dosage of only one of the dominant L-gene. Thus: Llll.

In crossing 'Glisten' with *N. cyclamineus*, among the 12 seedlings there are 3 with the dominant L-gene. The other nine were golden selfs which lacked the L-gene. Nearest ratio would be 50:50.

Conclusion: 'Glisten' has only one dose of the dominant L-gene. Thus: Llll.

It came as a surprise to me that 'Golden Amber' contains one dose of the dominant W-gene for white perianths. In this case, there is a *modifying gene* present which prevents the full expression of whiteness in this clone resulting in a pale yellow perianth. In the cross of 'Golden Amber' x 'Trojan', some of the seedlings had white perianths.

Conclusion: 'Golden Amber' has a dosage of one of the dominant W-gene but with modifying genes allowing partial expression of light yellow in its perianth. Thus: Wwww.

In the cross of 'Hillstar' x 'Pink Step', the resultant amphidiploids from this cross so far have yielded 8 seedlings with white perianths and 6 seedlings with lemon perianths. This result approximates the 50:50 expected diploid ratio.

Conclusion: 'Pink Step' has only 1 dose of the dominant W-gene. Thus: Ww.

In crossing 'Hillstar' x Self one obtains some progeny that are gold selfs (in an expected ratio of about 75% Lemon selfs to about 25% gold selfs.)

Conclusion: 'Hillstar' contains only 1 dose of the dominant L-gene. Thus: Ll.

Considering only the few known daffodil genes it is then possible to categorize certain types of daffodils in tabular form:

e.g. a white-perianthed pink double would be:

Wwww
Dddd
PPPP

e.g. a white-perianthed flower with yellow split-corona cup would be:

Wwww

Ssss

Pppp

Yyyy

e.g. a 2 Y-Y would be:

wwww

Yyyy

llll

There are many traits in daffodils for which the genetic makeup is presently *not known*. Among these is the presence of *white corona* when the W-gene for white perianth is present. I personally have no data to cite regarding this, but I rather suspect that the white coronas consist of a *recessive* trait.

At least one dose of the dominant L-gene (e.g. Llll) must be present to have lemon perianths. I presently have no data regarding the L/W phenotype. If it should prove that the genetic factor for lemon perianth with white corona is a separate gene from the dominant L-gene, then such a factor would necessarily be epistatic to the dominant L-gene. Data regarding this are presently unavailable.

The sets of chromosomes in *N. triandrus* are usually non-homologous to the sets of chromosomes present in yellow trumpets and poeticus. For this reason first generation hybrids between *N. triandrus* and main-line daffodils are mostly sterile. There have been three exceptions to this: 'Honey Bells' (if it is still in existence anywhere), 'Silver Bells', and 'Harmony Bells'. In each of these three instances these cultivars are partially fertile, implying that the chromosomes from *N. triandrus* in these three clones are at least partially homologous to the genes (N) of trumpets and poeticus.

The fertile poetaz types, such as 'Matador', 'Sol City', 'White Owl', and 'Bright Spangles' are amphidiploids between pure tazettas and the trumpet-poeticus mainline daffodils. Their chromosome counts are near 34 being made up of NNTT genotype.

In conclusion I wish to make a strong plea to the authorities who decide such things that the lemon cultivars with the dominant L-gene should be color coded as "L" rather than "Y" in all places of record. (Also the lemon-pinks should be color coded "L-P" instead of "Y-P". Dr. Throckmorton stated, "If I had it all to do over again, I would add one more color, Lemon-L, because there is such a spread between shades of yellow." The lemons are

both a *genotype* and a readily distinguished *phenotype* and certainly should be differentiated from the "Y's" (yellows and golds) in the scheme of color coding!

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Acknowledgment

Without the interest and encouragement of Ruth Pardue who typed and retyped this manuscript several times, it is unlikely that this article would have been published in its final form as soon as it is being published.

Grant E. Mitsek Novelty Daffodils

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BREEDING BREAKTHROUGH,

The \$10,000 Revelation

Henry Hartmann, Wayne, NJ

Ten years ago, no one knew of a good yellow breeder daffodil that would turn out plenty of superior 1 and 2 Y-Y daffodils. Expectations were one winner in a thousand seedlings.

So, I started from scratch and crossed and reverse crossed everything that was a 1 or 2 Y-Y. Some varieties would not set seed. After three bare years, I gave up on these. Most of the crosses and reverse crosses yielded nothing good.

During the winter of 1991, I spent one solid week analyzing data from the *ADS Daffodil Data Bank* book looking for 1 and 2 Y-Y varieties that have desirable dominance. None were found.

Well that's all history now. I presently have 74 superior yellow daffodil seedlings, 90 percent of which came from seven different crosses where 'Gold Convention' 2 Y-Y, was the pollen parent. Since I reverse cross wherever possible, and since no selections came from 'Gold Convention' as a seed parent, it is evident that 'Gold Convention' possesses paternal dominance. This is a very valuable trait for a variety that passes on good attributes. The variety 'Swain' also possesses male dominance, but with less desirable results.

If I had to put a dollar value on this revelation I would estimate its worth to be at least \$10,000. Purchase of bulbs exceeded \$1,000 and labor was worth at least \$1,000 per year.

Even though 'Gold Convention' is a long cup daffodil, the length of its cup is close to that of a trumpet. So you can cross 'Gold Convention' with even 2 Y-Y's and obtain a good percentage of trumpet seedlings.

So now you have it. An easy way to breed superior yellow daffodils. Use pollen from the daffodil variety, 'Gold Convention'. Knowledge is money.

Jumpstart the Daffodil Season with a Deep South Convention

Loyce MacKenzie, *Madison, MS*

Mark your 1997 calendar for a down-home, small-town, family-style convention. Join the American Daffodil Society in Jackson, Mississippi, on March 13 - 15, for the earliest ADS convention ever, and the one farthest south.

The 1997 convention will be held at the Edison Walthall Hotel in downtown Jackson, just across Capitol Street from the second oldest Governor's Mansion in continuous use. Although Jackson calls itself "The Crossroads of the Deep South," it provides a setting just the right size for an early spring helping of true Southern hospitality.

Come in early and enter your own flowers; there's no better way to feel a vital part of a convention than to take the risk of being a participant. If March 31 seems a bit early for your daffodils, plant miniatures in a sheltered location and plant lots of Division 6's.

The keynote speaker will be John Pearson, of Hofflands Daffodils. Those of us who were at the Portland and Baltimore conventions found John and Rosemary quite easy to get acquainted with, and helpful in every way, from sharing the secrets of creating gorgeous flowers to taking down the show. Additionally, noted Australian daffodil hybridizer, Rod Barwick, Glenbrook Bulb Farm, Tasmania, has also been invited.

Friday's working sessions will include Daffodil Photography: How To and How Not To; Landscaping with Daffodils: A Four-Season Garden and Not Just A "Graveyard"; and The Basics of Breeding Daffodils.

On Saturday's tour day, we'll visit the Daffodil Garden at Hendrick House on the campus of Mississippi College in Clinton. Mutterings of "Not enough time!" will surely be heard from everyone walking the rows of an international hybridizers' garden the likes of which we have not seen since Washington in 1988.

Seedlings and named daffodils from Rod Barwick, Ron Scamp, Kate Reade, Brian Duncan, Sir Frank Harrison, Clive Postles and John Pearson, as well as American-bred daffodils from Elise Havens, Helen Link, Frank Galyon and Leone Low, are in their second season of getting accustomed to the Mississippi climate. These beds are bordered with 80 different miniature cultivars and species planted by Martha Anderson.

Saturday will take you back in time to a 1920's Mississippi small town. You'll walk the dusty streets and see the cottage gardens, the schoolhouse, the country store, the country church . . . all the elements of life as it used to be in the rural South. The Mississippi Agriculture and Forestry Museum features all of this and our picnic lunch as well. We'll also visit the gardens of two CMDs members.

For those who aren't exhibiting, judging or clerking on Thursday, take the optional tour to nearby Vicksburg and enjoy the delightfully unexpected combination of lunch at a riverboat casino followed by a tour of the historic Civil War battlefield overlooking the Mississippi River. Plan to stay over Sunday night so that you can also enjoy the optional Sunday tour to Natchez. As you tour this other historic river city, you will have lunch at the Carriage House at Stanton Hall and visit four of the antebellum homes features on the Natchez Pilgrimage before coming back to the convention hotel for a dinner and slide program of the 1997 national daffodil show winners.

Jackson can be reached by automobile on I-55 or I-20, by Delta Air Lines via either Dallas or Atlanta, as well as by direct flights from Nashville and Cincinnati. Those who can fly in from St. Louis will be able to schedule TWA flights. Likewise, Northwest Air Lines has an airlink to Jackson via Memphis.

Come South in springtime '97, and maybe even make a wide swing through our part of the country. If you'd like information on other interesting destinations in the area from steamboat cruises in New Orleans and its French Quarter, to walking the avenues of Mobile's Bellinger Gardens, call me at (601) 856-5462 or write to 249 Ingleside Drive, Madison, MS 39110.

Ya'll come now — you'll be glad you did!

Hotel Reservation Request
American Daffodil Society Convention
The Edison Walthall Hotel

(Return to hotel)

225 East Capitol Street, Jackson, MS 39201

Tel: (601) 948-6161 (800) 932-6161 FAX: 601-948-0088

Please submit by February 28, 1997

Single - One Person - King/Queen Bed.....\$62.00

Double - Two Persons - King/Queen Bed.....\$72.00

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City _____ State _____ Zip _____

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Send reservation directly to The Edison Walthall Hotel with a deposit for The first night's lodging. After February 28, 1997, reservations accepted on a space available basis. Check in time is 3:00 P.M. Circle name of credit card: AMEX, VISA, MC, DC, DIS.

CC# _____ Expiration Date _____

Sales Tax - 8%, City Room Tax \$0.75/room

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MARCH 13-15, 1997

The Edison Walthall Hotel, 225 East Capitol Street, Jackson, MS 39201

Tel: (601) 948-6161 (800) 932-6161 FAX: 601-948-0088

Name (s) _____

Address _____

City _____ State _____ Zip _____

Nickname(s) _____ Your first Convention? _____

REGISTRATION FEE: Before December 31.....**\$185.00**

Before February 15.....**\$195.00** After February 15.....**\$205.00**

Hybridizers Breakfast...**\$10** Judges Refresher Breakfast...**\$10**

Thursday Tour: Vicksburg National Battlefield; lunch on a river boat casino.....(Minimum 30) **\$30.00**

Sunday Tour: Historic Natchez, visit to four antebellum homes, lunch at Carriage House; dinner and evening program at The Edison Walthall Hotel.....(Minimum 30) **\$65.00**

Registration Fee Includes: National Show; Friday Special Programs; Thursday, Friday, and Saturday Banquets; Saturday Tour and Luncheon

Do you plan to exhibit? Yes _____ No _____

Send Registration Fee to:

Mrs. Fred Roquemore
309 Indian Mound Road
Clinton, MS 39056

Make checks payable to: 1997 ADS CONVENTION

No additions or deletions will be permitted after March 11, 1997.

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THE DAFFODIL SOCIETY



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

The Society issues two publications each year to all members and welcomes contributions from all growers on the complete range of topics.

Minimum membership subscription for overseas members is \$21 for 3 years, provided payment is made by STERLING International Money Order or in US dollar bills.

Mrs. Jackie Patherbridge, The Meadows, Puxton, Nr. Weston-super-Mare, Avon BS246TF, England

HERE AND THERE

Junior Daffodil Club Begun in Indianapolis. A little trumpet fanfare and a drum roll here, please! Introducing . . . the Indiana Daffodil Society Junior Growers' Club. This newest daffodil club, organized by Suzy Wert, is being set up as an offshoot of the Indiana Daffodil Society; and according to the brochure will be something like "Martha Stewart meets Mr. Wizard." Suzy's enthusiasm is contagious, and she now has twenty girls from grades 2 through 6 signed up to participate. Not only are the girls IDS members, but each has also joined the ADS as well. Each girl will be receiving bulbs to plant, and will be expected to exhibit her blooms in the IDS show next April. Along with the bulbs, the girls will receive a complete Starter Kit which includes everything needed to get started growing daffodils, including soil amendments, daffodil fertilizer, growth and record charts, cultural information about growing daffodils, tips for showing daffodils, and a special Club Bulb. Suzy even has the girls distributing flyers about the Wister Award Winners to local nurseries, suggesting they order the bulbs for their fall sales. A side benefit is that some of the mothers have also joined the Indiana Daffodil Society. See what a little enthusiasm can do? Why not try it in your area?

The Ninth Annual Southern Garden Symposium will be held in St. Francisville, Louisiana, on October 11-12, 1996. Many workshops are scheduled, including one by Scott Ogden, on "The Exciting World of Bulbs." This non-profit event funds a scholarship in landscape architecture at LSU and is funding a public garden park in the historic district of St. Francisville. Gardeners in the Deep South might find it interesting. For more information, write to Southern Garden Symposium, P.O. Box 2075, St. Francisville, LA 70775, or call 504-635-4220.

Sadly we have to report the death of long-time life member Elizabeth Ann Bicknell of Lexington, Kentucky. She had served on the Board of Directors from 1989-1992 and was an Accredited Judge. She will be missed. Our sympathies to her family.

Ottava Mostra Del Narciso*

J. Shejbal, *Rome, Italy*

From March 22 until April 14, 1996, the eighth edition of the only Italian Daffodil Show took place.

During the first seven editions in my garden north of Rome in the years 1982-89, I simply opened my gate to visitors who could see the daffodils grown in beds. This year, in my new home on the slopes of the extinct volcano overlooking Rome from the southeast, I organized a very different show of daffodils grown in pots and exhibited on shelves at eye level. The shelves, of a total length of 36 meters with a width of 60 cm, were installed in the specialized micro-nursery, called Floriana, which is part of my new garden here and is run together with my son, Martin. Thus it was possible to receive visitors each day in those three weeks from 10 a.m. to 6 p.m.

More than 450 people came to see the flowers. Horticultural journals and newspapers wrote about the show, and the national television's first program came and produced a good ten minute service. The mayor of Monte Porzio Catone, the little town where we now live, asked us to show the daffodils on Easter Monday in the central square; and we were then invited to participate in the spring garden show "Primavera alla Landriana".

Growing and showing our daffodils in pots was really a great success.

According to the dimensions of the bulbs, we used two sizes of square green plastic pots: 10cm x 10cm x 17cm and 12cm x 12cm x 19cm, with good, enriched, local garden soil between two layers of volcanic grit (lapilli), at the bottom for drainage and at the top to avoid the soil being squirted out by rain or during irrigation. In this way, placing the pots next to each other on a plastic ground cover, a very homogeneous and clean, sufficiently deep "raised bed" was formed by the 2400 pots in which we planted, in October and November 1995, some 400 varieties of daffodils.

Visitors appreciated the opportunity to see the flowers placed directly in front of their eyes, or slightly above their heads; and being able to choose plants in bloom, instead of purchasing bulbs in garden centres without the certitude of them being true to name.

**Eighth Edition of Our Daffodil Show*



Also, our presence for one day with a stand in the square of Monte Porzio Catone was an excellent experience. Here it was mostly occasional visitors and passers-by who stopped in admiration; and many more people now know how beautiful daffodils can be.

At the show "Primavera alla Landriana" we were awarded the Gold Medal for Originality by a jury of horticultural specialists. We also received compliments from the organizers, including the owner of the Landriana, Marchesa Taverna, who, together with Russell Page, created here the well-known, fascinating Landriana Gardens.

Our daffodil season was very rewarding and all members of my family enjoyed it thoroughly.

Calicola and Cyclamineus Down Under

David Adams

I always read with interest published articles on species daffodils and those in the December 1994 *Journal* have been read and absorbed several times.

N. cyclamineus is well established in New Zealand and Tasmania. Indeed the species has had premiere vases of miniatures three times at recent North Island national shows in New Zealand. It has naturalized well here in Christchurch and I have three distinct varieties that I grow.

The first of these flowers very early and shows distinct fimbriation (?) on the mouth of the corona. I obtained this stock from Daffodil Acre in Tauranga.

The second variation flowers a week later and is too large to be considered miniature, the corona being as long as, or longer than, the perianth. I had it planted under a drainpipe for year-round moisture and it has been very vigorous.

The last variation flowers a further week later, with the corona being about half perianth length. This variation seeds well and is naturalized in a woodland garden. I have little problem with bulb loss.

Some years ago a writer in the *Journal* mentioned *n. calicola* naturalized at the property of the late David Bell. I am currently on the committee that administers the Bell property and can report a thriving population of *n. calicola*. I retrieved some of these bulbs in case of possible mistreatment. A small population has naturalized for me, although I find it difficult to get them to set seed. Peacocks have a remarkable skill at getting through the flower covers.

N. calicola grows vigorously in pots for me and multiplies well in this medium.

Hugh McKay from Hawkes Bay, has used *N. calicola* in hybridizing with other species. The resulting miniature hybrids are most special and will equal the best of other hybridists.

I appreciate the sentiments of the writers in the *Journal* researching the protection of the species. The vigor of *N. cyclamineus* and *N. calicola* in Christchurch suggests that their future is well secure Down Under.

POSTSCRIPT: Species Theories according to Adams.

N. canaliculatus is most difficult to flower, yet bulb division is rampant. Bulb retention is difficult in *n. cyclamineus* yet it has up to eighty seeds in a pod.

Theory: If a species multiplies by bulb division, it does not need to flower and set seed. A wise daffodil grower once said, "If you want *N. canaliculatus* to flower, plant it in your drive and treat it as harshly as you can."

N. cyclamineus grows near streams and sets seed readily. It is pendant with a long corona.

Theory: As *N. cyclamineus* does not multiply readily by bulb division, it is essential that the species multiplies by seed. The long corona protects the pollen from becoming wet and ruined, and also insures that the fertilization will occur.

Those interested in species protection are concerned about bulbs being dug from the wild, yet many readily set seed. I suggest that this may also be detrimental to the continued existence of these varieties where propagation by seed is essential for their continuity.

NANCY R. WILSON

Miniature and *species* Narcissus

Featuring bulbs from James S. Well's collection

6525 Briceland-Thorn Road
Garberville, CA 95542

List \$1



THE AMERICAN DAFFODIL SOCIETY, INC.
BOARD OF DIRECTORS--MEETING MINUTES
18 APRIL, 1996, 3:30 P.M. SHERATON BALTIMORE N. TOWSON, MD.

A regular meeting of the Board of Directors was held with 44 Directors present. President Marilyn Howe presided and Secretary Phyllis Hess recorded.

President Howe called the meeting to order at 3:38 PM and thanked everyone for attending.

REPORT OF THE OFFICERS:

SECRETARY: Secretary Hess moved approval of the Minutes as amended for the Fall Board Meeting 1995. Attachment A Day 4 (Sunday) Morning: Judges Refresher Breakfast should read (Judges Only). Second by Stan Baird. Motion Passed.

TREASURER: Treasurer Stettinius moved that the 1995 Annual Statement as handed out to the Directors be approved as modified. Second Lee Kitchens. Motion carried.

PRESIDENT: President Howe reported that she thinks the daffnet has been one of the exciting things that happened in 1995. She reported that the Society was in pretty good shape financially. As usual, we need more members. Ms. Howe thanked her Committee Chairpeople for all their hard work.

AUDIT COMMITTEE: Mrs. Ager reported that the Committee has carefully monitored and reviewed all financial records of the Society during the year 1995 and found no areas of concern. The Committee praises the efficient and hard working Executive Director and the Treasurer for managing the financial affairs of the Society in such a satisfactory manner.

FIRST VICE PRESIDENT: Mrs. Ager has worked hard to secure items for the 1996 Convention Auction. She would like to thank all the generous contributors.

SECOND VICE-PRESIDENT: Mr. Spotts reported the planning for future Conventions in 1998, '99 and 2000 are proceeding on schedule. The Fall 1996 Board Meeting will be held in Albuquerque, New Mexico on October 25 - 26. Mr. Spotts has recommended to the First VP that an Ad Hoc Committee be formed to develop policy concerning financial and liability issues for ADS official meetings to present to the Board.

REGIONAL VICE-PRESIDENTS: Reports were received from all but the Central Region.

EXECUTIVE DIRECTOR: The Executive Directors report dated 15 March was included with the Board Meeting Agendas and mailed to all Directors prior to the meeting. As of that date we have 1241 members in the US and 146 Overseas members. Mrs. Gripshover reported that she has been busy going through slides preparing them for inclusion in the Illustrated Data Bank. The *Journal* is now being mailed by a service in Nashville where it is printed. The Executive Director also sent material to an Arbor Day celebration in New Jersey.

REPORTS OF THE STANDING COMMITTEE CHAIRPERSONS:

AWARDS/SHOW REPORTER: Ms. Low reported the Knoxville and Atlanta shows were forced to cancel because of the unusual weather. Several shows are including the Small Growers Award in '96. There has been no increase in the budget for her committee and none is asked.

DATA BANK: In Mr. Jerrell's absence no report was given.

CLASSIFICATION AND REGISTRATION: Mrs. Gripshover's report was included with the Board Meeting Agenda and mailed to all Directors prior to the meeting, she reported the RHS is still working on some classification changes.

EDITOR OF THE JOURNAL: Editor Kitchens reported that after 2 years as Editor he hopes everyone enjoys reading the *Journal*. Coming issues will bring new authors and new features.

FINANCE: Mr. Stettinius asked Steve Vinisky to show the Illustrated Data Bank and describe same. Phyllis Hess purchased the first CD Rom version. Mr. Stettinius moved. Seconded by Dick Frank. That the Finance Committee recommends we pay Pacific West International \$5400 to be taken from the General Fund for the Illustrated Data Bank program for the exclusive world-wide marketing and sales rights to the Illustrated Data Bank for all daffodil-related applications in both Macintosh and IBM/Windows-compatible formats. Motion carried. Mr. Stettinius moved. Seconded by Delia Bankhead. That the prices for ads in the *Journal* be increased by approximately 20%. Dick Frank moved to amend the motion by striking it in its entirety and substituting for it, That the rates for advertising be set upon the recommendation of the Editor and the Chairman of the Publications Committee with the approval of the Executive Committee. Seconded by Delia Bankhead. Vote taken on the amendment. Motion carried. Vote on the original motion. Motion failed. Mr. Stettinius thanked the Board for allowing him to serve as Treasurer and expressed confidence in Rod Armstrong as our new Treasurer. He also praised Mary Lou Gripshover for making his job easier.

HYBRIDIZING: Mr. Vinisky's reported that the list of seed for the seed exchange will be listed in the June *Journal*. In 1995 close to 90 packets of seed were sent out.

INFORMATION SERVICES: Mr. Shazelle reported that since the creation of the Committee 2 important services have been provided. First, the creation of the Daffnet on July 14, 1995, using a listserv provided

by Mississippi College. As of April 9, 1996, 1273 messages have been sent and archived.. Currently 99 people are subscribers, approximately one third of which are ADS members. Secondly, on July 20, 1995, the ADS Homepage came on line using a WWW server again provided by Mississippi College, all at no cost to the ADS. The Homepage was written by Nancy Tackett who also edits same. The Homepage has been accessed 576 times as of April 10, 1996.

INTERMEDIATES: Helen Trueblood reported a questionnaire was sent to all 41 ADS Show Chairmen. 9 were returned. A new list of smaller daffodils has been made with sources. She remains hopeful that more dealers will add flowers in their catalogs in divisions 1 - 4 and 11 and 12. She asks for Cultivar names to be included on the list of 1 1/2 inch to 3 inch daffodils be sent to her.

JUDGES AND SCHOOLS: Naomi Liggett reported that a Judges Newsletter entitled *Criterion* was prepared and mailed in February to all Accredited and Student Judges per request of President Howe. Changes to the Handbook were included. Seven people have requested Accredited Judge Retired status. Information on preparing the judging master score was sent to all instructors teaching the six schools scheduled for Spring 1996. 2 refresher and 2 make-up schools were held. New Accredited Judges are: J. A. Strauss, AR, Bill Lee, Tom Stettner, Margaret Baird, Linda Walpe all of OH. There are 192 AJ, 55 Students, and 47 AJR for a total of 294. Mrs. Liggett had income of \$91.80 and expenses of \$35.38 for the schools, \$129.65 for the Newsletter and \$53.53 for mailing Judges and Schools material to Stan Baird.

MEMBERSHIP: Kathryn Welsh reported the ADS membership stands at 1408, an increase of 75 since 1995. She has developed a color poster using drawings from Marie Bozievich to be used by all Societies in recruitment. They are available for \$38 and \$43 if laminated. Kathy strongly recommends all members try to recruit one new member.

MINIATURES: Chairperson Ellwood reported 12 additions and 3 deletions to the approved list over the last year. These were printed in the December *Journal*. Applications have been received to include 'Angel's Breath' 5 Y-Y, 'Fen Ben' 7Y-Y, 'Ferdie' 6 Y-Y, 'Kholmes' 12 Y-Y, 'Midget' 10 Y-Y and 'Orclus' 12 W-W.

Applications for 'Bow Bells', 'Drop of Gold', 'Fresh Season', 'Julia Jane' and 'Yimkin' are needed. They have received the required number of votes but need a completed application to be included on the list.

PUBLICATIONS: Mrs. Kitchens reported that she has sent 27 letters soliciting ads, from these 32 ads were received. Income to date for 1996 is \$1300.

ROUND ROBINS: Ms. Bankhead reported that three of the four robins are making rounds on a good schedule, the fourth has been found and sent on its way. A new robin on species has been started and has 5 or 6 members so far. Delia feels it has been proven that a good director for each robin is very useful.

SLIDE PROGRAMS: Mr. Fong reported that 27 programs were sent during 1995, with expenses of \$124 and income of \$435. For 1996, 15 programs have been sent and 4 are reserved, expenses were \$101.67 and income \$225. Weres were sent to Mary Lou Gripshover to peruse for inclusion on photo CD's.

SPECIES CONSERVATION: Mrs. Andersen reported that no new contacts had been made with overseas experts. Several lectures and a slide talk at the Convention have been given in an attempt to raise awareness of loss of habitat in the wild. The Dutch bulb industry appears to be bowing to pressures from conservation groups in restricting its offering of species in popular catalogs. A suggested scale of points for species has been drawn up. Mrs. Andersen will update the "Species Slide Program" this winter to have a more conservation point of view.

WISTER, HEALTH/CULTURE: Mrs. Link reported in Mr. Wadenkamper's absence that the committee has decided to test 'Tangent' 2 W-P for the coming year. Mrs. Link moved. Seconded by Nancy Wilson. That 'Tangent be tested for the Wister Award. Motion Passed. The past winners are: 1990 'Accent', 1991 'Stratosphere', 1992 'Ice Follies', 1993 'Sweetness', 1994 'Ceylon' 1995 'Peeping Tom'.

RESEARCH ENDOWMENT FUND: There was no report.

REPORTS OF TASK FORCES:

GOVERNANCE: (Secretary's note: Please see New Business.)

MARKETING/PRODUCT: Mr. Vinisky reported that he has been working with 2 tour operators on the trip to England, a seven day trip is planned. No final cost at this time. More will be known at the Fall Board Meeting. Extension tours to Northern Ireland the following week are being coordinated, also to Keukenhof.

DEVELOPMENT: Mr. Pannill reported that now the Committee had something to work on and would set about trying to raise the \$5400 for the IDB.

AD HOC COMMITTEES:

NEW ZEALAND TOUR: Kirby Fong reported no new sign-ups as no ad was in the December *Journal*. As of April 9, 21 people were signed for the tour and 19 for the extension to Australia.

ILLUSTRATED DATA BANK: Rod Armstrong moved. Seconded by Delia Bankhead. That the Board approve the Executive Director to execute the Distributor Agreement with Pacific West International for exclusive world-wide rights to the Illustrated Data Bank for all daffodil related applications for all Macintosh and IBM/Windows-compatible formats. Motion carried.

UNFINISHED BUSINESS:

PROPOSAL FOR ESTABLISHING A DESIGNATION AS "ADS DISPLAY GARDEN": This proposal was deferred to the Fall Board meeting.

BOOK, IDENTIFYING MINIATURES: Mary Lou Gripshover reported the Committee is still working on the Miniature book and hope to have the first part out in the fall. They are still compiling photographs.

NEW BUSINESS:

MOTION REGARDING CHOOSING THE CHAMPION AT THE ADS NATIONAL SHOW: Naomi Liggett moved. Seconded by Kathy Welch. RESOLVED: That the champion at the ADS National Show be chosen as follows: Each ADS Accredited Judge shall choose three candidates; the Judge's number one choice will receive three points, second choice two points, and third choice one point. After the votes are tallied, the candidate with the most points will be awarded the ADS Gold Ribbon. If the winner is a seedling, it will also be awarded the ADS Rose Ribbon. This system may be used at local shows if the Judges Chairman feels there are enough candidates to warrant it. After much discussion. Motion defeated.

MOTION REGARDING CONTAINER-GROWN DAFFODILS SCALE OF POINTS: Mrs. Liggett moved. Seconded by Stan Baird. That the changes to the Scale of Points for Container-Grown Daffodils passed at the Fall Board Meeting be rescinded and the following scale of points be adopted:

SCALE OF POINTS FOR CONTAINER-GROWN DAFFODILS

Exhibit as a Whole	35	Hybrid	10
Symmetry With Uniform		Substance & Texture	10
Development	20	Color	10
Floriferousness	10	Pose	5
Condition & Correctness		Stem	5
of Container & Label	5	Size	5
Bloom	55	Foliage	10
Condition	10	Condition	5
Form According to		Color	5
Cultivar/Species/Species			100

When judging miniature daffodils, substitute form and grace for form. Motion passed.

MOTION FOR SCALE OF POINTS FOR SPECIES: Naomi Liggett moved. Seconded by George Bragdon. Motion: RESOLVED: that the following scale of points for judging species (developed by Kathy Andersen) be adopted. Motion passed.

Condition	50	Color	10
Form	15	Pose	5
Substance	10	Stem	5
Texture	5		100

MOTION CHANGING JOB DESCRIPTIONS: Stan Baird reported as Chairman of the Governance Task Force that several changes be made in the job descriptions in the Board Manual. (Please note that new or revised wording is underscored.) Stan Baird moved. Seconded by Bill Pannill. Resolved: That the following changes be made in the job descriptions in the Board manual. Bill Pannill moved to strike the change to item 6 in the Second Vice President's duties. Seconded by Bob Spotts. Motion Passed. Original motion then passed.

Change the President's job description as follows:

DUTIES:

1. Preside over Membership Meetings, Board Meetings, and Executive Committee meetings; prepare agenda in advance for printing and distribution by Secretary.)

Change First Vice President's job description as follows:

Add the following under DUTIES:

7. Supervise the work of the Regional Vice Presidents and convene at least one meeting per year of the Regional Vice Presidents, normally during the fall Board meeting.

8. Remind Regional Vice Presidents who fail to publish two regional newsletters per year of their responsibility for doing so.

Add the following duties to the Second Vice President's job description:

DUTIES:

7. Contact appropriate local societies and/or RVPs for scheduling time and place of ADS conventions.

8. Keep the Board Manual up to date by submitting appropriate changes or additions to the Executive Director for inclusion in the Manual.

9. Distribute a copy of the Board Manual to all new Board members as soon as they are elected or appointed.

Change the Secretary's job description as follows:

DUTIES:**2. Duplicate and mail agendas, as supplied by the President, for Board meetings.**

(Remaining duties to be renumbered accordingly.)

Change the Treasurer's job description as follows:

- 1. Sign all checks payable to the Executive Director and maintain all ADS financial records.**
- 3. At the end of each year, receive from the executive Director:**
 - a. all bank statements and records of the source of income (dues, life memberships, income from sale of books and supplies, and other income).**
 - b. records of all bank deposits, savings account passbook details, and other investment funds**
 - c. a statement showing dues paid in advance and life memberships to determine the liability for dues paid in advance.**

Changes in Executive Director's job description:

2. By delegation from, and in collaboration with, the Treasurer, receive all ADS income, pay all bills, invest (with advice and consent of treasurer) ADS funds, and maintain ADS financial records. Eliminate item 4 under Duties, which assigns the Executive Director the responsibility for printing and distributing the agenda for all meetings.

Eliminate item 15 under Duties, which assigns the Executive Director the responsibility for mailing The Daffodil Journal.

Change Publications Chairman's job description as follows:

- 4. Assume responsibility for mailing The Daffodil Journal, normally by contracting the work to a professional mailing service.**

MOTION TO CHANGE ROUND ROBIN CHAIRMAN'S JOB DESCRIPTION: Dick Frank moved.

Seconded by Mary Lou Gripshover. **RESOLVED:** That the following job description for Round Robins Chairman, which was submitted to the Committee by the present Chairman, be substituted for the one currently included in the Board manual. Motion Passed.

GENERAL

- 1. Attend as many Annual Meetings and Board meetings as possible.**
- 2. Present a report to the Board, except following the Annual membership Meeting.**

ORGANIZING A ROUND ROBIN:

- 1. Contact any members whom you know to share an interest in the subject of the robin.**
- 2. Put an article in the Journal soliciting members for the proposed robin.**
- 3. Collect a minimum of 6 people before setting up the robin. (Experience has shown that 8-10 people is ideal for interest, without undue delays, while robins of more than 12 people can get bogged down.)**
- 4. When you have your members, create a geographically sensible routing list and some basic rules for members to follow (see suggested procedures below) which you will add at the bottom of the routing sheet. Put yourself at the top of the list as Robin Director.**

DUTIES OF ROUND ROBIN DIRECTOR:

- 1. Suggest a specific topic for each round robin. This helps keep the discussions more to the point and makes the letters more interesting. Topics for a species robin could be the cultural requirements of a particular section (see back of *Daffodils to Show and Grow*), or even a particular species, the great variation within a species (*N. rupicola*, for instance), trying to establish a list of other plants that are found growing with a species in the wild and creating a list of companion plants that will grow in the U.S., group participation in the ADS Seed Exchange, and comparing notes on how things grow in each member's climate, etc.**
- 2. Keep track of the round robin via the postcards members are supposed to send when they send the robin on, and when necessary, call or write to get it moving.**
- 3. Make a copy of each complete round of a robin when it comes back to you (before you add a new letter with a new topic) and send it to the Round Robins Chairman. If one round of a robin, or a series of rounds, contains much information of general interest, either you as Director or the Round Robins Chairman might collect it into an article for the Journal. Be sure you have the consent of members if you plan to quote them directly (not necessary if no attributions will be made.)**

SUGGESTED ROUND ROBIN PROCEDURES

- 1. When the robin arrives, note date, remove your old letter, and put your new letter on the bottom of the stack. (NOTE: if you keep the stack of letters in date order with the earliest letter on top, it helps everyone follow the comments in each round.)**
- 2. PLEASE send it on within 2 weeks of receipt. If you don't have time to write a letter, just put in a "pass me by this round" note and send it on promptly. Keeping a robin more than a month constitutes automatic resignation. Reinstatement is at the discretion of the Robin Director.**
- 3. Please type, or use black ink on one side of 8-1/2 x 11 inch paper, for ease in copying. If you make any copies, be sure to replace the originals in the letters you send on. Put your name on any slides,**

photos, or other material you want returned and be sure everything you receive goes out to the next person on the list. Please put robin title, your name and address, and date received/date sent at the top of every page.

4. When you send the robin on, be sure to send the Director a post card so he/she can keep track of it. **MOTION FOR PROPOSED DEFINITION FOR DIVISION 10:** Dick Frank moved. Seconded by Nancy Wilson. Resolved: That the ADS respectfully suggest that the proposed definition for Division 10, Bulbocodium Daffodil Cultivars, be amended to include the words "usually one flower to a stem" rather than "one flower to a stem." We believe that this division should conform to the definition of Divisions 5-8 which need only have a preponderance of the matching characteristics, rather than the purity of Division 9 which may have none but the characteristics of the botanical group. We believe this way Division 10 would be greatly enhanced by the diversity of hybrids between the Bulbocodium Section and other sections. Motion Carried.

MOTION FOR HISTORIC DAFFODIL SECTION IN ADS SHOWS: Leone Low moved. Seconded by Mary Lou Gripshover. Resolved: that the ADS 1) encourage the addition of a Historic Pre-1940 Cultivars Section in all ADS-sanctioned shows, and 2) award a ribbon for the best bloom in the Historic Pre-1940 Cultivars Section at the National Show and offer it to all ADS-sanctioned shows. Motion carried.

THE SECTION

DEFINITION - The section would be open to all cultivars (but not species) introduced or in gardens before 1940.

APPROVED LIST - Since any cultivar listed in the Data Bank or Daffodils to Show and Grow with a date prior to 1940 is eligible for this section, there is no need for a separate Approved List. For a handier guide, however, the Historic Robin members would also prepare and circulate a much shorter "Historic Pre-1940 Cultivars to Show and Grow" list of varieties known to still be in cultivation.

ENTERING - Entering a pre-1940 cultivar in the historic section would be at the option of the exhibitor. Pre-1940 daffodils could continue to be entered in other sections as they are now. Exhibitors would be responsible for noting the date of introduction (from the Approved List or Data Bank) on their entry form and for requesting that their entry be placed in the historic section.

JUDGING - For the time being, the historic section would be judged essentially the same as all other sections. Blue, red, yellow, and white ribbons would be awarded as in any section. The scale of points would be the same; however, judges would be encouraged to look at historic daffodils within the context of their era and the section.

For the 1998 shows and beyond, the Judges and Schools Committee together with the robin and other in-terested individuals could consider developing a special scale of points for the historic section. This scale might give more weight to condition, in an effort to encourage the showing of the widest possible array of historic cultivars.

Daffodils exhibited in the historic section would not be eligible for the Gold Ribbon.

CLASSES - Dividing the section into classes would be at the discretion of the individual show chairperson, depending on the number of entries. Dividing could be by division, cultivar, or possibly date (pre-1900, 1901-1920, etc.). In addition to single-stems, other classes in the historic section might include vases of three, collections of five, and so on.

FACILITATING THE SECTION - To make it easier for shows to add the section, the robin members would distribute to all show chairpeople:

1. an explanation of the section and how it might be handled
 2. a list of reasons for adding this section
 3. a copy of the "Historic Pre-1940 Cultivars to Show and Grow" list
 4. guidance for judges, and
 5. an attractive, one-page, large-print description of the section and daffodil history for display at the show.
- Robin members would also make personal contact with all show chairpeople the first few years to explain procedures and options and to encourage their participation.

THE RIBBON

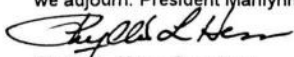
An ADS ribbon would be awarded for best daffodil in the historic section.

The ribbon would make visible on a continuing basis the ADS's valuing of historic daffodils.

The robin members would pay all costs for the ribbon for the first three years at least.

At the end of three years, the Awards Committee would evaluate the ribbon and make a recommendation, based on experience, to either continue or discontinue awarding it.

ADJOURNMENT: There being no further business Steve Vinisky moved. Seconded by Bill Pannill. That we adjourn. President Marilyn Howe declared the meeting adjourned at 5:26 PM.



Phyllis L. Hess, Secretary
The American Daffodil Society, Inc.

THE AMERICAN DAFFODIL SOCIETY, INC.

BOARD OF DIRECTORS--MEETING MINUTES

20 APRIL, 1996, 1:46 P.M. GREAT AMERICA TOUR BUS 1405 IN & AROUND TOWSON MD.
RESUMED ON BUS 1404 AFTER BREAKDOWN

A regular meeting of the Board of Directors was held with 49 Directors present. President Jaydee Ager presided and Secretary Phyllis Hess recorded.

President Jaydee Ager called the meeting to order at 1:46 PM by thanking everyone for attending this unusual Board meeting. She then introduced the new members of the Board, and asked that all members work hard to accomplish the goals of the ADS.

President Jaydee asked for approval of all her committee appointments: (Secretary's note: as printed in the June 1996 *Journal*. Moved by Richard Ezell. Seconded by John VanBeck. That the various appointments be approved. Motion carried.

NOMINATING COMMITTEE REPORT: Chairman Stan Baird read the Committee's report. The Committee recommended the Board appoint, Mary Lou Gripshover, Executive Director, Treasurer, Rod Armstrong, Secretary, Phyllis Hess, and nominating committee Chairman for 1996-1997, Ruth Pardue. Dick Frank moved. Seconded by Bill Pannill. That the nominations be closed and the nominees be accepted by acclamation. Motion carried.

ANNOUNCEMENTS: Mr. Spotts reported that the Fall Board Meeting will be held in Albuquerque, New Mexico on Friday and Saturday October 25-26, 1996.

UNFINISHED BUSINESS:

Dick Frank moved. Seconded by Jerry Wilson. That the recommendation from Joe Stettinius for a ADS Display Garden be referred to Committee. Motion carried. Lee Kitchen moved. Seconded by Dick Frank. That due to the resignation of Regional Director Craig Reed of Pennsylvania, Dianne Mrak be appointed to serve the rest of Mr. Reed's term of office which expires in 1998. Motion carried.

NEW BUSINESS:

Moved by Dick Frank. Seconded by Nancy Wilson. That the Board nominate Mary Lou Gripshover to represent the ADS on the RHS Narcissus Classification and Advisory Committee. Further that the funding come from whatever source the President finds. Motion carried.

Moved by Steve Vinisky. Seconded by Dick Frank. That the ADS accept the invitation of Mr. Bill Pannill to hold the 1997 Fall Board Meeting in Palm Beach, Florida. Motion carried with thanks to Mr. Pannill for his invitation. Dinner on Saturday evening will be held at the Pannill home.

Moved by Dick Frank. Seconded by Mary Lou Gripshover. That the discussion of ADS Illustrated Data Bank be referred to the Executive Committee.

Linda Wallpe on behalf of the Southwestern Ohio Daffodil Society invited the ADS to Cincinnati for the Annual Convention in the year 2001. Mrs. Wallpe has agreed to chair the event. Linda Wallpe moved. Seconded by Weldon Childers. That we accept the invitation. Motion carried.

Ruth Pardue, as Chairman, named to the Wister/Pannill Committee the following: Kathy Andersen, Christine Kemp, Naomi Liggett and Ted Snazelle.

Stan Baird, Chairman named to the Governance Task Force the following: Peg Newell, Elise Olsen, Joan George and Charles Wheatley. Further the Judges Handbook Committee will consist of: Stan Baird, Chairman, Bob Spotts, Elise Olsen and Kirby Fong

Steve Vinisky Chairman of the Information Services Committee named the following to his committee:

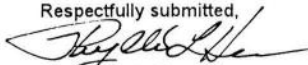
Dick Frank, Rod Armstrong, Marilyn Howe, Bill Pannill, Ted Snazelle, Bob Spotts, Mary Lou Gripshover, Brian Duncan and Peter Ramsey.

Helen Trueblood as Chairman of the Intermediate Committee named the following: Jeanne Driver, Pat Bates and Bob Spotts.

At the suggestion of John Van Beck, President Jaydee Ager was given a rousing round of applause for doing such a good job conducting a "floating Board Meeting".

There being no further business. President Jaydee adjourned the meeting at 4:45 PM.

Respectfully submitted,



Phyllis Hess, Secretary

THE AMERICAN DAFFODIL SOCIETY, INC.

ANNUAL MEETING MINUTES

19 APRIL, 1996, 9:27 P.M. SHERATON BALTIMORE N. TOWSON, MD.

President Howe presided, Secretary Phyllis Hess recorded.

President Marilynn Howe called the meeting to order at 9:27 PM and thanked the Maryland Daffodil Society for hosting the Convention.

Secretary Hess moved acceptance of the minutes of the last Annual meeting. Seconded by George Bragdon. Motion Passed.

Dick Frank moved. Seconded by Lee Kitchens. That the Finance report as filed with the Board be accepted. Motion carried.

Jaydee Ager reported as Chairman of the Audit Committee that the committee found no areas of concern. She praised Mary Lou Gripshover for her excellent work. The Committee members were: Jaydee Ager, Bob Spotts and Richard Ezell. Moved by Mary Lou Gripshover. Seconded by Richard Frank. That the report be accepted. Motion carried.

Stan Baird moved. Seconded by Dick Frank. That the amendments to the by-laws as published in the *Journal* June 1995, pages 230-231 and December 1995 pages 103-105 be approved. Motion carried. (Secretary's note: Please see Attachment A)

President Howe reported that her major goals as President of the Society had been met. Primarily the Society had moved into the computer age and is now on the Internet. She also thanked Steve Vinisky for making the Illustrated Data Bank a reality.

President Marilynn Howe presented the ADS Silver Medal to Helen Trueblood. The ADS Gold medal was then presented to Dr. William Bender.

Stan Baird presented the Nominating Committee Report and moved acceptance of same. Seconded by Dr. Bender. Motion carried. (Secretary's note: A copy is attached and made a part of these minutes.)

President Howe passed the gavel to the new President Jaydee Ager. President Ager asked for a standing ovation in salute of Marilynn Howe's contribution to the Society, and a salute to all the Past Presidents. A rousing ovation was received. She thanked our Baltimore and Middle Atlantic hosts for a fine convention. President Ager, recognized Carolyn Donnelly, Ted Snazelle, Liz Ellwood, Dottie Sable, Molly Wiley and Hilda Dunaway with a certificate of appreciation upon their retiring from the Board.

President Jaydee reported that some of the plans for her term of office include The Pannill Award be presented and it and the Wister Award used in a new effort to promote the ADS. She would like to continue to explore a liaison with the American Cancer Society. She would like to explore the concept of an American Organization of Plant Societies. The President would like to explore a new award for outstanding contributions to the *Journal*. She wants the Governance Committee to continue their work on updating the Board Manual. She feels ways need to be explored to affiliate the local Societies with the ADS. To that end she asks that Sam Winters Chair the Local Society Relationship Committee consisting of: Kathy Welch, John VanBeck, Linda Wallpe George Bragdon and Betty Jean Forrester to do the exploring. She is eliminating the position of Show Reporter. She asks that the Judges and Schools Chairman study the Handbook and update as needed.

President Jaydee will be asking the Board to approve Mary Lou Gripshover as the ADS representative to the RHS.

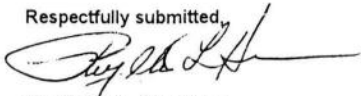
President Jaydee asked the members to recognize and salute the International Guests.

She will continue to ask Steve Vinisky and Kirby Fong to promote the ADS tours. She would like to look into investment strategies other than CD's. She wants work to continue on the IDB and the Daffnet.

Jaydee would like to see the work load of the Executive Director reduced or make her salary match her position. The *Journal* is now being mailed by a service which helps. She feels we also need to check on liability insurance for Local Societies, continue to increase membership, and fund small research projects. Recognizing that our people are our strength, she feels she has surrounded herself with good people to help her lead the Society into the future.

President Jaydee adjourned the meeting at 10:07 PM.

Respectfully submitted,



Phyllis Hess, Secretary

ATTACHMENT A:

(Secretary's note: Changed or additional wording is underlined) Delete Article III –Directors Section 1 and in its place, Article III - Directors - Section 1. The election of the Directors-at-Large of the Society shall be held annually at the annual meeting of the membership of the Society, or as otherwise hereinafter provided. Delete Article IV - Officers-Section 3-Election and in its place, Article IV -Section 3. Election. The election of Officers of the Society (other than the Secretary and Treasurer, who shall be appointed by the Board, and the Regional Directors and Regional Vice Presidents, who shall be elected by their respective regions) shall be held annually at the annual meeting of the Membership of the Society, or as otherwise hereinafter provided. The affirmative vote of a majority of the members present at the meeting shall be required for election. Election shall be by secret written ballot under Rules, not inconsistent with these By-Laws, which may from time to time be adopted by the Board of the Society. However, in the event that only one candidate has been nominated for any officer's position, the secret ballot with respect to such position shall not be required. The election of Regional Directors and Regional Vice Presidents of the Society shall be held via a written ballot included in the newsletter of the region involved or in the absence of a regional newsletter, by a ballot mailed by the Regional Nominating Committee to all members within the region involved. Delete Article V - Committees-Section 2 - Nominating Committees and in its place Article V - Committees-Section 2. Nominating Committees. The Board of the Society shall appoint annually a National Nominating Committee, which shall be composed of five (5) members of the Society. The President of the Society shall appoint from the membership of the National Nomination Committee, its Chair. No member of the Nominating Committee shall be an elected officer or director or a member of the Executive Committee, except that Regional Vice-Presidents may serve on the Nominating Committee. The National Nominating Committee shall recommend to the membership at the annual meeting of the Society and place in nomination not less than one (1) nor more than three (3) nominees for each elected national office upon which a ballot shall be taken by the members at such meeting. In the event that any regions have not elected their own regional officers, the National Nominating Committee shall also place in nomination at least one (1) but not more than three (3) nominees for the regional offices for that region. Following the report of the National Nominating Committee to the membership, additional nominations may be presented to the membership in writing subscribed to by five (5) voting members of the Society in good standing, who, in the case of the nomination of a Regional Vice-President or Regional Director, shall reside in the Region from which such Vice-President or Director is to be elected. The Nominating Committee shall also present, and place in nomination, at the meeting of the Board of the Society next following the annual meeting of the membership, at least one (1) nominee for the offices of Secretary, Treasurer, and Executive Director, together with at least (5) nominees for the Nominating Committee. The three (3) current regional directors of each region of the Society shall constitute the Regional Nominating Committee for that Region, with the Regional Director in his or her second year serving as chair thereof. Each Regional Nominating Committee shall place in nomination not less than one (1) nor more than three (3) nominees for each regional office to be filled in the region in which they reside. Any member of the Region may present nominees for a regional office to the Regional Nominating Committee provided such nominees are willing to serve and provided these nominations are supported in writing by five (5) members in good standing residing in the Region involved. Any such nominations must be presented to the Regional Nominating Committee on or before August 1 of the year prior to that in which the office is to be filled. The Regional Nominating Committee shall prepare a written ballot for the election of its regional officers, including any nominees submitted by members of the Region subscribed to by five (5) members in good standing who reside in that Region. This ballot shall be included in the fall regional newsletter, or, in the absence of a newsletter, shall be mailed directly to each member in the Region. A majority vote of those ballots cast shall be necessary for election. Each Regional Nominating Committee shall notify the chairman of the National Nominating Committee of the results of its regional election no later than December 1 of the year immediately preceding that in which the office is to be filled. If any Regional Nominating Committee fails to notify the National Nominating Committee of the election of its regional officers by that date, the nomination of candidates for regional officers for that region shall become the responsibility of the National Nominating Committee. In that event, the National Nominating Committee shall present nominees for these regional offices at

the Annual Meeting of the membership. The affirmative vote of a majority of the members of the Society at the meeting being required for election.

ARTICLE V, Section 5. Standing Committees. There shall be such standing committees as the Board of the Society may by resolution provide. Chairmen of standing committees may serve a maximum of six (6) consecutive one-year terms. An individual may serve an additional two (2) one-year terms as chairman of a standing committee provided the appointment is approved by the Board of the Society.

ARTICLE IV - Officers - Section 2. Terms. Each officer, except secretary and treasurer, shall be elected for a term expiring at the close of the annual meeting of the membership next following his or her election. No person shall be eligible for re-election for more than one (1) term following his or her service in that office for a full prior term except that regional vice presidents shall be eligible for re-election for two (2) consecutive full terms next following serving and original full prior term. No person shall be eligible for reappointment to the office of secretary for more than five (5) additional one-year terms. No person shall be eligible for reappointment to the office of treasurer for more than seven (7) additional one-year terms.

ARTICLE II - Government - Section 2. The Board shall be composed of: a. The President, the First Vice-President or President Elect, Second Vice President, Secretary and Treasurer, by virtue of their offices. (The remainder of "Article II - Government - Section 2" remains unchanged)

ARTICLE IV - Officers - Section 1. The officers of the Society shall consist of :

- a. The President
- b. A First Vice-President or President Elect
- c. A Second Vice President
- d. A Secretary
- e. A Treasurer
- f. A Regional Vice-President for, and residing in, each designated Region
- g. Such other officers as the Board of the Society may by resolution provide.

ARTICLE IV - Officers - Section 2 - Terms. Add the following sentence at the end of Section 2. The First Vice-President, after serving a one-year term in that office, may be elected to a one-year term as President Elect, in which case succession to the office of President shall be automatic.

ARTICLE IV - Officers - Section 4 - Duties.

Change the third sentence of this Section to read as follows:

In the absence of the President, the President Elect, First Vice-President, or Second Vice-President shall preside. (The remainder of "Article IV - Officers - Section 4 - Duties remains unchanged.)

ARTICLE V - Committees - Section 2 - Nominating Committee

Change only the fourth sentence to read as follows:

The Nominating Committee shall recommend to the membership at the annual meeting of the Society and place in nomination not less than one (1) nor more than three (3) nominees for each elected office upon which a ballot shall be taken by the members at such meeting, except that a President Elect who has served for one year shall automatically succeed to the office of President.

ARTICLE V - Committees - Section 3 - Audit Committee. The Audit Committee shall be composed of the Immediate Past President, the First Vice-President or President Elect, and the Second Vice President. The President Elect or First Vice-President shall serve as Chairman of the committee. (The remainder of "Article V - Committees - Section 3 - Audit Committee" remains unchanged.)

ARTICLE V - Committees - Section 4 - Finance Committee. The Finance Committee shall be composed of the President, the President Elect or First Vice-President, Second Vice-President, Treasurer, and three (3) other members of the Society appointed by the President with the concurrence of the Board of the Society. (The remainder of "Article V - Committees - Section 4 - Finance Committee" remains unchanged.)

ARTICLE XI - Amendments - Section 1. The members of the Society may, by majority vote at any annual or special meeting of the membership, amend or repeal these Bylaws. An

amendment may be proposed by five (5) or more members in writing exclusive of those members serving on the Executive Committee. Such proposed amendments may be either recommended or not recommended by the Board of the Society but may be approved or rejected only by a majority vote of the membership at an annual or special meeting of the membership. Proposed amendments must be published in at least one issue of *The Daffodil Journal* at least three months prior to the meeting of the membership at which these amendments are put to a vote. No amendment shall have the effect of terminating the existing unexpired term of any officer or director.

At the end of "ARTICLE V - Committees - Section 2 - Nominating Committee," which specifies the Nominating Committee's various duties, add a final sentence to read as follows:
Whenever appropriate, the Nominating Committee may recommend the appointment of a Treasurer-in Training who may be eligible for appointment as Treasurer after serving for one or more years as Treasurer-in Training.

Coming Events

- ADS Fall Board Meeting, Albuquerque, NM....Oct. 25-26, 1996
 ADS Convention, Jackson, MS.....March 13-15, 1997
 ADS Convention, Richmond, VA.....April 9-11, 1998
 Daffodil Society Centenary Convention
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Green Stars

Robert Darling, Washington, DC

You could actually see the clusters of bloom across the large field. The pervasive blue-green of the tazetta foliage glowed suddenly with another green, a distinct patch of bright green-yellow-green. It announced a small planting of truly green daffodil hybrids. Their unusual chartreuse color intoxicates like the Monk's liquor of the same name. Derived from *Narcissus viridiflorus* by Manual Lima, they made a lovely small clump. I knew where to look, having seen them before on other visits, but never blooming in such profusion. Miniature 8 G-G's, green day-stars shining on a bright December day just after Christmas.

Bill Welch grows several acres of daffodils, mostly Division 8, in Carmel Valley, California. His fields supply a major portion of cut flowers and tazetta bulbs for the country. He has an abiding interest in these multi-flowered members of the daffodil family, long wanting to grow a living "library" of tazetta types both species and hybrids. When Manual Lima suggested that he grow some of this *n. viridiflorus* hybrids, Bill agreed and gave them space in his commercial fields.

They caught my interest the first time I saw them several years ago, but this was the first time they made a real effect. I'd photographed them in years past and this year made several drawings attempting to capture their frankly curious and haunting quality.

Miniature green stars informally held on very short stems, about 6" high, sport florets with a perky, irregular charm. Many of the stems had four or five blooms, some only two or three. Their iconoclastic beauty would not gain 90 points from most ADS Judges. Their form does not conform to our prevailing standards. The perianth alas, is star shaped, with little overlap. Inner petals are slightly wider than the outer sepals which tend to twist a bit and flare. The mucro points are clear and add a spiky lilt to the florets. Their color changes from a delicious apple green when opening to a chartreuse. The very small, very crimped cup of brightish green deepend in the throat and sets of three bright yellow-orange anthers beautifully. The cups also subtly change color with age, loosing some of the fresh green tone to become more chartreuse.

Bill gave me a few blooms to cheer my stay, which they surely did. The florets, that continued to open indoors, were a lovely soft spring green with a vivid deep green cup. The color is very striking

and when fresh very pleasing. The soft green of the blooms that opened indoors contrast with a more mustard yellow of the older blooms in the open. There was a tendency of florets in the open to become slightly nicked or nibbled by slugs. Those sniffed had only a slight fragrance, which surprised me. Particularly when there were so many sweet blooming tazettas nearby.

Bill has directed his hybridizing ventures in daffodils toward earlier and larger clusters of blooms, although I did see a large bed of seedling bulbocodiums. He has done a great deal of work with tazettas and has developed some splendid paperwhites with large numbers of florets of great form and substance. The large florets have rounded perianths quite superior to any I've seen. It would be exceptional to have some of that soft green color suffusing these flowers, their striking form and texture sporting deep, brightly green-eyed cups.

How useful to have these green floral stars to introduce into holiday flower arrangements. They would be beautiful with orange berries or white or pink Poinsettia. Even without the best show form their dancing charm would be useful in small arrangements and lend an interesting color and scale contrast.

What a surprise then to see Bob Spotts' green daffodils at the Northern California Show in March and growing in his garden in Oakley. Unfortunately I missed his prize which he'd refrigerated for the National Show. Bob's blooms approached the form of a standard show flower. He lists them as a 7 G-G. Their charms are not miniature. Boasting lovely soft and subtle pale green colors they carry the idea of green flowers to a new high and offer surprising opportunities for a new line of standard flowers — green jonquils indeed!

Bill Welsh claims the Lima hybrids could not be further hybridized. I wonder. I've encouraged him to try working with these odd miniature blooms. The pollen looks viable. But he has the pressures of any small businessmen, particularly those working with daffodils. Time, weather, and daylight fight for his attention. My hope is that some bit of pollen will fall onto another flower. Or perhaps some December, I'll again be in Carmel Valley and muck through the field spreading pollen about. It would be wonderful if these delightful green stars could burgeon and glow in an every expanding floral galaxy.

So You Want To Win A Ribbon

(Part 3 of 3)

Marianne Burr, Olympia, WA

Winning special ADS Ribbons is even better than winning blue ribbons. They're fancier, and you get your name in the *Journal*. They come in addition to blue ribbons, a sort of two for one deal if your entry wins that Class. For some reason not very many people even try to win the ones given for collections, even though the bulk of ADS Ribbons is given for various collections of only five stems. Almost everybody brings enough flowers for the show so that they have at least one group of five with the common characteristic qualifying it for entry as a collection, but they put those five in the Single Stem Classes along with everything else. Tsk. Tsk.



Take advantage of this common oversight. *You* enter some collections. There's never a lot of competition, entry number-wise, and you could win big time! Like the shoe people say, "Just do it!" You don't have to be somebody special, you don't have to be invited, you don't have to groom your flowers, or know anything more than you do to enter the Single Stem Classes. Just pick the five best flowers you've got that fit the Class description, wedge them with fresh greenery to stand straight and tall, make sure the tubes are full of water, and add a name label to each tube.

Labeling is the only additional chore required. Each stem must have the correct name somehow attached. I've seen entries with the names propped up against the tubes, but the people walking around created enough breeze to knock them down. I use strips cut from index cards and scotch tape them to the tubes. Sometimes the only reason one collection wins out over another is that one had all its correct labels affixed and the other didn't. Either a label was missing, or one had the wrong name. As long as you take your time and have done what we talked about long ago in our quest for ribbons, namely labeled the flowers as they were cut at home, you will avoid this costly error. FYI: Without correct names, an entry cannot win, even if it stands alone in the class and is otherwise perfect.

The categories for five stem classes are self explanatory. Every show has at least one, and many have a class for each of the 12 Divisions. Remember, as long as you have the correct name, you don't have to remember what the Division is. Sometimes it's tough to tell a Div. 1 from a Div. 2. Look it up in your *Show and Grow* (or the one you've borrowed). As I've said more than once before, help is all around you in the staging area. Just ask. I've seen occasions where help was so plentiful, it was being offered wholesale — I didn't even *have* to ask. Whatever, it's there. Don't hesitate to use it.

Sometimes there are classes for five flowers that share the same color characteristics. Surely you must have at least five that are all yellow! No excuses for not entering that class if it's offered. Really, people don't do it. Take advantage of the space available on those collection benches and have a go at winning.

The ADS Purple Ribbon goes to the best collection of five standard daffodils that doesn't get a special ribbon of its own (more to come on this). That is, the judges select the best blue ribbon winner from the type of classes I've just described and award it a huge Purple Ribbon. New classes for collections of five miniatures have recently been devised and the best of those blue ribbon winners gets the Lavender Ribbon. Check the Schedule and put in some mini collections too while you're at it. You can't possibly win an ADS Purple or Lavender Ribbon unless you enter some kind of five stem collection. What can you lose? Just do it.

The ADS Maroon Ribbon is won by the best collection of five reverse bicolor daffodils. Those are the ones that generally open all yellow, but with time the cup fades to white. Since it takes varying amounts of time for the color change to occur in different cultivars, and different cultivars open at different times to begin with, it is a very fortunate competitor who can enter five flowers in this category that have done their thing and completely reversed. Big hint: They don't all have to have reversed completely to win. It all depends on the competition and I've seen many times that there wasn't any. The table was bare. If you have five nice flowers whose color code is Y-W, go ahead and enter, especially if it's close to judging time and no one else has entered yet. I suspect that the storage closet has more left over Maroon Ribbons in it than any other type. Why shouldn't one of them go to you?

The ADS provides two Red, White, and Blue Ribbons, one for standards and one for miniatures. Each of the five flowers must be of American Breeding or origin. Breeder's names and nationalities are given in *Daffodils to Show and Grow*. To win this ribbon, considered the most beautiful ADS Ribbon by many of us, takes more pre-planning than the others because you have to grow at least five standards or miniatures with a USA pedigree. There are many, many to choose from, and you probably already have more than enough to choose from in your garden. You just have to know which ones they are. So do your research ahead of time so you can enter this class. The individual labels for the flowers must include the name of the breeder (if it's not you, and it's a seedling — keep reading) as well as the name or number of the flower.

The term "Breeder" implies that that person was actively involved with the hybridizing which resulted in the flower. "Originator" is a broader term, meaning that it bloomed first for that person, regardless of how the seed came to be or where it came from. These definitions are important because one's own seedlings can be entered in the Red, White, and Blue Ribbon Class. We're all in American, right? If you are fortunate enough to be growing numbered seedlings from other Americans, they are eligible as well. Many of us who have seedlings got them by saving and planting the seeds from our own existing plants. You don't have to be a hybridizer to get your own seedlings. The plants know how to make their own seeds without any human help. All you have to do is plant them out and see what you've got a few years later. It really can be that simple. The big bonus is that besides having daffodils for free that are exclusive to your own garden just because you took the time to plant a few seeds a few years ago, you have a chance to win still more ADS Ribbons. The Rose and Miniature Rose Ribbons are awarded to the best seedlings in the show exhibited by the originator.

To enter a bloom that "flowered First" for you (which makes you the originator), give it a number of your own invention (which can include letters as well as numbers) and determine its Division and color code. You're the boss here; it's *yours*. For example, "XYZ-123 (7Y-Y)." A numbered seedling can be entered anywhere

in the show where you would put a flower with the same Division and color code. On the entry card you put the number in the space for the "name." Don't just call it "Seedling." The judges won't even judge it. If you are the originator you enter it under the number only. If it is someone else's you must include their name in front of their number. For example, "Mitsch ABC-789 (6W-W)." When the number stands alone without a name, the judges know it is being exhibited by the originator and is therefore eligible for the Rose Ribbon. It may sound all complicated and tricky now, but trust me, it won't be once you've done it.

The Rose Ribbons are highly honored because they indicate the high level of interest and commitment the recipient had in, and to, the *Genus Narcissus*, even if that person is not a hybridizer. Interest because he planted the seeds in the first place, and commitment because he remembered where he planted them and did not inadvertently plant something else on top of them, or till them up before they bloomed.

I hope that since this series began you have been making plans to win some blue ribbons, and that reading my tips this time will inspire you to enter some collections and start growing some seedlings. As in every single thing in life, if you pay attention, ask questions, and keep at it, you will improve.

See you around — I'll be the one checking the benches trying to see what the winners had that mine didn't, while I hang around to help take down the show and collect the ribbons I did win.

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NOTES FOR THE NEWCOMER

Enhancing the Picture

Peggy Macneale

When it comes to planting your new bulbs you may or may not already have a vision of how they will look when the flowers come into bloom. There are all kinds of daffodil growers. Some — especially those who concentrate on buying show blooms — simply line up their bulbs in beds that are given over exclusively to daffodils. Unless one has a large estate, where such a planting can be off to the side, the garden doesn't look like much except for the month of April. Another person may wish to achieve only the natural look, with drifts of daffs along the edge of the yard and out under limbed-up trees. Still another gardener incorporates clumps of daffodils hither and yon among the foundation shrubs, alongside the garage, and around the patio without much thought as to height, color, or time of actual flowering. In fact, many persons aren't aware that different types of daffodils may bloom from mid-March to May first.

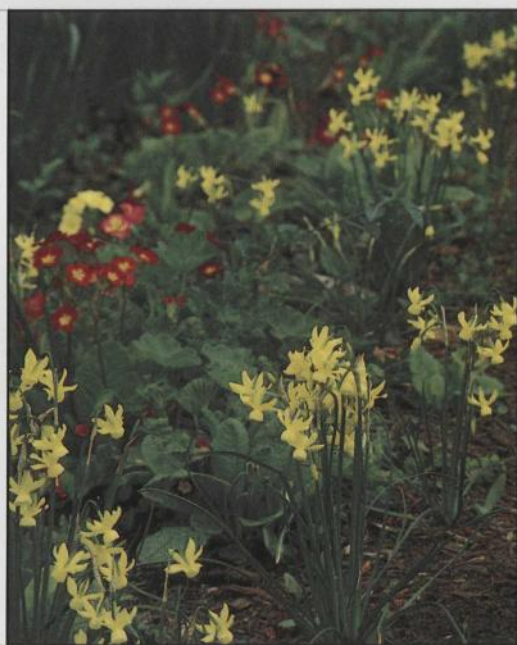


The prettiest daffodil plantings are those which have been carefully conceived so as to take advantage of shrubs that flower in early to mid-spring. There are a number of annuals and perennials, too, that bloom along with the daffodils, so a colorful picture can be achieved with a combination of a variety of different spring bulbs plus other plants. Steve Vinisky wrote of daffodil/"minor bulb" combinations in the March '96 *Journal*, so this is an addition to his recommendations from the standpoint of what I have observed here in the midwest.

Let's get specific and start with the Wister Award daffs.



'Ceylon' and Tulips



'Hawera' and Primrose

When 'Peeping Tom' comes into bloom, Forsythia is also in flower, so here's an early spring heart-lift. 'Ice Follies' buds are soon unfurling and these could join the golden picture, or perhaps you'd prefer a flowering Quince, or Shadblow, instead of the ubiquitous Forsythia. Meanwhile, a ground cover of *Vinca minor* adds a blue note, and a border of purple, white, and yellow pansies completes this design.

It isn't long before another Wister Award specialty makes the scene. 'Ceylon's' bright gold perianth and orange cup are duplicated by companion groups of orange Emperor and General de Wet tulips, and all are set off by the fluffy white spikes of Fothergilla shrubs. Then come 'Accent' and 'Salome', two pink cups that look luscious under a flowering cherry, accompanied by clumps of bleeding heart, and all in a carpet of *Chionodoxa*. You could use the same daffodils or any other pink cups to great effect with sweeps of 'Mertensia', backed by a planting of Persian lilacs.

I remember a wonderful combination in a local garden: an *Acer griseum's* bronzy peeling bark was the perfect foil for a full-blown stand of 'Stratosphere' jonquils. Another Wister Award jonquil is 'Sweetness'. Try this one in a bed of violets, under a White Angel crabapple tree.

I have taken slides of many other daffodils in combination with other April bloomers: 'Jetfire' with *Scilla siberica*; orange pansies with 'Jack Snipe'; 'Ice Wings' with grape hyacinths and Red Bouquet tulips; 'Martha Washington' coming up through a lake of ajuga; 'Beryl' abloom next to *Tiarella cordifolia* (foam flower); 'Pops Legacy' surrounded by forget-me-nots; 'Spellbinder' and 'Daydream' in the shade of a dogwood, with their cool lemon set off by a swath of blue *Ipheion* (*Tritelia*); 'Hawera' massed with rich gold and bronzy primroses; 'Pipit' and 'Dickcissel' thriving under a redbud tree along with blue Jacob's ladder' and finally, for a perfumed corner, how about a *Viburnum carlesi*/'Cantabile' combination?

Depending on what comes into bloom with the daffodils in your particular climate zone, you can explore any number of picture possibilities. Use your favorite ground covers, native plants, ornamental shrubs, and flowering trees so your daffs will have the best enhancement, and you will have a prize-winning, as well as a soul-satisfying, spring garden.

Benlate for Control of Narcissus Basal Rot

Ted Snazelle, Clinton, MS

Q. What should you do with existing supplies of Benlate (benomyl) now that it is no longer approved for use in control of narcissus basal rot?

A. Firstly, why does the Benlate label not include its use for control of narcissus basal rot in bulbs? Well, DuPont (sold Benlate in U.S.) was hit with some very sizeable damage claims for damage which occurred when it was used on ornamentals. Thus, no use of Benlate on ornamentals is included on the current Benlate label. What went wrong?

Well, I don't know for sure; however, there were claims that the Benlate was contaminated with a herbicide. Also, there were other claims that benomyl, or a breakdown product of benomyl, built up in the soil to toxic levels for ornamental plants like daffodil bulbs, etc. What the actual truth of the Benlate situation is, I don't know.

Secondly, as to what to do with existing Benlate stocks, you will have to make your own decision. If you have never had any problem with your current stock of Benlate which was used only for bulb dips, then you could choose to continue using your supply of Benlate solely for this purpose, i.e. don't add an additional use such as foliar sprays to control fungi which infect daffodil leaves. Benomyl does have some plant growth regulator (hormonal) effects on daffodils when sprayed on the foliage. The most notable of these effects is delayed senescence, i.e. dying down of the foliage. Daffodil foliage stays green longer than normal when sprayed with benomyl. Whether there is any relationship between delayed senescence of daffodil foliage and damage to the daffodils themselves, I don't know. However, I am afraid that to some daffodil growers, benomyl became their penicillin and other antibiotics. Now, of course, the over-use of antibiotics by physicians has resulted in many microbes becoming resistant to the antibiotics. Resistance to the benomyl by the basal rot fungus is not the problem with benomyl's use on narcissus bulbs. However its frequent use as both a bulb dip and foliar spray may have well contributed to the damage to the narcissus stocks.

Lastly, what am I doing? Well, my Benlate supply is exhausted, so I am dipping my daffodil bulbs upon lifting (after first hosing off the soil) in formalyn and/or Mertect. The only two fungicides approved for basal rot control in the United States today are Mertect 340-F (Merck) and 3336 WP (W.A. Cleary). Basically, clean bulbs are dipped in Mertect 340-F (2.5 tsp/gal of water) for 30 minutes. See page 245 of the June 1995 issue of *The Daffodil Journal* for more information.

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