AMERICAN ROSE

THE MAGAZINE OF THE AMERICAN ROSE SOCIETY

JULY/AUGUST 2019 $10 US

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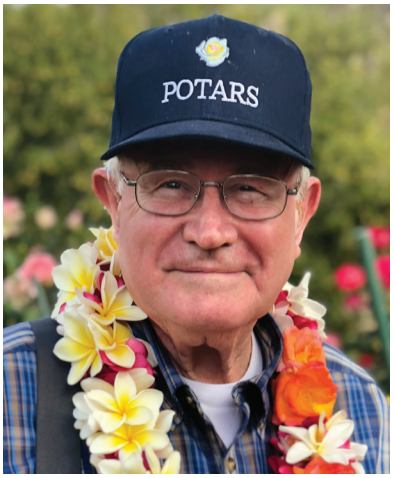


First Word

From the President of the ARS, Robert B. Martin Jr.

The May/June issue of *American Rose* contained an article on the 2018 ARS Newsletter Awards. Thereafter to correct a printing error resulting in the omission of a page, we delivered the complete article to all members by email and placed a copy of the article on the ARS website at www.rose.org/aom-winners. *You can see the complete list on page 69 of this issue.*

Fourteen local and district newsletters received awards, including the Large Society Gold for the second consecutive year to the newsletter of my home society, the San Diego Rose Society, edited by my dear friend Elaine Ornelas. I extend my congratulations to Elaine and to all the editors of the winning newsletters. As a newsletter editor myself for more than 20 years, I know the amount of work and dedication required and am personally grateful for your service.

The listing also includes the Award of Merit winners for outstanding articles published in district and local newsletters. Here by my count there were 112 Awards of Merit given to 67 different authors, several with multiple awards. These included nine awards given to my good friend Suzanne Horn, and eight to Carolyn Elgar, the outstanding Editor of the Orange County (California) *Rose Gazette*. I can also report immodestly that I received six such awards, making a personal total over the years of 71. I say this not to brag but to illustrate that I know what it takes to win such awards and once again I am grateful that we have so many in our society willing to share their expertise through the written word.

In addition to the newsletter awards, we have a number of very special awards that can be made at the local, district and national levels. These include the local society Bronze Medal, as well as the district Silver Honor Medal, the 2018 recipients of which are also listed in the May/June issue. I extend my congratulations to all those recipients for their outstanding service.

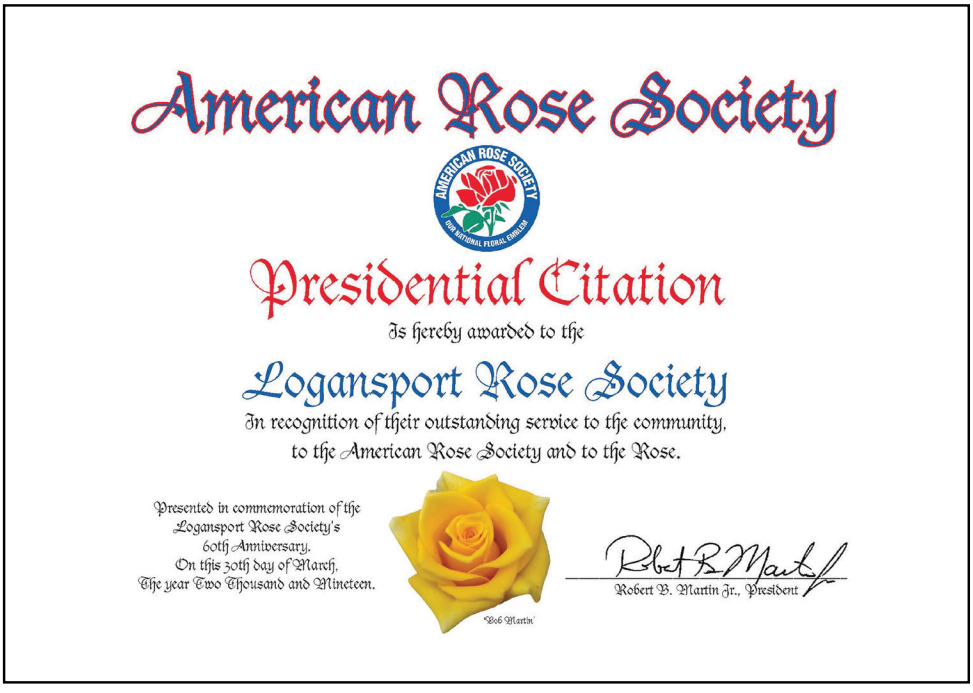
LEFT: 'Bronze Medal', photo Bob Martin.
BELOW: the ARS Bronze Medal.

Leaders of local societies should remember that each local society in good standing with the American Rose Society may annually award the American Rose Society Bronze Medal for Outstanding Service to one of its members for outstanding and meritorious service at the Local Society level. The recipient must be a member of the American Rose Society and an active member of the Local Society for no less than three years. The Bronze Medal itself is available from ARS Headquarters which also should receive a report of its award.

In addition, the American Rose Society makes a number of national and district awards in recognition of member achievements including the District Silver Honor Medal, the national Gold Honor Medal, the Klima Medal, the Guy Blake Hedrick Jr. Award, and the Whitaker Award. Such awards recognize sustained lifetime achievement by an individual or couple in devoting and focusing his or her talents and expertise to the promotion of the objectives and mission of the ARS or a District of the ARS. The rules and procedures for each award are generally stated separately and the selection of the recipient is made by different ARS or District committees. There is also the Rising Star Award established to honor the work of the next generation of rosarians.

Prior to 2017, the rules and procedures for each award had resulted in several cases – especially in the case of the Gold Honor Medal – where the award had not been made because of ties, a lack of a supermajority of votes, the casting of votes for no award by committee, the failure of committee members to vote at all, or other restrictive requirements. To eliminate these problems, I sponsored an Individual Awards Policy that was adopted by the Board of Directors in April 2017. This Policy was intended to override all such procedures in order to assure that all ARS national and district awards in recognition of member achievements are awarded annually.

The American Rose Society is a society composed entirely of volunteers who do what we do for the love of the Rose. It is not that we are paid the "Big Bucks", indeed we are not paid any Bucks at all. It is therefore good that we can give the "Big Thanks" to those of our volunteers who perform above and beyond the norm. I urge all leaders at all levels, local district and national to encourage recognition of service to the American Rose Society by nominating worthy individuals and making sure our awards are awarded each year.



Please also take note that the certificates for Presidential Citations have been redesigned with a cool image of the 'Bob Martin' rose. Leaders are encouraged to advise me personally of significant society anniversaries and individual accomplishments worthy of special recognition. I appreciate all that is being done by our faithful members and would be honored to have the opportunity to recognize noteworthy achievements. Let's reward excellence. Rewarding excellence encourages excellence and the Rose – the Queen of Flowers – deserves nothing less. ~RBM

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Mission Statement: The American Rose Society exists to promote the culture, preservation and appreciation of the Rose, and to improve its standard of excellence for all people, through education and research.

Vision Statement: The rose is America's National Floral Emblem. We aspire to be the nation's best source for information, research and education about the rose for our members and for the general public. We will share this information through a website, a national network of Consulting Rosarians, and rose shows and non-competitive rose exhibitions open to the general public.

Opinions expressed are those of the authors and are not necessarily those of the American Rose Society or its officers or directors.

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On Our Cover: Candy Oh!™ Vivid Red (Oso Happy® Candy Oh!, 'ZLEMartinCipar'), S, dr, 2008, Zlesak, David; flowers darkening in sunlight, 30-35 mm., fragrance: slight spicy; foliage medium-size, medium green; prickles 5-7 mm., hooked, moderate; growth spreading, tall (1 m.); groundcover; PP20,471; [polyantha seedling x 'Robin Hood']. See article on page 72

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The Notebook

from the Executive Director of the American Rose Society

The Summer Sun

THE HEAT OF THE SUMMER IS UPON US and I hope your rosebushes are still looking beautiful! As the temperature rises not only are the rosebushes affected by the heat but so are membership renewals and donations to the ARS. So how can you help? There are many ways! There are some straight forward ways to help — such as renewing your membership early. You don't have to worry about your already paid for months of membership left, it won't be shortened. We will just add the additional months that you renewed to your current expiration date. You can also buy a membership for a friend as a gift for a birthday or anniversary and share your love of roses with them all year long. You can consider making a donation to the Annual Fund, any gift is appreciated and greatly needed during this time of the year! This is when our donations are at their lowest but are needed most.

There are some other ways you can help, that you might not have thought of, such as gifting a portion of your IRA's required minimum distribution. If you have not yet met your 2019 required minimum distribution (RMD) and are considering making a charitable transfer to meet your RMD, a transfer to the American Rose Society Endowment Trust, also known as ARSET, can help satisfy this requirement. If you have never heard about this trust, the ARSET was established in 2006 by the ARS Board of Directors to help fund all of the activities of the American Rose Society organization itself. Growing this trust is very important for the future of the American Rose Society and I strongly encourage you to greatly consider this trust when you are looking for an American Rose Society endowment to support.

Finally, and most importantly, share your love of roses with everyone and invite them to join your local rose society and the American Rose Society. By doing so they will also become ambassadors and ensure our growth by asking others to join our wonderful organization that we all love so much!

• If you need recruitment materials such as 10 Tips, *Fragrant Rose* signup sheets, rose pot stickers, and the wonderful *Creating A Beautiful Rose Garden* booklet, or to make a donation, renew a membership, or to speak about a gift to the American Rose Society Endowment Trust, please contact Lucy Medvec, Director of Membership & Development at 318-938-5402 or email her at lucy@rose.org. She will be happy to assist you.

Yours in Roses,
Jon Corkern

Photos of the spring bloom at America's Rose Garden. Photos Beth Smiley.

Across the Fence

The latest ARS Member News

ERRATA

WE SINCERELY APOLOGIZE for the inadvertant omission of part of the list of Award of Merit winners. The complete list is included in this issue on pages 69-71.

IN THE MAY/JUNE ISSUE OF AMERICAN ROSE these photos were incorrectly labeled on pages 29 and 30. FAR LEFT, is 'Los Angeles' by Etienne Bouret; LEFT, is 'Antoine Ducher' by Etienne Bouret. We apologize for the error.

ARS CONTESTS

- PHOTO CONTEST: Contact: Curtis Aumiller, americanrosephoto@yahoo.com. Send Entries to: ARS Photo Contest Curtis Aumiller, 5 Brentwood Road, Camp Hill, PA 17011-2529. The deadline for entries for the 2019 contest is NOVEMBER 5, 2019.
- NEWSLETTER/BULLETIN COMPETITION: Contact: Patsy Cunningham, patham@cox.net.
- Rules and information for all the above contests can be found at rose.org/contest.

Music City Roses

2019 ARS National Miniature Conference & Rose Show

MUSIC CITY ROSES — OCTOBER 4-6, 2019
ARS National Miniature Conference & Rose Show
Carolina & Tenarky Districts Rose Show
Hosted by the Tipton County Rose Friends
For more information contact
Richard Anthony (330) 360-8510, RJA4CPA@aol.com
SEE PAGE 82-85 FOR MORE INFORMATION

NOMINATIONS SOUGHT FOR ARS AWARDS

- KLIMA AWARD: Established in honor of late ARS President Emeritus Joe Klima and his wife Marion; the Klima Medal recognizes excellence in the field of rose education. Submit nominations to the ARS Executive Director, PO Box 30000, Shreveport, LA, 71130, E-mail: executivedirector@rose.org, must receive all materials for the Klima nominations by Sept. 30, 2019.

- WHITAKER AWARD: Established in honor of Glenda Whitaker; an ARS member and leader whose excellent example and efforts on behalf of the society and its members have been an inspiration to all who have worked on behalf of the Society in the area of membership. Whitaker award entries should be sent to the Executive Director, PO Box 30000, Shreveport, LA, 71130; E-mail: executivedirector@rose.org and Chris VanCleave, Chair, Membership Committee, 219 Chadwick Lane, Helena, AL 35080-3137, chris@redneckrosarian.com, by Dec. 31, 2019.

- HEDRICK AWARD: Established in memory of Guy Blake Hedrick Jr., to recognize outstanding rose exhibitors who display the highest levels of excellence, integrity and respect for the ideals of showing roses, the Guy Blake Hedrick Jr. Award is intended as a lifelong achievement award for an exhibitor who has been a successful national, district and local exhibitor, and also a model in

sharing his/her knowledge in growing championship roses. Hedrick Award nominations are due by Dec. 31, 2019. Nominations may be sent to the Executive Director, PO Box 30000, Shreveport, LA, 71130, E-mail: executivedirector@rose.org and Horticultural Exhibitors' Committee Chair, Suzanne Horn, 455 W Maple Street, Glendale CA 91204-4256, LadyRedLH@aol.com.

• RISING STAR AWARD: Established to recognize and honor the work the next generatin of rosarians is doing in suport of the culture and appreciation of th rose. This award is intended to be given to up to five individuals per year age 45 or younger for outstanding achievement by an individual in promoting the culture and appreciation of the rose – our National Floral Emblem. Nominatons should be sent to the ARS Executive Director (executivedirector@rose.org), ARS President (petrose@aol.com) and ARS Membership Committee Chairman (chris@redneckrosarian.com) by July 1 of the year of the award.
• More information on all of the above awards can be found at rose.org/awards

TESTED AND ENDORSED PRODUCTS

AMERICAN ROSE SOCIETY ENDORSED PRODUCTS have undergone extensive testing by ARS members nationwide and found to be of high quality and a benefit to rose growers. Please visit www.rose.org/about-ars/endorsed-products to find out more about these products:

Bayer Advanced All-in-One Rose and Flower Care • Liquid Fence® Deer & Rabbit Repellent
Mills Easy Feed 20-10-6 • Mills Magic Rose Mix • Miracle-Gro Garden Soil for Roses
Miracle-Gro Garden Soil for Trees and Shrubs • Miracle-Gro Water Soluble Plant Food

MEMBER BENEFIT PARTNERS

THE MEMBER BENEFITS PROGRAM includes many different nurseries, as well as merchants of rose supplies and essentials. Your ARS membership provides discounts of up to 30 percent with these partners:

Angel Gardens | 10% discount • Chamblee's Rose Nursery | 10% discount
David Austin Roses | 10% discount • Fish in the Garden | 15% discount
High Country Roses | 15% discount • Jackson & Perkins | 15% discount
Northland Rosarium | 10% discount • Pine Straw Direct | 5% discount
Rogue Valley Roses | 10% discount • Walnut Hill Farms | 10% discount
Witherspoon Rose Culture | 10% discount

SOCIAL MEDIA

IF YOU ARE A SOCIAL MEDIA FAN, please join us, like us, tweet us or pin us!

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YouTube: http://www.youtube.com/user/AmericanRoseSociety

America's Rose Garden needs your help to purchase new LED lights for their annual Christmas in Roseland fundraiser. Each year, more than 15,000 people make their way through a whimsically lighted Christmas wonderland! Your investment of lights will help the staff raise more funds for ARS! Visit Amazon to order lights today: https://amzn.to/2OOY2BK

Rose Happenings

THE BEST WAY TO SEE ALL THE UP-TO-THE-MINUTE EVENTS or SUBMIT YOUR EVENT THROUGH THE ROSE.ORG WEBSITE. Go to rose.org, scroll down until you see the Rose Events Calendar, then tap the submit your rose event button and fill in the blanks. This will assure that your event is on our website and in *American Rose*. You may submit your event at any time; however, to have it appear in two publications, please submit your event six months prior to the event. If your event is not occurring in the next two months covered by the date on the issue of *American Rose*, it may not appear until a future issue due to space limitations. Please contact Beth Smiley, beth@rose.org if you have any questions.

NATIONAL EVENTS

Sept. 6 — Shreveport, LA — Angel of Hope Dedication. America's Rose Garden. Marilyn Wellan, 318-445-6006, roseusa@suddenlink.net

Oct. 4-6 — Franklin, TN — 2019 National Miniature/Miniflora Conference & Rose Show "Music City Roses" & Carolina and Tenarky District Rose Shows, Hosted by the Tipton County Rose Friends. Franklin Marriott Cool Springs, Richard Anthony (330) 360-8510, RJA4CPA@aol.com

2019 DISTRICT CONVENTIONS/EVENTS

Sept. 6-7 — Chatham, MA — Yankee District Rose Show. Chatham Community Center, Audrey Osborn, caperose@gmail.com

Sept. 6-8 — Henrietta, NY — New York District Convention and Rose Show. RIT Inn & Conference Center, Jane Knoeck, 585-694-8430, rochrosesociety@gmail.com

Sept. 6-8 — Pewaukee, WI — North Central District Convention & Rose Show. Holiday Inn Pewaukee-Milwaukee West. Bruce & Maggie Barr, 414-217-3087, rosemorehall@att.net

Sept. 7 — Decatur, IL — IL-IN District Conference and Rose Show. Richland Community Center. Teresa Byington, teresabyington@gmail.com

Sept. 13-15 — Kansas City, MO — Central District Rose Show and Conference. Holiday Inn on the Plaza, Laura Dickinson, 913-449-9377, ldickinson09@gmail.com

Sept. 21 — Nashville, TN — Combined Carolina & Tenarky District Rose Show. Embassy Suites by Hilton-Nashville Airport. Don Myers, rokirose@nc.rr.com; Richard J Anthony, RJA4CPA@aol.com

Sept. 28-29 — Auburn, CA — NCNH District Conference and Rose Show. Holiday Inn Auburn, Dave Coop, 916-276-0170, d.coop@sbcglobal.net

Oct. 11-13 — Richmond, VA — Colonial District Fall Meeting and Richmond RS Rose Show. Lewis Ginter Botanical Garden. Lynn Pappas, 804-330-2404, L_Pappas@msn.com

Oct. 26 — Vancouver, WA — Pacific Northwest District Fall Conference. The Heathman Lodge. Caroline Fredette, 206-723-7141, pnwdd2018@gmail.com

SCHOOLS

Aug. 10 — Simpsonville, SC — Carolina District CR School (4 cred). Hillcrest Memorial Hospital, Frank Van Lenten, 864-270-5137, fvanenten@charter.net

Sept. 6-7 — Chatham, MA — Yankee District HJ School (4 cred). Chatham Community Center, Ed Cunningham, 401-728-1786

Sept. 20 — Nashville, TN — AJ School. Embassy Suites by Hilton-Nashville Airport. Nancy Redington, rosered1@comcast.net; Craig Dorschel, craigdorschel@charter.net

Oct. 4 — Franklin, TN — Tenarky District AJ School (4 cred). Franklin Marriott Cool Springs, Nancy Redington, 717-264-6488, rosered1@comcast.net

Oct. 13 — Richmond, VA — Colonial District CR School (4 cred). Lewis Ginter Botanical Garden, Joan Reid, 804-652-9262, mvmahar@gmail.com

Oct. 27 — Vancouver, WA — Pacific Northwest District Fall CR School. The Heathman Lodge. Mike Peterson, 206-200-6384, peterson1616@yahoo.com

SEMINARS

Sept. 6 — Henrietta, NY — New York District AJ Seminar (4 cred). RIT Inn & Conference Center, Mary Ann Rink, 315-652-9145, rink4roses@hotmail.com

Sept. 6 — Rochester, NY — New York District Seminar (4 cred). RIT Inn & Conference Center, David Rink, 315-652-9145, rink4roses@hotmail.com

Oct. 27 — Vancouver, WA — Pacific Northwest District Fall CR Seminar. The Heathman Lodge. John Joe, 253-815-1072, mjmoe@seanet.com

LOCAL EVENTS

Aug. 3 — Portland, OR — Portland RS Miniature Rose Show. Pittock Mansion, Cheryl McClain, 503-652-7922, roselady@outlook.com

Aug. 4 — West Allis, WI — Greater Milwaukee RS Rose Show. Wisconsin State Fair Park. Carrie Bergs, 262-878-1609, caroline.bergs@icloud.com

Sept. 1 — St. Paul, MN — Minnesota Rose Show. Joseph's Grill, Brad Meyer, 612-363-4695, bradmeyer55124@gmail.com

Sept. 7 — Colorado Springs, CO — Colorado Springs Rose Show. 1515 N Cascade Ave, Mike and Anita Eckley, anitaeckley1@gmail.com

Sept. 14 — Middletown, NJ — Jersey Shore RS Rose Show. Deep Cut Gardens, Mary Hahn, 732-316-1871, only1mary@gmail.com

Sept. 14 — Pittsburgh, PA — Pittsburgh RS Rose Show. Bidwell Training Center, Ann Kubik, 412-831-1434, ark15102@aol.com

Sept. 14 — Santa Fe, NM — Santa Fe RS Rose Show. DeVargus Mall Center, Jack Ortega, 505-988-4614,jac_ortega@comcast.net

Sept. 14-15 — Portland, OR — Portland RS Rose Show. Lloyd Center, Cheryl McClain, 503-652-7922, roselady68@outlook.com

Sept. 21-22 — Kirtlan, OH — Northeastern Ohio RS & Cleveland RS Combined Rose Show. The Holden Arboretum, Cal Schroeck, 440-585-0506, calschroeck@aol.com

Sept. 22 — Cincinnati, OH — Greater Cincinnati Rose Assn. Rose Show. Ault Park Pavilion. Karen Freeman, 513-708-2546, freek@zoomtown.com

Sept. 28-29 — Nashville, TN — Nashville RS Rose Show. Belmont University. Larry and Connie Baird, 931-729-5259, duckriverose@yahoo.com

Oct. 5 — Lodi, CA — Lodi-Woodbridge Rose Show. Lodi Grape Festival, Chardonney Hall, Mark Ackerman, 209-794-8110, ellirose2@yahoo.com

Oct. 10 — Folsom, CA — Sierra Foothill RS Rose Show. Green Acres Nursery & Supply, Kathryn Jelten, 916-799-6005, kjelten@frontiernet.net

Oct. 12 — Huntsville, AL — Huntsville Twickenham RS Rose Show. Parkway Place Mall. Jill Chappell, greenmtnroses@comcast.net

Oct. 12-13 — Jackson, CA — Mother Lode RS Rose Show. Senior Center. Raymona Cunha, 209-256-3517, raymonac@sbcglobal.net, motherloderose.org/rose-festival-show

Oct. 19 — Buford, GA — Greater Gwinnett RS Rose Show. Bogan Park Community Room. Bet Sobon, 770-561-6846, betsobon@gmail.com

Oct. 26 — Chico, CA — Butte RS Rose Festival. CARD Community Center. Sarah Williams, 530-893-5984, swilliams@nsradiology.com

Oct. 26 — Houston, TX — Houston RS Rose Show. Memorial City Hall. Susan Helly, 832-867-7013, suzzieq1971@gmail.com

Nov. 9 — Palm Desert, CA — Desert RS Rose Show. Palm Desert Community Center. Linda Simmons, 760-340-3802, linda1468@aol.com

Nov. 9 — Las Vegas, NV — South Valley RS Rose Show. University of Nevada Cooperative Extension. Judith Kafantaris, 702-592-4539, judithkafantaris0625@gmail.com

Nov. 16 — Mesa, AZ — Mesa East Valley RS Rose Show. Mesa Community College. Bud Morrison, 602-390-7919, budmorrison22@gmail.com

Nov. 16 — Silver Springs, FL — Marion County RS Festival of Roses. Paradise Ballroom, Silver Springs State Park. Tom Cartwright, 352-620-9800, tcartwrightlaw@yahoo.com

Dec. 8 — Phoenix, AZ — Phoenix RS Holiday Tea. Valley Garden Center. Gerry Mahoney, 623-851-3756, xrose3@cox.net

America's Rose Garden needs your help to purchase new LED lights for their annual Christmas in Roseland fundraiser. Each year, more than 15,000 people make their way through a whimsically lighted Christmas wonderland! Your investment of lights will help the staff raise more funds for ARS!

Visit Amazon to order lights today: https://amzn.to/2O0Y2BK

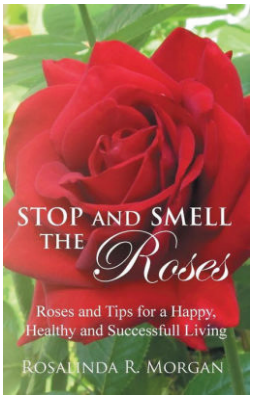
2019 Annual Fund Gifts

Rose Garden Tour & Dinner* by *Bob & Dona Martin*
The garden of Bob & Dona Martin features more than 520 roses of all types. It includes "Dona's English Garden", a newly installed garden featuring 58 English-style roses.
**Travel and accommodations are not included.*

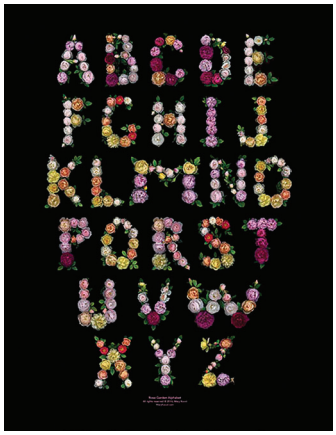
REDNECK ROSARIAN BY DEWIT

Set of Redneck Rosarian Dewit Garden Tools
Chris VanCleave, The Redneck Rosarian

Autographed copy of
Stop and Smell the Roses
Rosalinda Morgan



Print reproduction of original pastel art "Blueberry Hill"
Kathy Wyckoff



Rose Garden Alphabet Poster
and Rose Notecards
Mary Kocol

Set of five vintage American Rose Annuals
American Rose Society

"Tell Your Story" feature in ***American Rose***
American Rose Society

Hug-A-Tree: A tree in American's Rose Garden
named for the winner *American Rose Society*

Selection of classic rose books from the ARS Library
American Rose Society

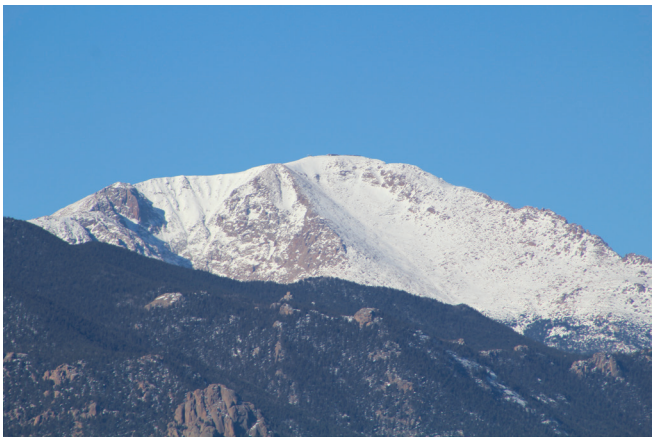
ForLoveOfRoses.com

Eight different roses hybridized by
Richard J. Anthony

Harlane Company, LLC
Providing tools to gardeners for over 40 years!

Two pairs of
Bionic Gardening Gloves
(one for winner and one for winner's rose society)
The Rose Gardener and Harlane Co.

Twenty standard, engraved rose labels and stakes
The Rose Gardener and Harlane Co.

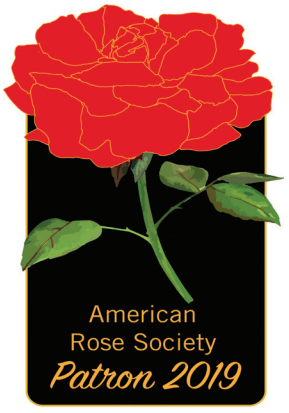


One week at
Diana's Secret B&B located in
Colorado Springs, Colorado
Diana Kilmer
Travel not included.

In 2018, we had such great response to the ARS Annual Fund Drive and we want to increase participation even more in 2019. We invite you to continue your support by sending in your donation today. If you have never donated before, or it has been awhile, please think about making a gift. Your donation brings life to our organization in so many ways and helps us grow like the roses in your garden.

As a special thank you to our donors at the $125 level, we will be surprising some of them with these fabulous gifts, with more to be announced.

It's easy to give to the ARS Annual Fund Drive:
1. You can give online at www.rose.org/donate or mail the donation form on page 94.
2. Become a 2019 Patron with a donation of $200 and receive a 2019 Commemorative Patron Pin (pictured).



Thank you again for your support of the American Rose Society.
All donations to the ARS Annual Fund are tax-deductible as allowed by law.
**Travel and accommodations are not included.*
Visit www.rose.org/rules-regulations for more information.

AMERICAN ROSE SOCIETY
Rising Stars

Zach Steeno

THE AMERICAN ROSE SOCIETY'S UP & COMING ROSARIANS AWARD FOR OUTSTANDING ACHIEVEMENT IN THE PROMOTION OF THE CULTURE AND APPRECIATION OF THE ROSE

ZACH STEENO EARNED HIS BACHELOR OF SCIENCE Degree in Horticulture at the University of Wisconsin-River Falls. As a student he completed a number of independent study projects related to plant breeding and cultivar development. Zach also helped with roses and rose breeding projects and became deeply excited and committed to rose breeding. Dr. David Zlesak recalls one time when he was helping him spread mulch in his rose gardens, *"It was during the month of June and I was crossing roses like mad back then. I gave him some colored tags that were different than what I was using that spring and some pollen containers and set him loose to make and keep whatever crosses he wanted. Zach had so much fun and asked tons of questions about the different parents (ploidy, their backgrounds, etc.). He has been deeply committed to roses ever since."*

Steeno accumulated a lot of roses at his parents' garden and tended a garden plot of roses during his year long internship at Longwood Gardens. He attended local rose society meetings around his family home near Green Bay, Wisconsin, and near Longwood Gardens. The summer he worked at the Green Bay Botanical Garden he was instrumental in helping set them up as an Earth- Kind® rose trial site. Zach loves everything about including learning about them, breeding them, and talking with others about them. He is a great advocate for roses with his wonderful positivity, passion and ability to inspire.

His strong interest in plant breeding and plant pathology led him to gain experiences in the Plant Disease Clinic at the University of Minnesota and also complete an IPM internship at Longwood. An opportunity arose and he was able to work with Will Radler as his rose breeding assistant at Rose Innovations. Will mentors Zach to push forward the breeding program and together they are building the program to incorporate new sources of disease resistance, hardiness, fragrance and a wider range of floral forms and colors.

Zach Steeno with 'Two Sisters'. Photo David Zlesak.

Zach is doing a great job managing the breeding program, keeping it organized as they move it forward. He is integral with the international collaborative breeding program between Rose Innovations and Meilland International in France and he travels to France to help select the seedlings in the pipeline. Zach also with the team at Conard-Pyle, the main U.S. introducer of roses from Radler's program. They visit trial beds throughout the country and the field production. Zach's rich enthusiasm, drive to see projects through, commitment to roses, understanding of industry and also plant pathology is helping him make strong contributions in the few short years he has worked with Will Radler at Rose Innovations. It takes time for plants to move through the pipeline towards introduction and now some of the hybrids he has had a role in developing are entering the trialing phase across the country. Zach is a young professional that is excelling early in his career and this award is a great honor to reinforce his passion for and contribution to roses.

Getting Though the Hot Months

by: Robbie Tucker

Master Rosarian

July and August are usually the warmest days of the year and can certainly put stress on your roses and the rosarian. Here are a few recommendations to get your roses through the hot months and guarantee beautiful fall blooms.

Be sure your roses are getting enough water! Roses need water to thrive. A well hydrated rose can more easily fend off disease. When you water, be sure to give your roses a good, deep soaking. It is much better to apply a deep watering a couple times a week rather than a shallow watering every day. If you have raised beds, it is almost impossible to over-water your roses during the summer months.

Continue your preventative spray program. You need to be keeping disease in check and harmful pests out of your garden. ***PPZ (propiconazole)*** and ***Mancozeb*** (or ***Manzate Pro Stick***) should be important components of your disease-control spray plan. Rotating ***Azoxy50*** into the cycle will round out your program, especially in large gardens. Use insecticides only if you have an insect problem. Over-use of insecticides will kill your beneficial insects leading to a certain outbreak of spider mites. For that extra boost, consider adding ***Nature's Nog*** to your spray solution. The seaweed and humates in Nature's Nog are designed to enhance root formation, increase vascular strength, promote green color, and reduce stress. Don't forget to water your roses well the day before spraying.

Feed your roses. Roses are heavy feeders and you will want to continue a good fertilization regiment throughout the summer. ***Mills EasyFeed*** is still my favorite because it is a complete fertilizer containing fish, seaweed, chelated iron and Epsom salts as well as the right balance of nitrogen, phosphorous and potassium. Roses require a large amount of nitrogen to be their best, so while great, organic fertilizer alone is rarely enough. Use Mills' EasyFeed at a rate of one tablespoon per gallon of water per rose bush every three to four weeks. You will be glad you did!

Add organics to your soil. In early Spring, I use **Mills Magic Mix** to give my roses the longer-term effect of organic feeding while enriching the soil and inviting earth worms and beneficial micro-organisms. By August, it is time to put down another 1 - 2 cups per large rose bush and 1 cup per miniature rose. Broadcast around the drip line of the bush and lightly scratch it into the soil. Be sure to give the rose a good watering.

Remove old spent blooms from your rose plants. Deadheading encourages the plant to begin another bloom cycle. Use a quality pair of bypass pruners with a sharp blade. My pruner recommendation is always the Swiss-made ***Felco*** line. They are light but durable pruners with easy to replace springs and blades. If you don't know what model to order, you can't go wrong with the **Felco #2.** If you have seen other rosarians with red-handle pruners, they were probably Felcos. Remember to recut your roses under water before putting in a vase. This will prevent any air lock in the stem due to cutting outside and guarantee the rose will hydrate well. To keep your roses lasting longer don't forget to use any of the great ***Chrysal*** products we sell. These preservatives will feed your cut roses for up to a week and keep the vase water fresh!

Don't forget to protect the rosarian! Do not spray pesticides without proper safety gear. This includes gloves, coveralls (or long pants and shirt), respirator and goggles. Remember, if you can smell it your are breathing it! Don't forget hydration and sun protection. Be sure to drink plenty of fluids before, during and after you work outside. Lack of water and overheating will creep up on you without warning. Wear sunscreen and a hat to protect your head.

Be patient and "stay the course". Fall is right around the corner. The best is yet to come!

Popular Rosemania Products

Mills Easy Feed (5lb)	$31.99
Mills Easy Feed (10lb)	$52.99
Mills Magic Mix (20lb)	$28.99
Mykos (mycorrhizae 12oz)	$31.00
Fungicides	
Azoxystrobin (1lb)	$199.00
Clearys 3336 (qt)	$59.99
Compass (1lb)	$489.00
Eagle 20 EW (pt)	$45.00
Mancozeb (pt)	$21.99
Manzate Pro Stick(6lb)	$54.99
PPZ(pt). aka H.Guard	$46.00
Miticides	
Avid (8oz)	$104.99
Floramite (8oz)	$119.00
Forbid (8oz)	$245.00
Shuttle (pt)	$158.00
Insecticides	
Botanigard (qt)	$91.99
Conserve SC (qt)	$158.00
Orthene (.733lb)	$29.99
Talstar (qt)	$46.00
Zenith 75(aka Merit)	$37.99
Spreader Stickers	
Indicate 5 (qt)	$49.99
Indicate 5 (gal)	$74.99
Super 7 (gal)	$74.99
Felco Pruners (2 most popular)	
Felco #2	$56.99
Felco #6 (small hands)	$54.99
Replacement blades	$15.49
Replacement springs	$7.75
Spring/Blade combo	$19.95
Chyrsal Preservatives	
Chrysal Sachets (50)	$14.75
Chrysal Sachets (100)	$26.00
Chrysal Pro1 qt.(for hold)	$39.00
Chrysal Pro2 gal.	$75.00
(Pro 2 for hydration,hold and food)	

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The World of Roses

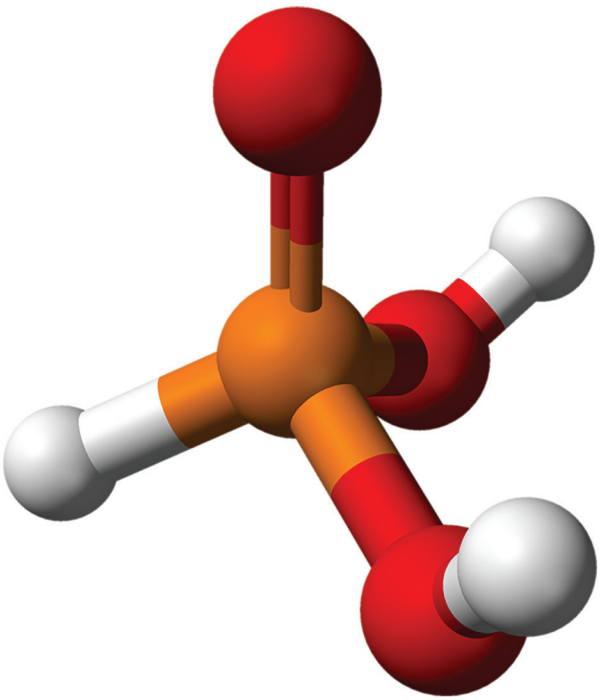
contributing editor Jeff Wyckoff

Phosphites

"Phosphites? Did you mean phosphates" was the reply I received from various websites when I began this project. Like many of you, I was totally unaware that there was such a thing as phosphite fertilizers, much less what was in them, how they differed from phosphate fertilizers, how they worked, how they operated, where you could get them, etc. Even as I write this my computer's spell-check is red-lining "phosphite". So Ok, let's start from the beginning.

Phosphorous, chemical symbol P, atomic number 15, is one of the basic elements of all life. It is a component of DNA, RNA, and various cellular structures. In plants it plays a role in energy storage and transfer, cell division, cell enlargement, regulation of enzyme activity, photosynthesis, respiration and several other processes. It is a very complex and "fertile" element; it not only has several allotropes, (different structural modifications of an element in which its atoms are bonded together in a different manner), 23 isotopes, wherein the number of neutrons in the element's atoms can vary, and it can be combined with other elements into a large number of compounds.

Elemental (pure) phosphorous is never found in nature. Commercial phosphorous is primarily mined from deposits of rock, generally called simply rock phosphate, containing high phosphorous content. Another source is bird or bat guano, which is also high in the other two macronutrients, nitrogen and potassium.



This 3D model of a phosphite molecule, H_3PO_3, shows how the atoms bond with one another.

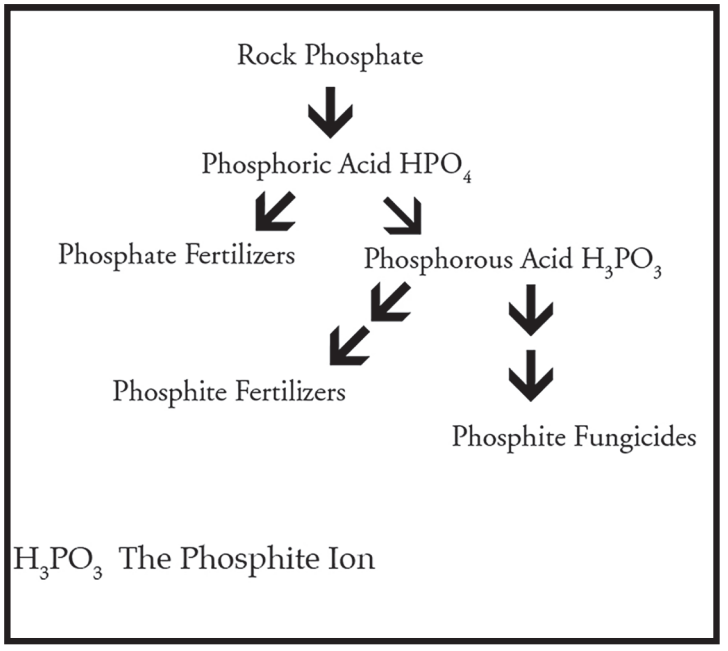
Phosphorous is extracted from phosphate rock through a variety of methods. Most commercial phosphate fertilizer manufacturing begins by producing phosphoric acid. This is done either through the use of an electric furnace or by treating the rock phosphate with acid. **Phosphoric acid, H_3PO_4**, is then combined with other elements to produce a wide array of products, to include such things as food additives, cleansers, toothpaste, water treatments, etc.

What a difference one atom makes!

However, there is also a closely related compound known as **phosphorous acid H_3PO_3**, which is completely different from its "cousin", and unfortunately these two are often confused, even in the scientific literature referenced. Both of these are used in the production of commercial fertilizer; those using H_3PO_4 are usually referred to as "phosphate" products, while those with H_3PO_3 as "phosphonate" fertilizers. Three-component fertilizers, those using nitrogen, phosphorous and potassium, NPK, are the most common phosphate type products, although "specialty" fertilizers such as triple phosphate, super phosphate, and even triple superphosphate, (which sounds rather like the double secret probation of the Delta Tau Chi boys in Animal House); triple superphosphate has an NPK of 0-45-0 and also contains calcium. Phosphate H_3PO_4 is taken up by plants and incorporated into cells where it forms an

important energy-yielding molecule (ATP) and structural components of cell membranes and DNA By contrast, phosphonate a.k.a phosphite H_3PO_3 fertilizers, because they have one less oxygen atom than their cousin, do not act in the same manner as phosphate in plants. Phosphite products are absorbed by plants and incorporated into cells as phosphite ions.

The Pennsylvania State University Extension Service offers the following definition of "phosphite": "Alkali metal salts of phosphorous acid. The most common phosphite is potassium phosphite, and is made by mixing a solution of potassium hydroxide with phosphoric acid." This gives us the following flow chart:



Not only does potassium phosphite provide the PO_3 ion, it also provides the phosphate ion, PO_4, as well. Soil microorganisms are able to assimilate phosphite and release phosphate, gaining energy and nutrients during this biological conversion, which can take three-to-four months. Like many compounds, potassium phosphite has a number of variations, to include monopotassium phosphite and di-potassium phosphite, all with different, and thus confusing, chemical formulae. All are white solids that contain salts of the phosphite anion H_2PO_3 and all have the same mode of action. These are almost always sold and applied in liquid form as sprays or soil drenches.

The primary industrial applications of phosphite fertilizers is for turf grass, golf course maintenance, greenhouse growing and similar venues, and hence, unlike traditional phosphate products, is available almost exclusively from agricultural supply firms rather than garden and big box stores. Wilbur-Ellis, a national agribusiness headquartered in San Francisco and operating in Oregon and Washington is an accessible example.

Wilbur-Ellis phosphite fertilizers can be found in their *Link*® product line. However, not all *Link*® formulations contain phosphite, so checking the label and related literature is recommended. Quantities and their respective pricings are harder to find, but five pounds at about $30 per pound seems to be a low-end standard.

Fertilizer and Fungicide?

It is becoming increasingly apparent however that phosphite fertilizers, in addition to promoting plant health in a different manner than traditional phosphate fertilizers, also have important fungicidal properties. Again, from the Penn state Extension Service:

"*Fungicidal properties of phosphonates were discovered by scientists at Rhone-Poulenc Agrochemical Laboratories in France during the 1970s. These scientists were screening various chemicals for fungicidal properties when they discovered that phosphonate salts were effective in controlling diseases caused by a group of fungi known as the oomycetes (Phytophthora, Plasmopara, Pythium, and others). Soon after this discovery, fosetyl-Al was formulated under the trade name* Aliette…"

As most rosarians know, Aliette is one of the few fungi-

cides available to the general public that has proven to be effective against downy mildew. Bayer Crop Science patented *Aliette*, composed of 80 percent fosetyl-Al (O•ethyl phosphonate) in 1999, and is sold by their licensees under various trade names, primarily in five pound quantities at around $20 per pound.

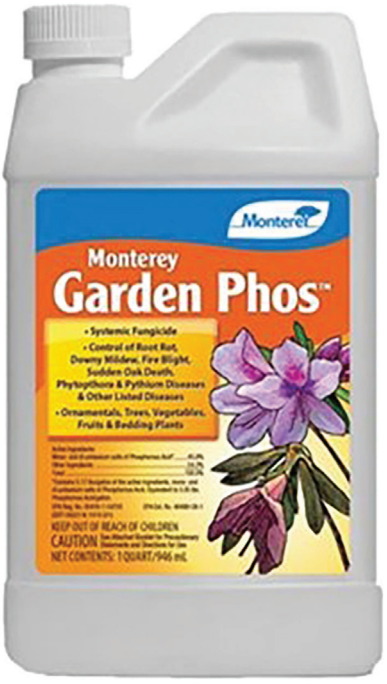
While there has been little/no information on this in the American rose community, it has taken off dramatically in the U.K. The following is an excerpt from an article in the bulletin of the newly-formed Rose Society U.K. by renowned British breeder Chris Warner:

> *"Farm Fos is potassium phosphite. Very importantly it is environmentally friendly. It enables your sprayed rose to access more of the nutrients available in the soil, which would otherwise be locked out. .. I trialed it for two years. It can be applied either by sprayer or by watering on to the root area by watering can. Used once a month it virtually stops black spot and almost more importantly downy mildew... After my own trials, Cambridge NIAB used it in their trials and R.N.R.S. used it in their rose trials in St Albans. Gareth Fryer wrote about using it in Garden News and now much of the U.K. trade use it. My trials not only stopped black spot and downy mildew, but to my surprise considerably enhanced growth.*

The product in question, *Uncle Tom's Rose Tonic*, marketed in the U.K. by Farm-Fos Ltd., consists of equal parts of mono-potassium and di-potassium phosphonate. While it can be imported into the U.S., there is a domestic product with the same chemical composition, that being Monterey's *Garden Phos/Agri-Fos*, (the same product under different names). Like *Uncle Tom's Rose Tonic*, these consist of c. 50 percent mono and di-potassium phosphonate, with the other 50 percent being an inactive carrier.

Garden/Agri Fos can be obtained for around $20 per pint. Reliant has a similar composition and price. An internet search turned up a number of products containing only potassium phosphite; however nearly all of these, marketed as fungicides, were for restricted usage only, and/or in quantities too large for the average gardener.

Whether sold as fertilizers or fungicides, phosphite products represent another tool in our efforts to keep our roses healthy and thriving by providing both in a single, affordable package. Since they have been shown to be effective against downy mildew and their respective prices are comparable, five pounds of a phosphonate would be a better value than the same quantity of *Aliette*. If it is used a spray or soil drench as recommended by Chris Warner, it could actually prevent downy mildew rather than treating it once it appears, as does *Aliette*.



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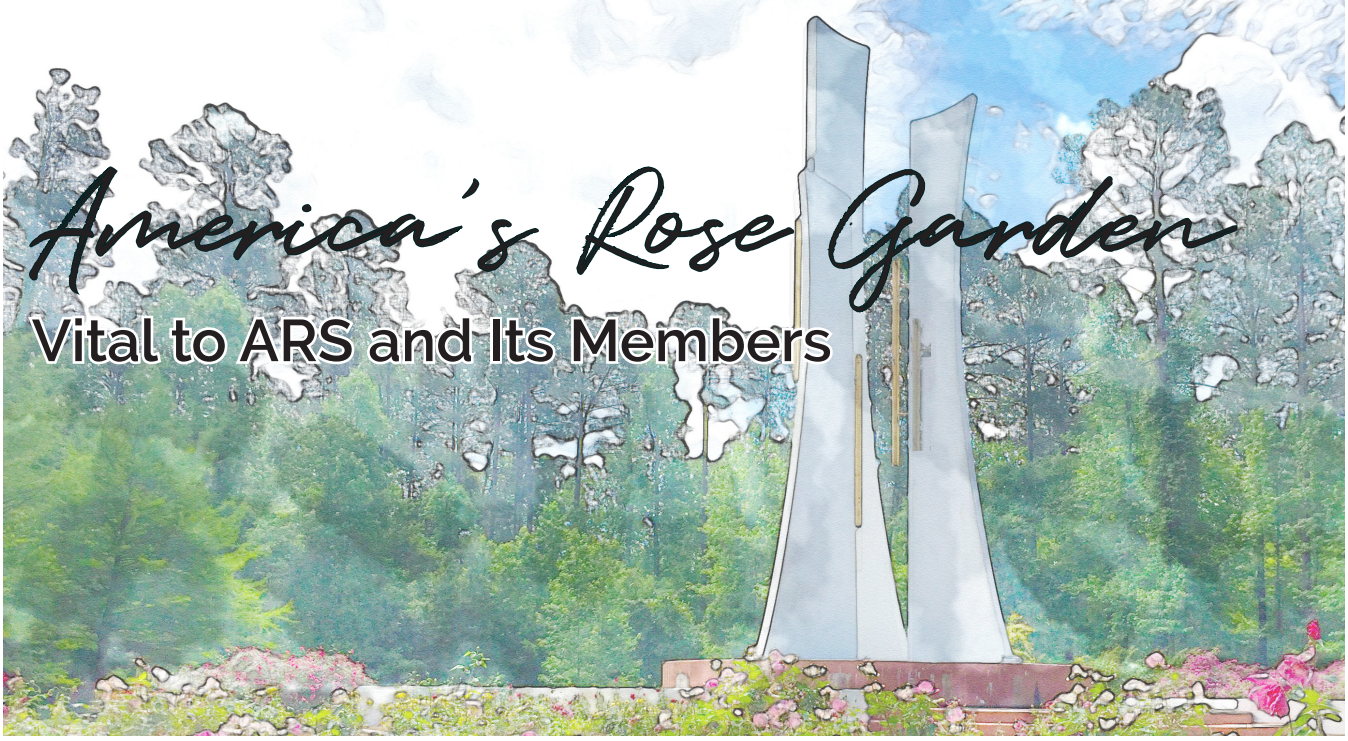

America's Rose Garden

Vital to ARS and Its Members

by Marilyn Wellan, ARC Coordinator – Great Garden Restoration Project

THE BENEFIT OF A REMARKABLE HISTORY

One of the things that makes the American Rose Society of extraordinary interest to rosarians, and relevant to the "other world" of non-rosarians, is our incredible history. We are increasingly aware of that history as we head toward our 130th anniversary as a society and the 50th anniversary of a home and garden of our own.

It is that history that elevates our gardens to a special place in the hearts and lives of American Rose Society members. Being ordained by the "Father of the American Rose Society" J. Horace McFarland gives the founding of our gardens added significance.

In the *1935 American Rose Annual* McFarland reported on the work of the Rosarium Committee, formed two years earlier, probably during his presidency, which proposed a National Rosarium, *"to realize the vision of a vast garden devoted to the display, study, and culture of roses in all their forms, to demonstration of their capacities, and to providing facilities for research into all related subjects."*

It was proposed that the rose garden be large, *"not less than 50 acres… freely open at all times to the public, in order that color and mass effects, fragrance, and general beauty of design might commend themselves to general approbation and contribute toward making the love of roses more wide-spread and deeply felt."* (America's Rose Garden might not be as large as envisioned by the Rosarium Committee, but our acreage does give us that potential; and we believe it will have the specified attributes, inspiring all who visit to love roses even more.)

"A Botanical collection of all obtainable roses species and forms would be included as essential to the project. The Rosarium would also constitute a museum in which rare, historical and special varieties in danger of extinction could be preserved. There should be groups of roses in families, illustrating with growing plants the development from the original species to our present highly organized garden varieties." (This goal of displaying roses in families is included in our planting plan; and preservation of varieties is a part of our mission.)

"Areas could be devoted to special exhibitions and demonstrations of interest to all rose students, including a thorough study of understocks… plots for testing fungicides, insecticides, and fertilizers." (Allen Owings' Annual Horticulture Symposium and our quarterly Green Thumb programs are the beginning of our effort to be the site of meaningful rose culture programming. The complete garden might be considered a testing ground.)

"A suitable library building could also preserve books, papers, pamphlets and house something analogous to an art museum where the use of roses in the Arts may be displayed. Laboratories, workshops and greenhouses …" (We have the library with a wonderful collection of rose books and papers; we aspire to open a Rose Museum; and would love to have a facility for the growing of some of our plants and preserving rare roses that are available to us.)

Having an incredible history of the Gardens is an amazing benefit in the prestige that it affords. The pride that we, as members of the American Rose Society, feel toward the headquarters of the Society and the gardens should be a given.

FINANCIAL IMPACT OF THE GARDENS

We sometimes hear comments that maintaining the gardens puts a financial burden on the Society. Actually, the opposite is true. At least, in the past few years, earned income from the Gardens is equal to the planned distributions from the American Rose Center Maintenance Endowment Trust; and those two figures combined — garden income and endowment income, after expenses, provide a financial benefit to the operations of the Society. Therefore, in addition to the benefits of pride and prestige, the Gardens can also be seen as a revenue-producing asset and therefore of great benefit to the Society.

IT CAN ONLY GET BETTER

With the improvements outlined in the garden's Master Plan, and the Restoration projects now underway, we can expect increased garden visitation; increased benefits from tours, horticultural seminars and symposiums, weddings and events; more recognition by the media; participation by other garden organizations, all of which will bring ever-increasing activity and the increased revenue that results from that activity.

The Society, like all plant societies, has felt the sting of decreasing numbers of members since the 1990s. However, there is encouragement to be found in new statistics that shows interest in gardening is at an all-time high. One of the most encouraging statements I came across in researching this article is this one: *"with 80 million participants in gardening in the US, it is clear that gardening is one of the most popular activities in modern contemporary life."*

The Garden Research Organization reported, "Gardening, long the purview of the older and more wealthy, now has a younger face." Their National Gardening Survey of 2018 reports that more American households are gardening than ever before (77 percent) and it is the younger households that are contributing to the increase, with 18-34-year-olds gardening at a rate of 29 percent.

Older gardeners are holding steady at 35 percent of households. Another study by the Scarborough Research firm shows *"Gardening homeowners are 10 percent more likely than all homeowners to be baby boomers (45 to 64 years of age), 33 percent have at least college degrees; and 26 percent have an annual household income of $100K or more; and 22 percent are retired."*

Many younger gardeners are learning from gardening apps and websites. It is safe to say that group has not found its way to join local rose societies and grow roses. Much of today's interest in gardening centers around the production of healthy, home grown foods, often grown in raised beds. It continues to be in our best interest to tap into those trends and try to bring some of those gardeners to Roses.

GARDEN TOURISM – A THRIVING INDUSTRY

Likewise, garden tourism is on the rise. The book *Garden Tourism* by Richard W. Benfield, published in 2013 by Central Connecticut State University, is the definitive word on garden tourism in all its forms and effects.

An observation early in the book explains part of the appeal of garden visitation this way: *"…Tourism to gardens may satisfy a fundamental need in our existence as a species. As a result, humans going to gardens may be a response to a force larger than a desire to have a pleasant day out. There is also a substantial body of work on the psychological value and effects of greenery on humans, work which confirms that natural settings like gardens have a profound positive effect on both mental and physical health."*

A recent survey showed that one-fifth of U.S. residents went on a garden tour, visited a botanic garden, attended a gardening show or festival, or participated in some garden-related activity while on a trip of 100 miles or more. This translates to 39.3 million U.S. adults, a *"number borne out by the American Public Garden Association that suggests that in 2005, visitors to their member gardens exceeded 40 million, a number that would suggest that garden tourists outnumbered visitors to Las Vegas or Disneyland and Disneyworld combined."*

Botanic Gardens are the type of garden most visited, and those visits are most often as part of a trip taken for other reasons (84 percent). Our goal to gain Botanic Garden status for America's Rose Garden will, I believe, be a major impetus for our growth in visitors and our overall success as an important garden among gardens.

Our gardens will strive to offer all of the top priorities that visitors want to find in a garden visit:

- A peaceful, quiet and tranquil setting;
- An experience with nature;
- A learning experience, garden map, labeled plants;
- A sensory experience of colors and fragrance;

- A beautiful place for exercise walking and jogging;
- An easy to navigate garden, ability accessible;
- An exciting place for discovering new plants;
- A fun and educational place for children;
- Seasonal interest in plantings;
- Lighting for evening garden events;
- Food, water and gifts in the gift shop;
- A friendly atmosphere, a memorable experience.

WHAT DOES IT TAKE TO BE A BOTANIC GARDEN?

There is no one single definition of what constitutes a botanic garden, according to *Garden Tourism*. Some botanic gardens have research and conservation as their central focus. Others are oriented toward tourism. The definition provided by the American Public Gardens Association (of which we are a member), leans toward tourism:

- The garden is open to the public on at least a part-time basis;
- functions as an esthetic display, educational display, and/or a site for research;
- maintains plant records;
- has at least one professional staff member;
- Garden visitors can identify plants through labels, guide maps and other interpretive materials.

I believe America's Rose Garden will be a Botanic Garden featuring roses that focuses on tourism, education (horticulture education and the "History of the Rose in America"), and the display and conservation of rose varieties.

Focusing on tourism and increased visitation will ensure the garden continues to be self-sustaining, and that it will bring great prestige to the Society and its members. Focusing on horticultural and historical education, and conservation, falls in line with the Gardens and the Society's missions. These goals are major components of the garden's Master Plan, and it is important that we keep our eye on those goals.

GARDEN TOURISM AT HOME

Garden Tourism states that while garden visitors are sought from far and wide, most gardens rely heavily on their local audiences. America's Rose Garden has enjoyed good turnout for its Christmas in Roseland annual events (now in its 36th year!). And financial support during important fundraising drives from the Shreveport community where the garden is located has been very satisfying. But increasing local garden visitation and event participation is a major goal of the Great Garden Restoration Project.

The gardens have gained substantially by the recent resurrection of the Shreveport-Bossier Rose Society. The society meets monthly at the Klima Education & Visitor Center, provides horticultural programs of interest, invites the public to attend their meetings, and its members are generous and diligent supporters and volunteers in the gardens.

In April, the ARS Board of Directors unanimously approved the creation of a Shreveport Area Advisory Board, recognizing the need to involve the community of which much has been asked. As of the end of June, the formation of America's Rose Garden Advisory Board is complete. Seven local leaders in business and philanthropic community served as the "Organizing Board" and nominating committee for the Advisory Board.

Twelve potential members were identified and invited to serve on the founding Advisory Board. The criteria for service was three-fold: be a member of the ARS as a show of support and to be informed; have an interest in the gardens; and be influential in the community. All 12 accepted! Six men and six women. No one turned down the opportunity to serve the gardens! The organizational meeting of the group will be held in September.

The Advisory Board will form its own organization, elect its Chair, decide when and where it will meet, and recommend projects that will benefit the gardens. They will be regularly informed on garden news, needs and status by Jon Corkern. And basically, they will serve as the eyes and ears for the gardens; as champions for our growth and prosperity; as ambassadors and stewards throughout the communities of northwest Louisiana.

AMERICA'S ROSE GARDEN: COUNTING OUR BLESSINGS

Incredible history; valuable physical assets; gardens help to fulfill the mission of the ARS; gardens benefit the Society financially; potential for growth and greater success; Garden support increased by Shreveport-Bossier Rose Society and the America's Rose Garden Advisory Board. (Next will be the forming of a "Friends of America's Rose Garden" group which will include garden memberships.)

If your ARS membership means anything to you, you will recognize the value of the gardens to the Society overall, and by extension, its value to you as a member-owner of the gardens.

Being a committed member of the Society, we hope you will be a champion for the gardens. In view of all we are accomplishing in the Great Garden Restoration, we also hope your name, those of your friends, fellow members and family will be among those who are supporting this great investment in our future. Dr. Jim Hering, Chair for GGR Fundraising, would like to hear from you.

THE GREAT Garden Restoration

The following donations, pledges and grants totaling more than $740,000 have been received in support of the Great Garden Restoration through June 2019.

RESTORATION GIFTS
$75,000 and over

Jackson & Perkins Landscape & Garden Design
Area Lions Clubs Centennial Legacy Project Installation
Louisiana State Parks FHWA Recreational Trails
Malmay Logging, Jack Malmay

RESTORATION GIFTS *$20,000 and over*

Bodin, Ivy — Bequest
Community Foundation of North LA *Carolyn W. and Charles Beaird Donor Advised Fund*
Shanley, Pat & DelVecchio, John
Wellan, Marilyn & Myron

RESTORATION GIFTS *$10,000 and over*

ARS Buckeye District *Gift & Pledge*
ARS Deep South District *Gift & Pledge*
ARS Education Endowment *Trust Gift & Pledge*
Chambersville Tree Farms, Dean & Carol Oswald
Collin County Rose Society
Extra Touch Builders, Burt Allen
Hering, Dr. Jim & Anne
Hover, Frank & Flora
Matthews, Neill, *Bequest*
Owings, Dr. Allen
Page, Jack and Myers, Robert *Gift & Pledge*
San Diego Rose Society
The House of Meilland and Star Roses & Plants

RESTORATION GIFTS *$5,000 and over*

Berger, Linda & Berger, Diane
David Austin Roses, Ltd
Herc Rentals, Keith Dillard
Kelley, Ken & Wanda
Spiers, Jerry & Carol
White, Barzanna

RESTORATION GIFTS *$1,000 and over*

Allen Owings Annual Horticulture Symposium '18
Allen Owings Annual Horticulture Symposium '19
Ardini, Robert
Arlington Rose Foundation
ARS Gulf District
ARS New York District
ARS Pacific Northwest District
ARS Pacific Southwest District
Community Foundation of North LA *"Give for Good"*
Dallas Rose Society
Dale, Cindy & David
Dale, David
Garrison's Home & Garden Showplace, Mark & Sandi Walton
Graves, Claude & Pam
Hammond, Gaye
Harder, Ann
Louisiana Signs & Designs, Kris Kelley
Manhattan Rose Society
Martin Jr., Robert B. & Dona
Mayo Family of Judy, Claudius & Madge
McClure, Gloria
New Orleans Rose Society
Papkin, Robert
Pharr Brothers
Seabaugh, Alan
Shreveport-Bossier Rose Society
South Metro Rose Society
Weeks Roses, Inc.
Whitley, Ralph
Willis Farms, Dr. Gladden 'Bud' Willis

RESTORATION GIFTS *up to $999*

Anonymous
Brink, Barbara
Delaware Area Rose Society
Gold Country Rose Society *In memory of Dorothy Lewis*
Gough, Candy
Hanson, Harvey *In honor of Frank Hover*
Jacksonville Rose Society
Jones, Lucia
Krontz-Schuppener, Linda L. *In memory of Lorraine A. Hair*
Osburn, Lou
Robinson, Susan A.
South Metro Rose Society
Williams, Elena

THE FIRST CIRCLE

Golden Triangle Rose Society
Graves, Claude & Pam
Hering, Jim & Anne
Hover, Frank & Flora
Kressbach, Tom & Eleanor
Long, Sandy & Dave
LA State Horticulture Society
Martin Jr., Robert B. & Dona
Myers, Don & Mary
Northwest LA Master Gardeners
Page, Jack and Myers, Robert *Gift & Pledge*
Papkin, Rachel & Robert
Reeve, Connie
Rose Innovations, Will Radler
San Diego Rose Society
Schneider, Barbara & Diller, Sue
Shockley, Carol
South Metro Rose Society
Wayne, Tom, *In memory of Mr. & Mrs. William Wayne*
Wellan, Marilyn
Wickett, Mr. & Mrs. Richard

HUG-A-TREE *$500*

Cole, Kristen
Gainesville Rose Society
Owings, Dr. Allen
Stream, Ralph & Jean
Wellan, Marilyn
Wellan, Myron

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Adams, Jolene
Anonymous
Arbor Gate
Asheville Blue Ridge Rose Society
Bay Country Rose Society
Bishop, Susan
Brueckman, Mr. & Mrs. Roger
Burch, George & Clare
Carlson, Doug & Jan
CenLa Rose Society
Collin County Rose Society
Columbus Rose Club
DeDene, Duane
Fayetteville Rose Society, *In honor of Sarah Rackley*
Graves, Claude & Pam, *In memory of Lucille Morris Clauch*
Hayward, Keith & Carolyn
Henderson, Sylvia, *In memory of Shelley L. Henderson*
Hering, Jim & Anne, *In memory of Michael Williams*
Hibbard, Pat
Hiers, Jay & Pam
Joy, Robert C. & Barbara A.
Morrison, Bud & Yvonne, Mesa Valley Rose Society
Musolf, Gary E., In memory of Helen Eiland (SMRS)
New England Rose Society
New England Rose Society Youth & Roses
Northeastern Ohio Rose Society
Pierremont Hills Garden Club
Plantskydd
Redington, Nancy
Reich, Martha
Richmond, Judy
Shipley, Ray & Marie
Shriver, Susanne
Smith Family, David
Sommers, Diane
Southwest LA Rose Society
Stephens, Dennis & Debra Mae White
Stream, Ralph & Jean, *In memory of Kitsy Mostellar*
The Marietta Daisies *in honor of Janice Clark, Dr. Bruce Gilette, & Chris Woods*
Van Buskirk, Melanie for Mom
Verrett, Marguerite
Wayne, Tom, *In honor of Mr. & Mrs. William A. Wayne, Elmira, NY*
Western New York Rose Society
Wiener Family, Mr. & Mrs. Jacques
Wilensky, Diane
Williams, Baxter & Patsy
Williams, Michael & Betty
Wilson, Mary Pilgreen
Woods, Chris, *In memory of William E. Woods*

Staying Healthy *in the Rose Garden*

contributing editor Yvonne Brault, M.D.

Skin Injuries

WITH ANY ACTIVITY as intense as rose gardening, injuries to the skin are inevitable. A laceration to the skin can ruin a gardening experience or send you to the ER and ruin your day. Proper care can enhance healing and prevent worsening. Offered here are some general guidelines to help you decide when to seek medical attention. When in doubt, be seen!

- A cut longer than 2-3 cm (about an inch) and through all layers of skin will probably need stitches. Get them. Sutures generally need to be placed within six hours of acquiring an injury.
- Wounds overlying bending joints will probably not stay closed long enough to heal as they will break open every time you bend the joint. Get them sutured to heal them properly. Any wound which may be into a joint needs to be evaluated.
- Any injury which may have entered a joint space or is deep in the palm or on the face needs special medical attention. Be evaluated. If you are worried about the cosmetic appearance of a healed wound, be seen.
- See a physician if you are not up to date on your tetanus. Most gardening activity injuries are dirty wounds which are tetanus prone. If you are outside and near dirt your wound may contain the tetanus germ *Clostridium tetani*. Not only does a laceration need washing with soap and water (ALL CUTS NEED IMMEDIATE WASHING WITH SOAP AND WATER) but you also need to make sure your tetanus immunization is up to date. If you have a clean wound you need a booster shot every 10 years. If you have a dirty wound like gardeners get, you need a booster if it has been five years since your last immunization. Tetanus infection (commonly known as lockjaw) is very serious and prevents muscles from contracting normally. It can ultimately be fatal, but is usually easily prevented with immunization.
- If it has been MANY years since you had a booster shot (you cannot remember how many decades) or if you never had the immunization series as a child, your doctor will need to inject preformed antibodies to tetanus into the area to help prevent tetanus infection. If you have not been immunized at all you will also need to complete tetanus immunization after the initial boost of immunity.
- See a physician if a serious wound has gross dirt or particulate matter. Just plain washing may not be enough to clean the wound properly. You may need pain management (local anesthesia) for adequate cleansing.
- If you have ongoing bleeding, apply direct pressure to the wound to stop it. If you have done this for several minutes and as soon as you let up it begins to bleed again, you probably need stitches.
- Step-on injuries can be infection prone not only if they are puncture wounds, but because while healing they come into contact with our dirty shoes and what we walk on. If something sharp cuts you through your shoe, you need antibiotics. If you have a puncture wound, by definition they are deeper than they are wide, and it is nearly impossible to adequately clean the wound. Soak your foot in warm soapy water two-to-three times daily to prevent crusting and help healing. See your doctor for any concerns. You may need antibiotics depending on the wound.
- If there is any concern about damage to a bone combined with a skin injury, you need to be evaluated.
- Any break in the skin can result in cellulitis, or localized infection. Watch for signs like worsening redness, swelling, warmth, pus, pain or numbness, or a fever. See your doctor for further wound care or antibiotics. See your physician immediately if you notice a red streak leading up your arm or leg, as this is a sign of spreading infection (lymphangitis).

Skin injuries may be preventable by using properly maintained tools, wearing gloves and proper footwear (not flip flops), removing obstacles in pathways, utilizing good fall prevention techniques, etc. Cut away from yourself when opening that new box of bare-root roses or your new gardening tool! Stay healthy in the garden!

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FROM TOP LEFT, CLOCKWISE: 'Dr. W. Van Fleet', 'Glenn Dale', 'Dr. E. M. Mills', 'Mary Wallace', 'Breeze Hill'. All photos Connie Hilker.

Heritage of the Rose

contributing editor Connie Hilker

The Roses of Walter Van Fleet

I AM FASCINATED BY WALTER VAN FLEET, the man and his roses. Van Fleet was a prominent figure in the early days of the American Rose Society. I first learned of him when I was researching a rose that I collected as cuttings from beside the front porch of a small house that was scheduled to be demolished. (The story of this rose appeared in the March/April 2019 issue of *American Rose*.) The rose turned out to be 'Dr. W. Van Fleet', introduced in 1910 by Henderson & Co. As I have learned since then, it was no surprise to find it in that particular spot. It was a wildly popular rose in its time. This rose is among a group of what would become known as "Dooryard Roses"… climbing roses bred as landscape features for large flowers, fragrance, disease resistance, and ease of care. In the late 19th century when hybrid tea roses were becoming the predominant focus of hybridizers, Van Fleet struck out in a new direction, working toward creating hybrids with the rugosa, wichurana, and other species roses which had been recently introduced from Asia. His intention was to create easy-care roses that were well suited as garden plants in American growing conditions.

In the *1916 American Rose Annual*, Van Fleet wrote, *"The aim of most raisers of seedling roses, here and abroad, appears to be the prompt production of compact-growing and constant-blooming varieties, suitable for the production of cut blooms under glass or in the garden… it cannot well be denied that continuous-blooming roses, with their strong infusion of tender Oriental [Tea rose] blood, are, with very few exceptions, children of exacting cultural conditions and cannot generally be relied on as home-yard plants… More easily managed varieties than are now available, suited for common dooryard culture under the diverse climatic conditions of our broad country, are needed."* [p. 27][1]

Van Fleet wasn't an average commercial rose hybridizer. Once a practicing physician who dabbled in rose breeding, he left medicine to work for the Department of Agriculture to research improved varieties of all sorts of plants. In addition to roses, he experimented with strawberries, gooseberries, corn, tomatoes, peppers, cannas, gladioli, geraniums, and honeysuckles. He also worked toward the development of blight-resistant cultivars with the goal of ressurecting the American Chestnut, which had been pushed to near extinction by Chestnut Blight. [*American Rose Annual*, 1922, p. 13-14][2]

Van Fleet's work at the USDA's Bureau of Plant Industry was revolutionary. Roses that he was working to develop during that time were unlike anything that had been seen in the market. F. L. Mulford, a colleague, wrote, *"The ideal rose for which he was striving, in his later work at least, was a garden form, that variety that would compare in healthfulness and disease resistence with the best of the rose species; that would be hardy under ordinary garden culture; and that would be a continuous bloomer."* [*American Rose Annual*, 1922, p. 18]

The Bell Experiment Station, the facility where Van Fleet worked, was designed exclusively for research and did not have facilities for propagation or distribution of his roses to the public. In 1920, it was announced that the Bureau of Plant Industry was entering into an agreement with the American Rose Society to make Van Fleet's roses available to the public.

"The American Rose Society has been legally incorporated in the state of Pennsylvania as a corporation of the first class, not for profit, in order that it may complete and carry on its favorable agreement with the Bureau of Plant Industry of the Federal Department of Agriculture for the wide and equitable distribution of the rose creations of… Dr. W. Van Fleet. The first of these roses… has been named Mary Wallace, and is now in propagation under this arrangement." [*American Rose Annual*, 1922, p. 9]

Van Fleet did not live to see this agreement in action. In January 1922, while on a trip to Miami, Florida, he died unexpectedly following surgery for a strangled hernia. Six of Van Fleet's Bell Station hybrids were

FROM TOP LEFT, CLOCKWISE: 'Philadelphia', 'Silver Moon', 'Ruby Queen', 'American Pillar', 'May Queen'. All photos Connie Hilker.

ABOVE: 'Mary Lovett', 'Alida Lovett', 'Birdie Bly'.

distributed posthumously: ‘Mary Wallace’ in 1924, ‘Heart of Gold’ in 1925, ‘Sarah Van Fleet’ and ‘Dr. E. M. Mills’ in 1926, and ‘Breeze Hill’ and ‘Glenn Dale’ in 1927.

After my discovery of ‘Dr. W. Van Fleet’ at that little house, I read everything I could find about Dr. Van Fleet, and I became fascinated with the possibility of collecting and growing as many of his roses as I could. When I started my collection in the early 2000s, some of his roses were readily available at nurseries or by mail order, others were difficult to find, a few were out there in gardens but no longer offered commercially, and some appeared to be completely lost. Through purchases, trading plants and cuttings, and a few lucky encounters, I have gathered 18 of the 22 Van Fleet roses that are still available worldwide. I have met other Van Fleet enthusiasts along the way, some of whom have become dear friends.

The 12 ramblers in my Van Fleet collection are planted in the front yard, where I can admire them every day. ‘Dr. W. Van Fleet’ holds a prominent spot on the north fence. It was joined in 2017 by ‘Philadelphia’ (1904) and ‘Mary Wallace’ (1922). The fence on the south side of the front yard has ‘May Queen’ (1898), ‘Alida Lovett’ (1915), “Pink Van Fleet” (which may be ’Bess Lovett’), ‘Mary Lovett’ (1915), ‘Breeze Hill’ (1926), and ‘Glenn Dale’ (1927). ‘Ruby Queen’ (1989), ‘Silver Moon’ (1910), and ‘American Pillar’ (1902) are farther down the south fence, toward the back of the garden.

Three Van Fleet rugosas are planted near one another in the back garden. ‘Sir Thomas Lipton’ (1900) and ‘Sarah Van Fleet’ (1926) are each more than eight feet high. ‘Rugosa Magnifica’ (1903) is nearby, six feet high.

The last three roses in the collection are planted near other roses that compliment them. ‘Birdie Blye’ (1904) and ‘Beauty of Rosemawr’ (1903) are a good fit with the chinas and polyanthas in my miniature Garden. ‘Dr. E. M. Mills’ (hybrid hugonis, 1925) blooms very early and it anchors a prominent place in the mixed rose border in our front yard.

My fascination with Walter Van Fleet, and my quest to collect his roses, is ongoing. I am hopeful that I can one day find the remaining four Van Fleets that have thus far eluded me. I’m actively seeking: ‘Heart of Gold’ (rambler, 1924), ‘New Century’ (hybrid rugosa, 1900), ‘Pearl Queen’ (hybrid wichurana, 1898), and ‘Ruskin’ (hybrid rugosa, 1928). ‘Alba

Rubrifolia' (hybrid wichurana, 1901), 'Aunt Harriet' (hybrid wichurana, 1918), 'Charles Wagner' (hybrid perpetual, 1904), 'Clara Barton' (hybrid tea, 1898), and 'Magnafrano' (hybrid tea, 1900) appear to be completely lost worldwide.

About "Pink Van Fleet"

In 2007, I read an article about three Van Fleet ramblers that were introduced in 1915-1917 by J. T. Lovett's nursery in Little Silver, New Jersey, and named for Lovett's three daughters. I ordered 'Mary Lovett' from Vintage Gardens and 'Alida Lovett' from Appalachian Roses. (Sadly, both of these nurseries have closed.) No source could be found for the correct 'Bess Lovett' in nursery collections or gardens listed on Help Me Find. I posted a query about 'Bess Lovett' online, and was met with a very generous reply, offering cuttings of a rose believed to be 'Bess Lovett', which was collected 20-or-more years before from the USDA blackspot trial grounds in Beltsville, Maryland. "Pink Van Fleet", which is how the rose was listed in the facility's records, appears to be a good match for 'Bess Lovett', based on old descriptions and period photos. I have propagated "Pink Van Fleet" and 'Mary Lovett', neither of which is commercially available, and have shared plants with nurseries and individuals, to insure their survival and to hopefully make them available again to the general public.

[1] You can read the entire article by W. Van Fleet in the online edition of the *1916 American Rose Annual* here: https://archive.org/details/americanroseannu1916amer/page/26

[2] You can read the entire article in the online edition of the *1922 American Rose Annual* here: https://www.biodiversitylibrary.org/item/78796#page/24/mode/1up

FROM TOP LEFT, CLOCKWISE: 'Pink Van Fleet', 'Rugosa Magnifica', 'Sarah Van Fleet', 'Sir Thomas Lipton'. All photos Connie Hilker.

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Showing Good Roses

contributing editor Suzanne M. Horn, Exhibitor, Horticultural Judge, Master Rosarian

Showing The Shrub Class, Part Two:
The Diversity of Shrub Roses & How to Exhibit Them

LET'S CONTINUE OUR DISCUSSION of the extensive variety of roses that can be grown and shown as "shrubs". All roses are technically shrubs. This class originated as a catch-all group for roses that didn't fit into a specific category. Their classification became based upon registration by the hybridizer and their individual growth habit. As such, they are the most diverse of all the rose classes and offer exhibitors many opportunities to win with them at the rose shows.

In Part One of this article, I discussed the two categories of shrub roses recognized by the American Rose Society – Classic Shrubs and Modern Shrubs. I also discussed the point scoring system outlined in the *Guidelines for Judging Roses* and how to best present your shrub rose entries for the best results.

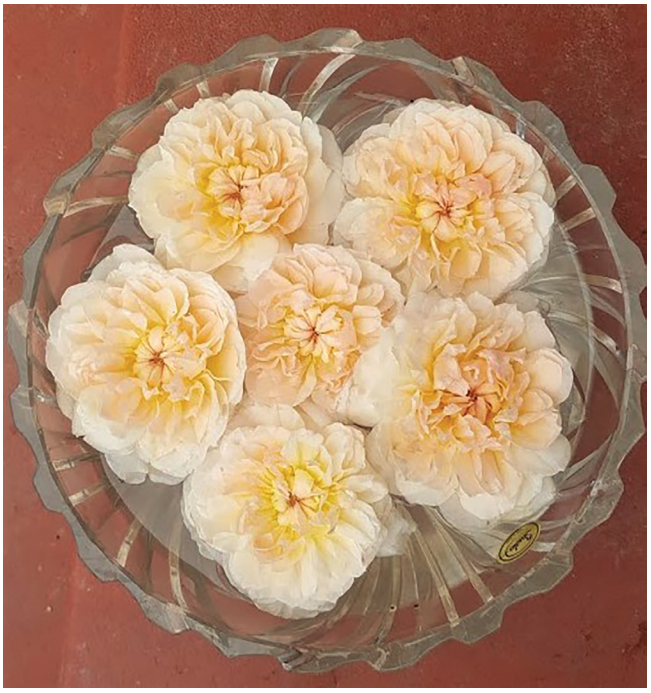
Unless otherwise indicated in the show schedule, shrub specimens may be exhibited either as one-bloom-per-stem entries or as sprays. Most often one-bloom-per-stem entries and sprays compete against each other. Due to the wide diversity and varying forms of shrub roses, the judges have their work cut out for them; and the selection of a winner often comes down to the judges' personal sense of aesthetics.

Let us take a moment to look at Shrub Sprays. As noted above, they come in varying sizes, and the biggest is not always the best. A good rule of thumb is to utilize the same standards you would use in showing floribunda or polyantha sprays. All of the prime elements of judging come into play with sprays, just as with individual blooms. I suggest that you make a checklist for yourself and check off the following considerations when entering a Shrub Spray. Are the individual blooms fresh with good hue and substance? Are the florets of similar size and color? Do they have a preponderance of fresh stamens? Can you remove spent blooms with stale looking stamens without compromising the uniformity of the spray? Does the spray present good inflorescence without gaps? Are there any distracting stems or blooms towering over the spray that should be removed? You will want to remove growth emanating from either above or below the main spray if it is distracting to the uniformity of the entry.

Symmetry from both overhead and from the side is an important factor in showing shrub sprays. The *Guidelines* note, "From the top the florets should be arranged in a regular outline, which may be circular, oblong, rectangular or any other geometric shape so long as maximum symmetry is maintained." The spray should either appear flat with all of the florets at the same level, or rounded with the center florets slightly higher than those at the outer edge to present a rounded or domed appearance.

The main difference between shrub sprays and other types of sprays is that stem length may be shorter. Many shrub sprays are top-heavy. As such, the stem may need to be shorter so the entry doesn't fall over in the vase. In any event, some stem and foliage should be visible above the lip of the vase, preferably at least two leafsets. Do note that you have the option to disbud your sprays or not. In most cases, shrub sprays are not disbudded unless partial or complete disbudding improves the overall appearance of the spray. Once again, it comes down to an individual's artistic judgment as to how many, if any, sidebuds to leave on the entry to potentially enhance its beauty. The key is for

CLOCKWISE FROM TOP LEFT: Albuquerque Challenge Class Winner, Pacific Southwest District Show ('The Squire', 'Jubilee Celebration', 'The Dark Lady'), shown by Suzanne Horn, photo by Dona Martin; 'Sir John Betjemen', Best Modern Shrub/Queen, PSWD show, shown by Suzanne Horn, photo by Baldo Villegas;'Fair Bianca', Most Fragrant Shrub Rose, Orange County Rose Society Show, shown by Suzanne Horn, photo by Suzanne Horn; 'The Squire', Vase of Three Modern Shrubs, Kern County Rose Society Show, shown by Suzanne Horn, photo by Baldo Villegas; 'Bouquet Parfait', Best Classic Shrub, Orange County Rose Society Show, shown by Suzanne Horn, photo by Suzanne Horn; 'Evelyn', Best Vase of 12 Shrub Roses, Pacific Rose Society Show, shown by Suzanne Horn, photo by Leslie Espagnol.



your entry to have a nice, uniform appearance presenting maximum visual impact.

Once you have done your best to prepare your shrub rose exhibits, you must be sure to enter them into the correct classes. Double check your reference books for accuracy. As noted above, Classic Shrubs will be identified as belonging to any of the following four groups: hybrid kordesii (HKor), hybrid moyesii (HMoy), hybrid musk (HMsk) and hybrid rugosa (HRg). Thus, if your roses fall into any of these categories, you will enter them into the Classic Shrub class.

All other shrub roses fall into the Modern Shrub class and have a designation of (S) next to their names. In most cases, the show will offer either a "Best Modern Shrub" trophy or, as is becoming increasingly popular, a Modern Shrub Queen, King, Princess and Court of Honor.

Let me encourage you to grow new varieties of shrubs whenever possible. The judges will decide on the blue-ribbon winners from each variety and them compare the blue-ribbon winners against each other in order to award the Best of Class trophy or the Royalty awards. If you are entering a popular exhibition variety such as 'The Squire' or 'Golden Celebration', there will very likely be a number of entries of that variety in the show; and only one can garner the blue ribbon, even if there are numerous blue-ribbon quality roses under consideration. Entering a newer variety gives you a greater chance of your rose obtaining a blue ribbon and being judged against other blue-ribbon winners for the top prizes.

If the Classic Shrub and Modern Shrub Certificates are not offered in the show schedule where you are entering roses, all the Classic Shrub and Modern Shrub entries are eligible for the Best Shrub Rose Certificate. In that case, all shrub roses compete against each other for the Best of Class award.

No discussion of showing shrub roses would be complete without discussing the subject of Sidebuds and what to do with them. Sidebuds are defined in the *Guidelines* as "A growth emanating from a leaf axil, having insufficient maturity to display formation of a stem, with or without a flower bud". Although sidebuds are not permitted when showing hybrid teas, floribundas, miniatures, minifloras or climbers, an exception is made for shrubs and Old Garden Roses. If left on your entry, sidebuds should frame and complement the bloom. They should enhance the overall beauty of the entry and not be a distraction. Sidebuds that distract from its beauty will cause the entry to be penalized and lose points.

As such, you will need to make a decision whether or not to disbud your shrub roses. There is no one right answer. For instance, I always disbud my shrubs in the garden. Therefore, most of the shrubs I enter at the show are single stem entries. I have other friends who are top exhibitors who do not disbud their shrubs in the garden and often show their roses with sidebuds attached. The bottom line is that this is an artistic judgment call. In my opinion, most sidebuds tend to be distracting and should be removed; but you should use your own artistic judgment on an entry by entry basis to achieve the most beautiful exhibit possible.

Let me add a few final suggestions on how to show shrub roses based upon some extended show schedules offered by many local shows as well as district and national shows. Many shows offer a class called Rose in a Bowl, which can be open to any large rose or group of roses, or which can be exclusively for shrub roses. Since only a bloom head is being entered, you will seek roses with excellent form, color and substance. The rose should fill the bowl well, and it should be floating and not touching the bottom of the bowl.

Sometimes classes are offered for an Artist's Palette, which is either designated for shrubs or open to shrubs. These entries also require five to seven bloom heads only. You will want to utilize roses that have similar size and form, color and substance. You will also need to use blooms with distinctly different colors, generally ranging from light to dark, left to right. This is definitely a class that calls for artistic judgment.

English Boxes are sometimes offered for shrub roses, and they can make for strikingly beautiful exhibits.

OPPOSITE PAGE, CLOCKWISE FROM TOP LEFT: 'Heathcliff', Modern Shrub Court of Honor, Pacific Southwest District Show, shown by Suzanne Horn, photo by Dona Martin; 'Golden Celebration', Shrub Rose in a Picture Frame, San Diego Rose Society Show, shown by Suzanne Horn, photo by Suzanne Horn; 'Walferdange', Six Classic Shrub Sprays, Orange County Rose Society Show, shown by Suzanne Horn, photo by Suzanne Horn; 'Mary Magdalene', Judges Class, San Fernando Valley Rose Society Show, shown by Suzanne Horn, photo by Kitty Belendez; 'Magnificent Perfume, Shrub Rose in a Bowl, shown by Bob & Dona Martin, photo by Dona Martin; 'Mary Magdalene', Six Shrub Roses in a Bowl, shown by Suzanne Horn, photo by Suzanne Horn.

TOP: Shrub Court of Honor, Pacific Southwest District Show 2019, shown by Suzanne Horn, photo by Dona Martin; ABOVE, LEFT: 'Sir John Betjemen', Shrub English Box, Pacific Rose Society Show, shown by Suzanne Horn, photo by Dona Martin; ABOVE,RIGHT: 'The Squire', Best English Box, Kern County Rose Society Show, shown by Suzanne Horn, photo by Suzanne Horn.

Entries may be open to only one variety or mixed varieties. In any case, in addition to excellent form, color and substance, you will want to look for uniformity in size and bloom shape, and in color if the entry is for one variety.

Rose in a Picture Frame (one or more blooms) is a class that is often open to all large roses, and therefore to shrubs. Be sure to read the show schedule to see whether the class is open to one bloom, multiple blooms or a choice of either. Since once again the exhibitor will be entering bloom heads only, the exhibit will be judged on form, color and substance. In addition, the bloom(s) should complement the frame. Another consideration is the use of foliage. In most show schedules, foliage is permitted to be used as an accent to frame the bloom(s). However, make sure that the foliage does not extend past the frame. Furthermore, do note that the foliage you use to accent the bloom does not have to come from the same rose, so choose the nicest leaves you can to highlight the entry.

Best Open Bloom is often open to all large roses, in which case you have an opportunity to enter your shrub roses in this class. All prime elements of judging come into play with these entries, and you must place special emphasis on your entry having bright, fresh stamens.

Most Fragrant Rose is usually open to all large roses, which of course includes shrubs. Many shrub roses are extremely fragrant, which enhances their chances of winning in this category. Entries are judged 70 percent on fragrance and 30 percent on the bloom. You will want to enter a rose that has the kind of pungent, heady scent that knocks you back from the table if at all possible. After that consideration, you will want to have a beautiful bloom on a rose that is in accordance with the other prime elements of judging in order to obtain the best results for your entry in the judging.

For those who grow many multiples of shrub roses, you may want to consider entering Collection Classes, which are periodically seen in show schedules. Collections of three and six are sometimes offered, and even collections of 12. These classes offer the exhibitor an opportunity to make maximum visual impact with shrubs.

For those exhibitors who feel really ambitious, I recommend entering Shrub Challenge Classes. For these classes, staging is vitally important. Also, you will need to use your artistic eye for a balance of colors, size and proportion. Various districts around the country offer different challenge classes, but there is only one National Challenge Class for Shrubs, and it is offered only in the spring, the Griffith Buck Memorial Shrub Trophy. This class calls for an entry of three different shrub varieties, one bloom or spray, exhibited in separate containers. Of note, you can mix single stems and sprays in this entry. All of the prime elements of judging come into play with this class, but you must pay particular attention to staging and a balance of colors, height, size and proportion.

Other societies and districts offer similar challenge classes to the Griffith Buck with slightly different requirements. For instance, in the Pacific Southwest District where I reside, we have the Albuquerque Rose Society Challenge Class, which has the same requirements as the Griffith Buck with the exception that you cannot mix single stems and sprays. You can enter an exhibit with three single stems without sidebuds, three single stems with sidebuds, or three sprays. No mix and match entries are permitted in this class.

One of my very favorite challenge classes in the Pacific Southwest District is offered by Santa Clarita Rose Society, who took over the trophy sponsorship for this class from the Scottsdale Rose Society in 2014. It calls for nine or more large flowered stems, classes other than miniature and minifloras, three or more varieties displayed in a container not wider than 10 inches provided by the exhibitor. This class is open to shrubs and other large roses, utilizing single blooms or sprays or a combination of both. My personal favorite part of this challenge is the phrase "or more". In my first attempt at this challenge class, I utilized about 20 blooms, gleaned at the last minute from my "leftover" bucket. I was so pleased that it won. If you grow a lot of Modern Shrub roses and live in the Pacific Southwest District, this is a challenge class for you!

In conclusion, as you can see, there are many wonderful opportunities to exhibit shrub roses of all types. More and more American gardeners are choosing to grow shrubs; and the major hybridizers are putting more emphasis on introducing into commerce these beautiful, hardy alternatives to the traditional hybrid teas. I encourage you to explore the diversity, fragrance, charm and unique challenges of growing and showing shrub roses. I'll see you at the rose show!

Treasures on the Bookshelves

ARS Horticultural & Research Libraries

contributing editor Marilyn Wellan

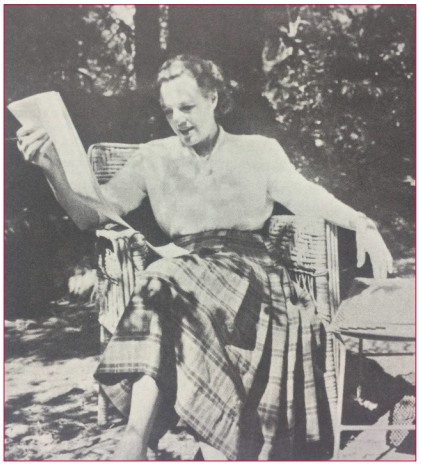
Roses of Yesterday and Today

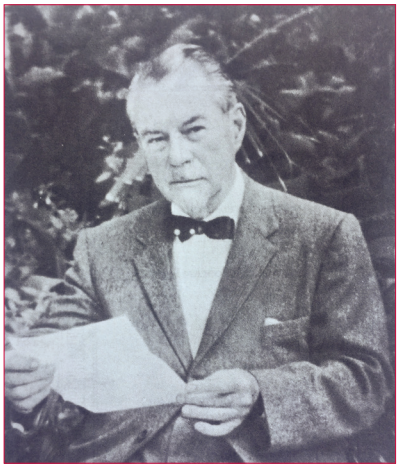
When I first began to grow roses, my garden was made up of catalog purchases from Jackson & Perkins' collection of "Rose of the Year" varieties. Once, I purchased a rose locally sold as 'White American Beauty', which refused to grow like my other mannerly hybrid teas. My research proved it to be 'Frau Karl Druschki', and my long love affair with old roses began. I still grow that beautiful rose today.

That was when I discovered the Roses of Yesterday and Today rose nursery that produced the most charming and useful catalog of all that found their way into my mailbox. That's where my old garden rose education began. The catalogs taught me about rose classes and the characteristics of those roses. The descriptions read like poetry (sometimes they did include a bit of verse), and included date of origin, class, height and bloom habit. Often, the catalog listings included quotes from well-known rosarians and customers, and helpful pronunciations of the roses of French origin, such as "Mal-may-zon" and "Som-broo-ee."

So when I discovered Dorothy Stemler's beautiful little book *Roses of Yesterday* in the Schorr Library, it brought back memories of all those catalogs, and in turn, it opened the door for me to examine the history of the rose nursery business that Ms. Stemler nurtured in the stead of its two previous owners.

BELOW, L-R: Dorothy Stemler, Will Tillotson (from the 1959 catalog), *Roses of Yesterday.*





Noted rosarian Francis E. Lester moved to the U.S. from England around the turn of the century, having grown up *"during the heyday of England's romance with the rose,"* according to Thomas Christopher in his book, *In Search of Lost Roses*. Lester's collection of old roses was built by propagation from cuttings of roses found around the missions and foothills near Santa Cruz, California; roses that he recognized from his childhood in England. From that collection, he created a display garden and opened for business as "Lester Rose Gardens." He wrote in 1941, "This catalogue differs from many catalogues you will receive; it has no expensive colored illustrations, and I hope, no extravagant claims. But it does offer you the benefit of long experience with roses; it tries to tell the truth."

Francis E. Lester is remembered for his book, *My Friend the Rose*, published by J. Horace McFarland who wrote the introduction, with illustrations reproduced from *Paintings by Mary Lawrence*, that was first printed in 1799. McFarland wrote, *"*My Friend the Rose *is written for the select group that looks on the rose with loving eyes… That Mr. Lester "knows his stuff," or rather his roses, will quickly become apparent, for he is frankly discussing his friends."*

For a time, the nursery was run by wife Marjorie Lester and Will Tillotson as "Lester and Tillotson Rose Gardens", and then Tillotson carried on the business as "Will Tillotson's Roses" from 1948 to 1957. Tillotson was a colorful character; his catalogs titled *Roses of Yesterday* and also *Roses of Yesterday and Today*, "carried on the tradition

of the 'chatty catalog' updating descriptions with field notes, customer comments, notes from reference books, and unties the 'old sack of adjectives' and submits his efforts to your tender mercies."

Stemler became Will Tillotson's "Honorable Secretary", and worked side by side with him in the rose nursery. They were privileged to acquire and grow many roses sent to them by Graham Stuart Thomas and Dr. Griffith Buck. Will Tillotson died in June 1957; and from the introduction page of the 1959 *Roses of Yesterday and Today* catalog, it appears Tillotson's Last Will and Testament left the old and rare roses in her care, asking that as she continued his work, that he "be remembered occasionally by mention in her catalogs — and (I) give her anything which I may transfer in style or content of those I have written for many years."

Dorothy Stemler, with help from her daughter Patricia Stemler Wiley and son-in-law Newton Wiley, continued the rose nursery as "Will Tillotson's Roses," "with Will Tillotson's faith and confidence in me…" During this time, Dorothy and Pat established the Roses of Yesterday and Today Garden, and sold roses through the beautiful catalogs using the same format established many years earlier. The mother and daughter traveled extensively, speaking on roses, and making friends with some of the great rosarians of the world, including Graham Thomas, Peter Beales, David Austin and Trevor Griffiths of New Zealand.

After an obviously successful 20 year career in growing and selling roses, Dorothy Stemler passed away in 1976. She left us with a beautiful book, *Roses of Yesterday*. The beauty of the book is found in her lovely and heartfelt words under a section titled "The Romance of the Rose," in her rose descriptions, and in the exquisite watercolors of artist Nanae Ito.

Following her mother's death, Pat and Newton Wiley officially changed the business name to "Roses of Yesterday and Today" and continued the nursery business, with the help of their six children until 1996 when they retired in their 70s.

During their ownership, Pat continued the award-winning annual collectors' catalogs, writing 20 of them during their tenure, and maintaining the Roses of Yesterday and Today Garden, famous for its plantings of old, rare and unusual roses. Newton Wiley passed away at Watsonville, California in 1998; Patricia Stemler Wiley in 2009.

According to the website for Roses of Yesterday and Today, and since 1998, Pat and Newt Wiley's son Jack Wiley and his wife Guinivere (Jenny) have continued to keep the garden of 230 roses open to the public every day. Following the business practices of Francis Lester, Will Tillotson, Dorothy Stemler and Pat Wiley, the two continue to offer old roses, selected modern, unusual and rare rose varieties for sale, and to propagate old varieties to bring them back into cultivation. Now, a son born to Jack and Jenny in 2000 may help to ensure the business remains a family affair, and will keep this rich and proud history of roses and dedicated rosarians alive.

Sources: Roses of Yesterday and Today website; Patricia Loraine Stemler Wiley obituary; Roses of Yesterday *by Dorothy Stemler;* My Friend the Rose *by Francis E. Lester from Schorr Rose Horticulture & Research Library.*

TOP TO BOTTOM: 'Austrian Copper', *Rosa foetida bicolor*, prior to 1590; 'American Beauty', hp, 1875; 'Eglantine', *Rosa eglanteria*, ancient; all art by Nanae Ito from *Roses of Yesterday.*

Rosarian's Toolbox

contributing editors Dr. Gary O. Rankin and Dr. Monica A. Valentovic

ONE OF THE MOST IMPORTANT ELEMENTS for growing good roses is water. Now that summer is here, with its dry and hot weather, it is especially important to make sure that our roses get enough water to grow properly. While nature provides rain, there frequently isn't enough rain to meet the roughly one inch of rain or one-to-three gallons of water needed each week. Roses grown in pots often need to be watered daily, as they can dry out quickly. So, let's take a look at the tools we need to keep our roses watered.

The most common way to water roses is by hand with a hose and some type of nozzle or water wand. Luckily, garden hoses are readily available from local sources, on-line or from horticultural tool suppliers. Hoses come in lengths from 25 to 100 ft. and cost about $20 to $70 depending on length, type and quality. Garden hoses are normally made of vinyl, rubber or a combination of the two. Keep in mind that not all hoses are created equal, and the saying that "you get what you pay for" can certainly apply to buying a garden hose. Vinyl garden hoses are often economical and can work well in mild climates with light watering needs. Rubber garden hoses are more durable, which can be important in harsher climates, but can also be heavier than vinyl hoses. One problem with some vinyl or medium duty hoses is that they often kink as you move them around the garden, which will cut off the water supply. To help solve these problems, some garden hoses have combined rubber and vinyl layers and/or mesh reinforcement for lighter weight but more strength and durability. We recently purchased a *Goodyear* yellow high visibility garden hose that provides a lightweight garden hose with excellent weather durability. In other garden hoses, metal coils or cords are added between layers of rubber or vinyl to help reduce kinking. Brands such as *Teknor Apex NeverKink* hoses use reflex mesh technology and braided materials in construction to reduce twisting, kinking and tangling. Many hoses also have metal coils or plastic sleeves at the end of the hose you attach to the faucet to prevent kinking. Picking the right hose for you will depend on your needs for strength, durability and weight.

There are also many options for nozzles and water wands. Standard pistol nozzles are usually less than $15 and provide a powerful stream of water down to a mist depending on the grip adjustment. Some nozzles have multiple spray patterns, which can be changed by rotating the head from one setting to another, allowing for six or more watering options. The *Gilmore Swivel Nozzle* has a thumb control to adjust flow rate, and the swivel connection to the hose reduces kinking in the hose from turning the nozzle.

LEFT: Garden hoses made from various materials: vinyl (top), rubber (middle), light weight rubber (bottom).

Water wands come in a variety of lengths (up to 48") and cost up to $50 depending on what features you add. For example, *Dramm* offers aluminum wands in colors and with shut off valves to use with their standard water nozzle that provides a water shower. *A.M. Leonard* offers wands from 24"-48" with a straight or angled handle with either a plastic or stainless steel nozzle for under $30. There are also a number of water wands available in a ~15"-20" length such as the *Orbit 58995 Thumb Control*, *Orbit Underground 56287*, *Melnor ReflexGrip*, *Stanley Soft Spray*, *Nelson Garden Watering Wand* and others. These wands usually have a nozzle with multiple settings from mist to jet (strong focused stream), and some have a thumb control to regulate flow rate. We use these shorter wands for cooling off or washing the bushes in hot weather or watering pots. In addition to fixed length water wands, we have found telescoping watering wands at local box stores that allow us to change the wand length as needed.

ABOVE: Nozzles and water wands: Telescoping water wand (top), short water wand with thumb control (middle), pistol nozzle (bottom); BELOW: Soaker hoses are porous hoses that come in varying lengths and diameters. Photos Rankin/Valentovic.

If you don't want to hand water, there are other options. One of the simplest options if you don't want to do hand watering is using a soaker hose. Soaker hoses are porous hoses that allow water to leak out from the hose due to the water pressure from the faucet and gently soak the ground along the hose. Placed in the garden along the bases of the roses, the hose can be covered with mulch or buried up to 6" deep. A regular garden hose is attached to provide water flow to the soaker hose when it is time to water. Soaker hoses come as single hoses of different lengths for placement in the garden or as kits that allow you to customize your water distribution. There are also many drip irrigation systems that can be installed in the garden which allow water to be dripped from a plastic nozzle placed at or near the base of the rose bush. These systems usually come in kits that include plastic tubing to carry the water from a hose connection to the drip nozzles, posts to place near the base of the rose for holding the nozzles, and the drip nozzles. Some kits contain timers to start and stop the drip irrigation.

A last type of water system that we have used during the summer is overhead watering. Overhead watering is a great way to cool down the roses on a hot day and can wash off the leaves as well. Impulse sprinklers attached to tripods placed in the garden can cover a wide area at once. While these systems may cost up to $200, they are another great way to water your roses in hot weather. We use this technique in the early afternoon, so that the roses have time to dry off before evening and reduce the chance of developing blackspot. If you don't want to buy a sprinkler system, you can attach an impulse sprinkler to one or more thick garden stakes to make your own overhead watering system.

Visual Impact

Tips and information on photographing roses

contributing editor Curtis Aumiller
americanrosephoto@yahoo.com

Rose Season is Coming… Again!

HERE IN THE NORTHEAST of the United States where I live, it is time to start pruning and preparing for our fall rose shows. Most of us have our District conventions during this time of year and it gets very busy. Photography inquiries continue to come in about adding photos to the local schedules. Please see the information below for a few pointers if you are looking to finalize your photo wording in the fall convention schedule.

Tips for Rose Photography Schedules

I have been noticing a few things as I look at various local and district photography schedules that are being written. This section is to give a few tips to make sure your schedule is most inclusive while following the ARS rules.

First, please read the ARS Guidelines for Judging Rose Photography! The rules are listed, and a sample schedule is also included. A few things that MUST

BELOW: 'Rouletti' by Curtis Aumiller; OPPOSITE PAGE, L-R: 'Love' and 'Selfridges' by Jim Linman.

be included in your schedule is the point scorecard and the "legal" disclaimer regarding the intellectual property belonging to the photographer and by entering they are giving permission for us to include photos and information in our newsletters as well as the ARS website. This is to make sure that your society, district, and the ARS are covered.

Second, don't forget there are Rosettes AND Certificates that the ARS offers. These may not seem like a big deal to people who have been exhibiting for a long time, but they can do great things to a newcomer in boosting their enthusiasm, confidence, and willingness to continue to participate in rose shows! We were all newcomers once and the first time we won a certificate, or a rosette was a big deal to us. I still have mine!! How to manage these courts and how these are awarded is also listed in the guidelines.

Third, try to be inclusive. Many people want their show to look pretty, and I understand that, but the newer exhibitor may not want to invest large amounts of money in their photographs, especially if you are only awarding a few ribbons, no rosettes, and no certificates! I usually recommend that the photos be 4x6 or 5x7, no matting, no mounting. In my local society we do this, then the district is 5x7 or 8x10, no matting, no mounting, then the national is the big competition. Please note that there is no wording in ANY of the rose judging guidelines that requires the exhibitor be an amateur. This wording was removed from the ARS many years ago.

Finally, HAVE FUN! At the local level I enjoy seeing photography sections that include classes such as "rose society activity", "Critters in the garden", "children in the garden", and especially, a "Junior" class where kids can enter photos. These are great ways to show to the public that your society is inclusive and fun. Having photos of your activities shows you are active, critters can include dogs and cats, and who doesn't love seeing kids in the garden. Let your imagination run wild! This makes it fun for everyone and believe it or not, will keep the public that is looking at your show staying at the show longer. They will talk about the kids, pets, etc., and this gives you more things to talk to them about and maybe get them interested in joining!

If you have any suggestions for classes I didn't mention, or something that you do in your show that you would love to mention, please let me know. I would love to spread your ideas around the country so we can continue our mission to highlight the rose!

Photography Show 101

This month in Photography Show 101 we are going to discuss the backgrounds of photographs. When it comes to what is in the background of the photograph, it can be a little subjective to the judges. Some judges like the black background, some judges like a more naturalistic background, some like in between. The one thing that all judges agree upon is whether the background is distracting, and how distracting.

Many times, you will see photographs that we term "the floating bloom". This is where there is nothing in the background except a solid color and there not even foliage with the bloom. I have heard some people

ABOVE, LEFT: 'Miss Congeniality' by Roman Kwarcinski; LEFT: 'Liebeszauber' by Clive Nickerson; ABOVE: 'Easy Does It' by Elena Williams.

say that the judges don't like the floating bloom. I do not agree with this statement. As with ANY specimen where all the points are going into the bloom, it better be the best bloom in the world to get all the points. Black background with dark red blooms makes it hard to see the intricacies of the petals and blooms, whereas a black background with a yellow or something like "Autumn Splendor" makes the rose "pop" and very prevalent. I see the rose before I even notice that it is an all-black background. For horticulture exhibitors, this is exactly like working with a rose in a frame or a palette format. What roses look good against the black background in these types of exhibits? Other colors of backgrounds are much harder to work with but play around and see what you think works best for your rose. You can always ask an arranger what colors they use for their backgrounds when they are arranging with certain roses. The color of the background can add or distract from the bloom and they have gotten pretty good at figuring what they need for certain color roses. *(See photos of 'Love' and 'Selfridges on page 45).*

Nature provides the perfect color background for rose blooms… green foliage. In horticulture judging, we look down upon the top of the bloom to see how the foliage "frames" the bloom, especially in hybrid tea judging. In photography we have a few different challenges when it comes to the foliage background. First, you want to make sure that the lighting is not catching on the foliage and producing a bright spot that will catch the judge's eye before they even see the rose. Glossy foliage can cause this to happen so you may need to take photos from different angles to not get that glare. Also, the foliage does NOT need to be in focus. Many times, by changing the depth of field on the camera, you can blur the foliage and the glare is no longer an issue. (See 'Miss Congeniality' above, left.)

A mistake that I see often and hear judges speak about is when you are taking photos in the garden and there are other blooms in the background of the photo. Even if the other blooms are not in focus, the color causes a distraction to the photo and the judges will remove points for this. When I am speaking to people about taking and judging photos, the first thing I say is, "what is it a photo of?". If the photo is of a hybrid tea bloom, but I see other colors in the background, then the photo is really of the entire area, not just that one bloom. This may require you to move the bloom to another area, clean up petals on the ground or on the leaves around your, or gently move another rose

out of the frame while taking the photo. These little changes can have a great impact on the photo. (See 'Liebeszauber', page 46.)

The final background issue is other distractions. Some things that can be distracting are mulch, concrete, block walls, fences, and other man-made items. While they are not always the reason for point deductions, there are many times that it can be distracting. People should consider this when taking photos and think if there is a way to minimize this distraction. Some suggestions include an old piece of black fabric (old bed sheets work great for this) where you might want to lay it behind the specimen you are photographing to help minimize the distraction. (See 'Easy Does It' page 46.)

In the next issue, we are going to discuss garden photographs and why they can be a challenge. Please contact me if you would like me to cover a specific topic in photography and I will do my best to include it in future issues! Keep those shutters clicking!

LEFT: 'Pretty Lady Rose' by Curtis Aumiller.

ROSE PHOTOGRAPHY CALENDAR OF EVENTS

October 5, 2019 – "Music City Roses" 2019 ARS National Miniature Conference and Rose Show. The National Challenge Class in photography will be offered at this show. For more information, please visit www.musiccityroses.com

November 5, 2019 – Deadline for entries in the ARS American Rose Digital Photography Contest. Please visit https://www.rose.org/photography for detailed instructions and guidelines. PLEASE make sure to read the rules correctly. There have been some changes made so you do not want your beautiful photograph disqualified because of something simple like not reading the schedule correctly.

If you would like to have something listed, please send requests (with all the pertinent information) to Curtis Aumiller at americanrosephoto@yahoo.com. Remember that photography competitions that are not ARS sanctioned are also welcome!

2018 Digital Photo Contest WINNERS

The 2018 contest was again a huge success. If you were unable to watch the webinar this year, you are invited to go to https://www.rose.org/photography where you can find the webinar that lists all the first through fourth place winners in each category! In the next pages you will find the first place winners from the Regular Class of the contest.

CLASS ONE: One bloom, no sidebuds, of Hybrid Tea, Grandiflora, Minature, Miniflora, and Floribuda classifications of roses. Roses designated as "single" (eg. Single HT, etc.) must be entered in class 2. First Place 'Sunny Sundays' by Robert Sabin.

CLASS 2:
One bloom, fully open, no side buds, stamens must show. Roses classified by the ARS as "singles" ARE permitted in this class. Hybrid Tea, Grandiflora, Minature, Miniflora, and Floribuda classifications of roses are in this class. First Place "Dorothy Rose" by Linda Burg. *Bronze Medal Winner, Best Miniature Single Bloom.

CLASS 3:
One spray, two or more blooms, Hybrid Tea, Grandiflora, Minature, Miniflora, and Floribuda classifications of roses are in this class. This class does NOT include collections. First Place 'Climbing Raibow's End' by Jolene Angelos. *Best Miniature Spray.

2018 Digital Photo Contest WINNERS

• **CLASS 4 (ABOVE, LEFT) : One bloom or spray of an Old Garden Rose, Shrub, Species, Polyantha, or Large Climber. Spray photos do NOT include collections.** First Place 'The Imposter' by Cheryl Frechette.
• **CLASS 5 (ABOVE, RIGHT): A photo of a Traditional arrangement, miniature or standard, following the *ARS Guidelines for Judging Rose Arrangements*. Roses do not need to be identified. The name of the arranger MUST be listed.** First Place "Arrg. by Jean Stream" by Linda Burg.
• **CLASS 6 (BELOW, LEFT): A photo of a Modern arrangement, miniature or standard, following the *ARS Guidelines for Judging Rose Arrangements*. Roses do not need to be identified. The name of the arranger MUST be listed.** First Place "Arrg. by Sue Witwer" (#1) by Sue Witwer.
• **CLASS 7 (BELOW, RIGHT): A photo of an arrangement in the Oriental Manner, miniature or standard, following the *ARS Guidelines for Judging Rose Arrangements*. Roses do not need to be identified. The name of the arranger MUST be listed.** First Place "Arrg. by Sue Witwer" (#2) by Sue Witwer.

2018 Digital Photo Contest WINNERS

• **CLASS 8 (LEFT): Abstract or Impressionism: The photograph should evoke a sense of originality; a new and different way of imagining the rose or roses with the mind's eye. This may include processes used to alter the original image such as colorizing, black & white, texturizing, dodging, burning, dithering, painting, shadowing, blurring, layering, cloning, filtering, merging, cropping, etc.** First Place "Winter is Coming" by Ann Kameoka.

• **CLASS 9 (ABOVE): Garden: A photo of any rose garden. Photographs should show the use of roses within the structure of a garden, which can be widely variable. Roses should dominate**

in the photograph, and some layout of the garden should be visible. Roses do not need to be identified. If a public garden is used, the name of the garden MUST be listed. First Place "Dunn Formal Rose Garden #2" by Charles Prince.

• **CLASS 10 (BELOW, LEFT): Seedling: A photograph of any seedling which is not currently registered/named. This can be any type of rose. Example of naming the entry would be 10a-Mark Jones, Seedling-Aumiller. The name of the hybridizer MUST be listed.** First Place "Seedling H17" by Clive Nickerson. *Best Seedling

• **CLASS 11 (BELOW, RIGHT): Macro Photography: Photographs should be EXTREME closeup photo of any part of the rose or rose plant. This would include prickles, leaves, etc. Color, Black & White, Sepia, or combinations of these are permitted in this class. Roses MUST be identified.** First Place "Manhatten Blue" by Linda Burg. * Silver Medal Winner.

McFarland Comes Home

by Curtis Aumiller, Penn-Jersey District Director

AS PART OF THE GREAT GARDEN RESTORATION at America's Rose Garden, we partnered with the House of Meilland and Star Roses & Plants for a rose that we could name after the Father of the American Rose Society, J. Horace McFarland. Star Roses & Plants was gracious enough to not only provide this rose to the ARS, but they sent 50 bushes to me here in Harrisburg Pennsylvania, the home and final resting place of J. Horace McFarland.

While McFarland's home, Breeze Hill, is no longer available (it is a private residence), the final resting place for J. Horace McFarland, Harrisburg Cemetery, was very happy to allow us to plant this new rose at his grave to help honor a great public figure to Harrisburg, Pennsylvania as well as the ARS. In conjunction with the Cemetery Board and the caretaker, we worked on planning for this planting as well as future plantings if possible, at McFarland's grave. Four 'McFarland' roses were planted in a new bed on either side of the gravestone.

There is room to plant other 'McFarland' roses if we can find a source to acquire 'Editor McFarland' and 'Horace McFarland'. If anyone has one of these cultivars and is willing to share a cutting, it would be greatly appreciated. You can contact me at americanrosephoto@yahoo.com. While I had hoped to plant some roses in the city of Harrisburg, this did not work out at this time. ARS will continue to work with Harrisburg to install a garden in the future.

Some of the McFarland roses were also shared with the Jasper Crane Rose Garden located in the Brandywine Park in Wilmington, Delaware. J. Horace McFarland lent his gardening prowess to this garden when it was being laid out to help create the rose gardens. It was fitting that we share this wonderful rose with this garden.

There were also roses given to members of the Penn-Jersey District to plant across the district so that the home of J. Horace McFarland can be remembered by all, as well as to see how the rose performs in various microclimates. I am happy to report that the roses I have as well as those I am caring for at the cemetery, are performing well. They are quite vigorous as well as quite disease resistant currently. I can hardly wait for the bushes to be established and see how well they will perform in the future.

The largest donation was to the Milton S. Hershey Gardens in Hershey, Pennsylvania. The following article appeared in the M.S. Hershey Foundation newsletter with permission to reprint the article for all members to enjoy.

ABOVE: 25 'McFarland' roses are showcased at the M.S. Hershey Tribute Garden, which was created as part of Hershey Gardens' 75th anniversary, photo Curtis Aumiller. BELOW: 'McFarland', photo courtesy Meilland.

New Rose Named for McFarland

The Inspiration Behind the Hershey Rose Garden

by Jill Manley, Sr. Director Communications, Development & Membership, M.S. Hershey Foundation

JOHN HORACE MCFARLAND, born in 1859, was the son of nurseryman and publisher George McFarland, who settled in Harrisburg, Pennsylvania after coming home from the Civil War. Young Horace worked in his father's nursery, but also gained experience setting type in his father's publishing business, printing seed lists and later nursery catalogs. At age 30, in 1889, J. Horace McFarland opened his own publishing company where he gained contracts to publish nursery catalogs and the *Standard Cyclopedia of Horticulture*.

In 1915, McFarland and Robert Pyle believed that commercial rose growers of the American Rose Society should be interested in encouraging amateur gardeners to grow roses. At the time, the Society had about 250 members, but most of them were commercial growers. The resulting agreement changed the ARS from a narrow purpose commercial trade organization into one that focused on providing information on rose culture for home growers.

J. Horace McFarland is credited with turning the commercial growers' organization into one that welcomed — and served — ordinary home gardeners and lovers of roses. In 2017, the American Rose Society Board of Directors proposed that J. Horace McFarland, be officially designated the "Father of the American Rose Society."

The Hershey Rose Garden: A Seed is Planted

In July 1935, McFarland wrote a letter, inviting Milton Hershey to visit the acclaimed rose garden at his home in Harrisburg. He also wrote,

"I have a desire to get Mr. Hershey to see the advantage of a rose garden. He does things in such a magnificent way and so clearly operates for human welfare that I believe he would be

ABOVE, L-R: J. Horace McFarland speaks from the steps during the dedication ceremony of the Hershey Rose Garden in 1938; Photo courtesy of Hershey Community Archives. See the 'McFarland' Rose in the M.S. Hershey Tribute Garden at Hershey Gardens. Photo Curtis Aumiller.

impressed with the possibilities afforded only by the rose for advancing human welfare.

I could see a great rose garden in Hershey which would increase the attractions of that marvelous place, but there is a peculiar opportunity open right now, not yet offered to any man of means, to do something at Washington which would give international renown."

The following April, McFarland wrote again, advocating that Mr. Hershey consider "the establishment of a public rose garden" in Hershey. McFarland also urged Mr. Hershey to support the establishment of a "National Rosarium close to Washington." He suggested that the two men meet to discuss these proposals.

Mr. Hershey immediately replied to McFarland's letter and indicated his interest in the idea of a rose garden. The two men agreed to meet in Hershey during the Pennsylvania State Federation of Garden Clubs' annual meeting in April. Their first meeting took place on Wednesday afternoon, April 29, 1936.

Harry Erdman, responsible for all things horticultural in Hershey, related what happened next in a 1955 oral history interview. According to Erdman, Milton Hershey had been considering expanding a small rose garden at his home, High Point, for some time. Erdman had suggested that a garden could be developed on land just south of the Hotel Hershey. Horace McFarland's enthusiasm for planting a rose garden in Hershey coincided nicely with an idea that was already being considered.

McFarland invited Milton Hershey to be his guest at the April 29th Garden Federation dinner that evening. As the dinner's keynote speaker, McFarland used his speech to publicly ask Mr. Hershey for a financial contribution towards a National Rose Garden in Washington, D.C. According to Erdman, Mr. Hershey's reply was:

"Well, we have been planning a garden of our own; and, before we give that amount of money for the politicians to play with, we better spend some of it at our own place and see what interest people take in it."

The Hershey Rose Garden opened in 1937 with more than 12,000 rose bushes.

Introducing the McFarland Rose

The American Rose Society recently commissioned a new rose to be named after J. Horace McFarland. The pink rose, hybridized by the House of Meilland and Star Roses and Plants, is a hybrid tea rose.

The ARS has generously donated 35 McFarland roses to Hershey Gardens. *"The perfect place for these special roses is adjacent to the M.S. Hershey Tribute Garden, which was planted in recognition of Hershey Gardens 75th anniversary,"* said Bill Kieffer, Hershey Gardens' operations manager. *"We are grateful to receive these roses, since they are not yet available for sale. They will blend beautifully with the revitalized M.S. Hershey rose."*

**Excerpts of this article came from www.rose.org*

American Horticultural Society

Making America a Nation of Gardeners, a Land of Gardens

Founded in 1922, the American Horticultural Society is a national membership organization that supports successful and earth-friendly gardening by:

- Providing useful and authoritative information
- Recognizing horticultural achievements
- Connecting to tomorrow's gardeners
- Showcasing the best of American horticulture

AMERICAN HORTICULTURAL SOCIETY

To learn more or join, call (800) 777-7931 or visit *www.ahsgardening.org/join*.

ABOVE: 'Omar Pacha', photo Darrell g.h. Schramm.

The Democratic Rose *In History*

by Darrell g.h. Schramm

ONE COULD MAKE A STRONG CASE for feminism regarding women whose names were given to roses bred from the mid-19th century into the early 20th. No sexism here—so it would appear. In addition to roses named for nurserymen, male rose breeders and horticulturists, mayors, military generals, princes and dukes, the names were somewhat balanced by those in honor of queens, countesses, duchesses and almost countless madames, usually the wives of nurserymen, rose breeders, bankers, politicians, generals, or officials of one organization or other.

But on closer inspection, what we see in these selections of rose names is a kind of botanical elitism in nomenclature. Where are the shop girls, the governesses, the nurses, the women of the working class?

Consider, for example, the roses bred or introduced during or soon after the Crimean War of 1853-56. As a result of this war, at least three roses were produced in commemoration of the conflict. One of these is 'Lord Raglan', a hybrid perpetual named for an English commander of troops who died during the war. The rose has followed suit in the U.S. though still available abroad. Another is 'Tour de Malakoff', a fragrant centifolia in soft shades of crimson, magenta, purple, and violet, named for the tower of a small Russian fortress which, once overtaken by the French, ensured the defeat of Sebastopol and the Allied victory. That rose still survives in gardens and in commerce. A third rose is the silvery pink bourbon 'Omar Pacha' with ruffled petals, named for an ex-Briton turned Arab who fought with the Turks on the side of the French and English. This rose, too, is in commerce, though barely.

LEFT, TOP: 'Tour de Malakoff', photo Darrell g.h. Schramm; LEFT, BOTTOM: Lord Raglan, Omar Pacha and Marshall Pelissier, 1854; 'Lord Raglan', photo from *The Florist, Fruitist and Garden Miscellany, 1856*.

Yet why were no roses named for either of two women who also found themselves at or near the scenes of carnage during the Crimean War, women who were brave, undaunted, heroic?

Florence Nightingale, a true humanitarian, who despite opposition, set out for the Crimea in 1854 with 34 or 37 (sources vary) nurses, mostly from different religious orders. At the British base in Constantinople, she set up a hospital and another just south of Sebastopol. At least 18,000 soldiers had been admitted to the hospitals, more with typhoid and cholera and other infectious diseases than war injuries and wounds. Her sense of sanitary and personal care reduced the death rate in the hospitals by two-thirds. While she was honored in London after the war, the government presenting her with $250,000, she used the funds to open a new hospital that included nurses' training. She was not, however, memorialized with a rose. That did not occur until 79 years after her death, in 1989. Already that rose has vanished. In 2000 Keith Zary produced a floribunda with that name.

Mary Seacole was a Jamaican businesswoman who had done some nursing in Jamaica and Panama. When she learned of the Crimean War, she requested leave to aid

ABOVE, LEFT: 'Annie Besant', photo from *The Practical Book of Outdoor Rose Growing*, George C. Thomas, Jr. 1914; ABOVE, RIGHT: 'Florence Nightingale', photo Jackson & Perkins.

the troops there. Her request denied, she decided to use her own resources and, with a partner, gathered a stock of supplies, boarded a Dutch steamer, and landed at Constantinople. Making her way to the war front in Crimea, she had built just behind the front lines a large shanty called British Hotel. There, with some hired help, she provided refreshments, meals, and rest. Seacole was much appreciated and admired by soldiers and officers alike. When after the war she returned to England virtually penniless, military personnel raised money to prevent her becoming destitute. One hundred sixty years later a statue was erected in her honor on the grounds of London's St. Thomas Hospital — with some protests that suggest racism. But no rose has been named for her.

Granted, rose breeders in England, unlike in France, were scarce. Old nurseries like Standish & Noble did not begin breeding roses until the 1860s or later. Yet without a doubt, Florence Nightingale and Mary Seacole both deserved, if not a rose in their honor, at least, the Victorian Cross, an award for valor made from the metal of Russian artillary captured at Sebastopol in the Crimean War. Unfortunately, they were overlooked. Sexism? Elitism? Certainly not democratic.

In 1888 the English journalist Annie Besant exposed the plight and the disease of young women, the "match girls," who worked in match factories dipping matchsticks into a combustible white phosphoric paste. The phosphorus infected their jaws, eventually rotting the bone tissue and causing the jaw to glow a chartreuse color in the dark. The disease would then affect the brain and finally cause organ failure and death. Most of the workers were teenage girls paid a few shillings a week from which fines were deducted for tardiness, loquaciousness, dropping matches, and other minor "offences."

Annie Besant developed protest techniques still used today, not least the gathering of a delegation of the young women to lobby the House of Commons. In the end the match company Bryant & May capitulated, abolishing all fines and deductions, and the government banned the use of white phosphorus. (Red was then used in its stead, without any detrimental effects.)

Twenty years later, in 1910, the Nabonnand nursery on

the French Riviera named a very pale, salmon pink hybrid tea with an amber center 'Annie Besant'. Such a christening was unusual for Nabonnand, for most of that nursery's numerous roses are named for the renowned and the elite. Sad to say, the rose is no longer in commerce. But consider: it was the French, not the class-conscious English, who bred and named the rose.

To his credit, the first great English breeder of roses, Henry Bennett, named a tea (some call it a hybrid tea) for — not a flower seller, not a shop girl — a working class woman of 22 who helped her father work a lighthouse on the Northumberland coast. Her name: Grace Darling. The color of this full rose is a delicate, creamy pink or the color of old ivory flushed with a soft crepuscular pink, utterly lovely and refined. Next to it, many a modern hybrid tea appears pert, brazen, brash.

This is her story: One late summer night in 1838, the ship Forfarshire crashed against rocks during a storm in the North Sea. Of more than 60 people aboard, nine were able to swim to and cling to rocks a mile from shore. In the early morning hours, the Darling family saw the situation. Grace responded at once, persuading her hesitant father to go to the survivors' rescue and insisting on joining him in his rowboat. Reaching the rocks, her father helped one woman and four men into the boat while Grace determinedly managed the oars. Three of the men helped her row back to safety. Immediately then, two sailors rowed back to the rocks for the rest of the survivors and Mr. Darling.

The news spread quickly. And just as quickly, Grace Darling became famous. Queen Victoria recognized her bravery in a personal letter and sent her 50 pounds sterling; the Duke of Northumberland set up a trust fund for her; offers to paint her portrait and offers of marriage arrived repeatedly. Grace declined the latter. She died of tuberculosis four years later. The rose was introduced in 1884. The rose is still sold today.

After the 19th century, western European rose breeders began to be more democratic in nomenclature. The Alexander Dickson breeders in Ireland had been an exception, almost invariably naming their roses after local friends and family. Now more roses began to be given names like 'Alice Grahame', 'Bessie Brown', 'Betty Uprichard', 'Christine', 'Coralie', 'Janet', 'Kathleen', 'Mrs. Redford', 'Miss Edith Cavell'.

This last named rose deserves its own story, for not only was a polyantha named 'Miss Edith Cavell' in 1917 but also a hybrid tea was designated 'Edith Cavell' in 1918.

An Englishwoman, Edith began as a governess, then eventually became a head nurse, opening a medical institute for nurses in Belgium in 1907 when she was in her forties. While she was visiting her family in England, war was declared in 1914, prompting her to return to Belgium, saying, "I am more needed than ever." Following the German invasion of Belgium, her nursing school became a Red Cross hospital. It wasn't long before her humanitarian work included sheltering Belgium, English and French soldiers eluding the Germans, then helping them escape over the border to neutral Holland.

BELOW: 'Grace Darling', photo Darrell g.h. Schramm.

RIGHT: 'Miss Edith Cavell', photo Boronaky Gabor.

Although she knew that "we are bound to get caught one of these days," she continued her assistance in the underground.

Indeed, in August of 1915 she was arrested and imprisoned for 10 weeks until her trial. In October she and 34 others were found guilty of abetting the enemy. Edith confessed to providing money and even guides for the escaping soldiers. Among four others, she was sentenced to death. Despite some swift English diplomacy, she was speedily stood before a firing squad on October 12 and executed. England, France and other European powers were outraged. Germany thereafter forbade executing women during the war.

It did not take long for Mr. G. de Ruiter of The Netherlands to name his new, dark red polyantha rose 'Miss Edith Cavell'. Although by the mid-1980s, the rose had nearly vanished in England, it continued and continues to be sold in the United States.

Demos in Greek refers to the people — all the people, not just a special segment or gender of people. Though roses named for aristocracy or otherwise famous individuals carry a certain cachet, it is gratifying, bracing, and embracing in a more humanitarian world to name roses today for the common man or woman as well. Now, in nearly any public or private garden, we can readily find the democratic rose.

~WATER~ FOR ROSES

The Right Amount

By Sid Gnesa, Assistant Editor, Rainy Rose Society

ROSES, AS DO ALL PLANTS, NEED WATER to live and grow. Water fills the plant cells keeping them rigid (turgid) and the plant upright. Water provides for photosynthesis to feed the plant. Water cools the plant's leaves as it evaporates from their surfaces in a process called transpiration. If not enough water is available, a rose will struggle to survive, be more susceptible to disease, look poor (limp), and will not generate those beautiful flowers rose growers desire.

Roses like any other plant can be overwatered. Overwatering is a common cause of plant death. Too much water drowns the plant as it does not allow it to breathe. Ironically, a sign of overwatering is a limp rose - an exact same sign as seen when there is a lack of water. An overwatered plant can have yellow or dried out leaves because its ability to conduct photosynthesis and transpiration are stemmed. Prolonged overwatering can lead to root disease.

How much is enough water for a healthy plant? This is a complicated question and depends on several of factors.

Soil type is a key factor in watering

Some soil types such as sandy soils allow irrigation and rain water to quickly pass through them and have little water holding capacity. Others, like clay soils, have a very slow water transport, but have a large water holding capacity--both which may result in drowning the rose. Water holding capacity is the ability of a soil to retain water provided it has adequate drainage. Make holes in the bottom of a container and fill it with soil. Add water until it comes out the bottom and the drainage stops. The soil in the container is now at its maximum water holding capacity.

A standard test to determine soil water drainage is to dig a hole about a foot deep and wide. Fill it with water and then let this water drain out. Immediately, fill the hole again with water. This time check the water level in inches every 15 minutes to record the change in level over time. Multiply the average of these readings by four to determine the average change per hour. The result is the average drainage in inches per hour. If the soil has less than one inch per hour of drainage, it can stay wet for a long time. For these soils, watering amounts and timing are critical to avoid drowning the plant.

ROSARIANS NEED TO CONSIDER:

- SOIL TYPE
- CLIMATE
- DRAINAGE

Drainage of one to six inches per hour is preferred

Soils draining faster than six inches per hour will need frequent watering to retain sufficient water in the root zone. In the Pacific Northwest soil types can vary from clay, which is slow draining, to basically gravel that is extremely fast draining.

If you have tested the soil drainage and discover you have slow draining soil, be careful about how you amend it. Rose growers can make the mistake of digging a hole in slow draining soil and then adding back

amended soil having peat moss and other organic material. The result will be that irrigation or rain water will pool in the hole and drown the plant.

If the soil is extremely fast draining, the addition of top soil will allow more water to be retained. Adding organic matter will also retain water; however, over time, this organic matter will break down and need to be replenished.

Commercial farming operations seldom amend the soil when planting trees or vines. They just dig a hole and reuse the same soil when planting. It is my opinion when planting roses in the ground that you separate out any large rocks, cut roots and un-decomposed matter, but reuse what soils come out of the hole. Do not add amendments unless they are required to retain water. For additional information see: https://puyallup.wsu.edu/wp-content/uploads/sites/403/2015/03/soil-amendments.pdf

Climate is factor in watering.
When the air temperature is warmer, roses use more water via evaporation to cool the plant. Wind will also cause a rose to use more water due to desiccation or wicking of the leaves of moisture. This issue can be more prevalent with dry winter winds.

Many rose types do not go dormant, but slow down in growth. These roses still need water in the winter, although they require less water.

Sun or shade will affect water usage as will the amount of rainfall. Install a rain gauge to measure the amount of rain. Unless it is raining one inch per week during the growing season, the soil may become too moisture deficient for roses to be healthy.

There are more factors that affect water usage; but for the typical gardener they can be discounted.

Do the above appear complicated? Yes, more so as gardens typically have numerous climates (microclimates) and soils types all requiring different amounts of water. Fortunately, unless dealing with extremes in yards with clay soil in one part and sandy in another, an average water amount applied to all areas should be adequate for having happy plants.

Things to consider when watering
Plant roots grow where the water is. A deeper root system is of benefit as it is less susceptible to the effects of draught and disease. Established roses can have roots 19 inches in depth. For water to reach this depth, sufficient watering time is required. Unless the soil is sandy, this generally means low and slow water rate applications. This is where drip and soaker hose irrigation excel as they provide for a slow, controlled application of water.

Newly planted and transplanted roses need more water because their root systems have not been established. The result is the smaller less established root system requires increased water frequency.

Rapid spring and summer growth, and blooming roses require more water because the plant has more vegetation. This means increased water frequency.

Roses need water as long as they are actively growing. Continue watering roses into the fall until they harden off. Modern roses do not go dormant, but they do enter a period of less activity — except in their root systems that may continue to grow all winter long. Roses that are well-hydrated before this resting time are best able to withstand the rigors of winter. Roses that do not go dormant may need to be watered if they are experiencing a dry winter.

When spraying or fertilizing, water roses a day or so before as sprays and fertilizers can dehydrate a plant.

How much water is enough?
A reasonable water demand calculation can be made based on soil type, drainage, location and weather for which is beyond the scope of this article or the soil can be probed to determine the moisture depth. For mature rose plants, probe about one foot from the trunk with a ¼ inch steel rod. The deeper the probe goes easily, the deeper the moister depth. Ideally, you want the probe to go as deep as the roots go.

Modern roses, once established, do reasonably well even if not watered as frequently as long as the air temperatures are moderate. Native and old growth roses do very well without watering for longer periods of time. They have deep roots and have adapted to varying water availability and growing conditions.

Over time, gardeners will get to know their soil types and establish a "feel" for water demands, application rates and frequency of watering.

Roses in Containers and Raised Beds
If planting in containers or raised beds, there are many options not available to native soil planted roses. Containers and raised bed gardens, if designed correctly, will have excellent drainage. As a result, the soils can be specifically mixed for the needs of the plant. Typically, raised bed and potting soil is a mix of sand, soil and organic matter which allows good soil retention and drainage. Nursery plant potting soils may have perlite or vermiculate added to increase the water holding capacity.

Containers, however, do not have a large amount of soil; and, as a result, their water holding capacity is very limited. The result is roses in containers require much more frequent water applications then plants in the ground or in a raised bed. When using plastic containers such as 5-gallon buckets, if the container color is not white, I suggest they be painted white to lower the effects of the sun heating the surfaces which can lead to overheated roots.

To insure proper watering for a potted plant, having a correct soil type that allows both water drainage and retention is critical. Apply enough water that it runs out of the bottom. When the water has stopped draining out, the soil is now at its maximum water holding capacity. Make sure the container has holes to allow excess water to drain out.

For raised bed gardens, probe or dig down into the soil to check the moisture content. You want a moist but not damp soil. Take a sample of the soil and squeeze it. Unless it is heavy clay, a moist garden soil will compress then fall apart when released. Water should not be squeezed or drip out, and the soil stay in a ball after release.

There are various types of electronic and mechanic soil probes that will display a reading which can be correlated to soil moisture. If using these, confirm the readings with a soil probe or visual inspection until gaining confidence the readings are correct.

To help prevent water evaporation and cool the soil, add a few inches of compost or mulch around the plant. Make sure this added material layer does not clump up over time and become a barrier to water penetration.

Where and how does one apply this water?
Water can be supplied by sprinkler, dripper, and soaker hoses from the end of a hose overhead or at the base of the plant. For roses, the best application method is one that does not get water on the leaves or allow water to reflect off the soil and reach the leaves. Roses don't like overhead watering during the growing season as this can cause disease and staining of leaves and bloom petals. Water reflected off the ground can bring with it spores causing blackspot that lay dormant on the top of the soil.

The best method for watering roses is at the base around the trunk, but not on it. Then, water out from the canes as far as the roots extend. Make sure the water application rate (typically measured in gallons per hour) is slow enough that the water has the time to move through the soil and doesn't simply run off. For plants in the ground, this is where drip, micro-mist (small sprinklers) and soaker hoses are very effective. For containers and raised bed gardens, a hand bubbler nozzle can be used as the soil type should provide for reasonably fast drainage (permeability) and thus fast water application rates.

When applying water to raised bed gardens or bare soil areas, break up the top of the soil first to reestablish the waterways for capillary action for water. Soils can also be compacted or form a crust that inhibits water penetration at high applications rates. This compaction or crust may need to be broken up to provide for adequate water penetration. After watering, probe the soil to determine if the watering results are what were expected.

Water Quality
A final issue is water quality. Utility supplied water may have chlorine or other chemicals. A water softener can increase the concentration of salt in the water. All these issues can affect plant health.

Does the above sound complicated? It can be. Does it really matter? Not for most gardeners. If you have the proper watering setup and do a little experimentation, over time watering can become almost rote in nature and something your plants will appreciate.

In closing, water plays major role in rose plant health! Providing a rose with the right amount of water will go a long way toward growing healthy plants and maximizing those plant blooms rose growers love.

homestratosphere.com

by Ken Sheppard

WHEN PEOPLE TELL ME their roses seem to be struggling and they don't know why, one of the first things I ask for is a description of their summer watering methods and schedule. More often than not, the response is "But it rains enough in the summertime here that I don't really have a schedule or system – in fact I rarely/never water my roses at all."

True, in most areas your roses will rarely die outright from lack of water (unless you live in a very hot and dry area,) but they won't reach anything like their full potential without regular summer watering. Most areas, even my notoriously rainy Pacific Northwest region, still have enough hot and dry weather in the summer to stress un-watered roses, which weakens their defenses against damage from diseases and other pests. Water stressed roses will grow less, and less well.

So watering in the summer is really necessary for optimum rose health. I find that roses need a lot more water than many people realize. I have a fully automated system that waters about two-thirds of my roses (more about that later), and I water the rest by hand. During dry summer periods I try to provide about three gallons of water per bush about every other day during hot weather, or maybe a bit less often if it has recently rained. That sounds like a lot, I know, but it seems to be about the right amount for me, even in my marine climate. You might need more or less than that, but it's really not that hard to figure out the correct amount by watching for the reaction of the bush in hot weather. Dry, curled or wilted leaves and new growth can wmean several things, but if giving the roses more water is the issue, you'll see immediate improvement from doing that.

But there's a catch to providing your roses with lots of water. The black spot and powdery mildew fungal diseases that are the biggest summer problem in many areas thrive on wet rose leaves during periods of warm summer days and cooler nights, which is a typical summer weather pattern in many areas, including my Pacific Northwest region. So how to get water to your roses without wetting the leaves and thereby promoting fungus diseases? The answer is easier than you might think. Let's start with the simplest systems, and move on to more complex ones:

Hand Watering With a Hose

For smaller gardens this may be the best, as well as the least expensive system. Frankly, there are a lot worse things than walking through your rose garden on a sunny summer morning to hand water your bushes.

When you water by hand, you by necessity put a large amount of water on your bush in a short time (unless you want to spend fifteen minutes standing at each bush dribbling water slowly around its base.) I find this is actually a good thing, however. Putting a lot of water around a bush every now and then is really better than just a small amount of water more frequently. Rose roots run deep, and frequent shallow watering will often not get the water down to the root zone, where it is needed. So how to deposit a large amount of water

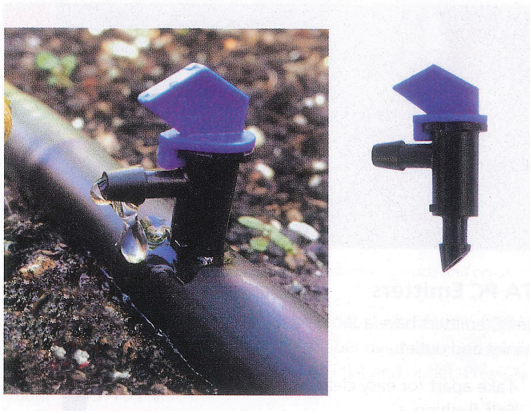
around your bush without it just running off into the surrounding area and promoting weed growth? Start by forming a watering basin around each plant. To do this, you should ideally plant your bush with the top of the crown at approximately ground level, so you can dig a small watering well around the crown. (This also makes it easier to bury the crown in the winter for cold weather protection if that is necessary in your area.)

For hand watering I use a long handled watering wand with a trigger and a shower-type head that can be placed right at the crown to fill up the watering well without wetting the leaves. They make these wands in varying lengths, and I use one that is about three feet long, so I don't have to bend over to place the head at the crown. Depending on your soil, and how fast it absorbs the water, you may have to fill that well up two or three times to get that three-gallon amount to your plant. My soil is slow-absorbing, so when I hand water like this, I usually work on three or four adjacent plants at once, going back and forth filling each basin up sequentially while the others are draining. In this way I can get the most water on the plants in the shortest time without overflowing the basins. This works well, and really does not take too much time if you are working with a small number of roses, say 25 or less. There is low system installation and maintenance cost (a hose and a wand), though you do have to drag your hose around the yard.

Soaker Hoses

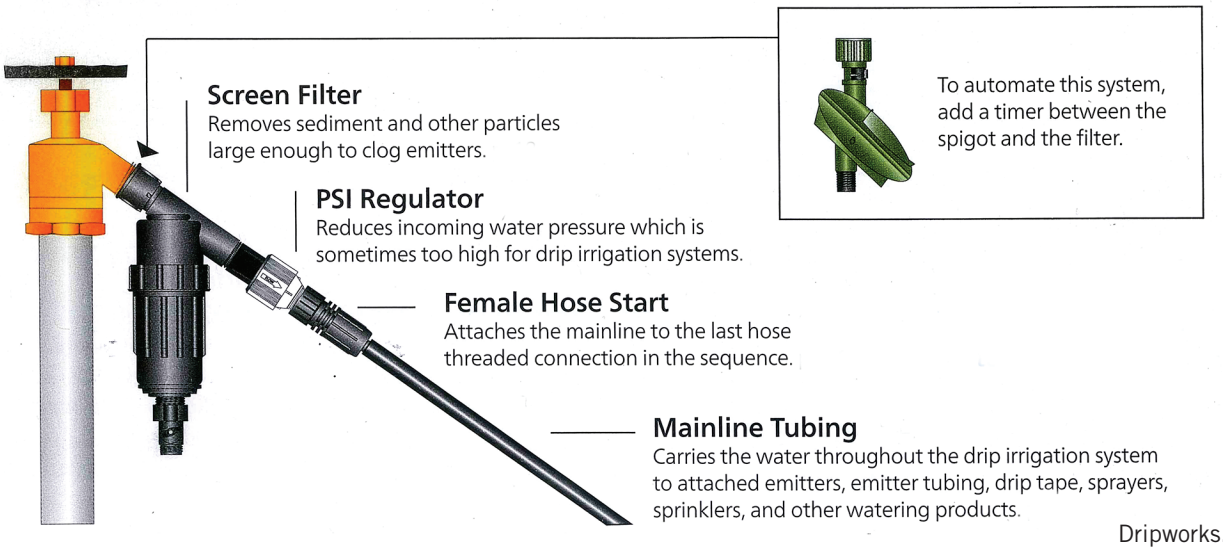
This is a bit more installation and setup time, but I have seen soaker hose systems that are unobtrusive and work well for a fairly large number of roses. The soaker hose is snaked around and between the roses, and is often then covered with mulch to be less visible. The hose is turned on manually for whatever time is needed to get the desired flow.

Perhaps the biggest drawback of such a system is that it is difficult to tell exactly how much water is actually getting delivered to the roses. So be sure to adjust the schedule for this type of system to be sure it is wetting the soil down to the root level of your roses. Additionally, if you have multiple beds in different locations, running a single soaker hose to all of the roses becomes difficult, especially if you have to cross lawns or pathways to reach each bed. But if you have enough hose outlets adjacent to your roses, this can work well.



TOP slow drip emitters. BOTTOM: Hose bib watering system with timer. Photos Ken Sheppard

Typical backyard garden hose threaded start



Dripworks.com

Hose Bib Watering System, No Timer

This is a step up in complexity and cost, but also a step up in convenience. In this type of system you put a small water-emitting device at each of your plants, then connect them all to a main plastic line that connects to a hose or hose bib. Turn on the hose, and all your plants are slowly watered at once. The small plastic tubing is easily buried or concealed, and the emitter puts the water right into the basin where it's needed.

There are many types of slow drip emitters. They are often simply punched into the main feeder line at the appropriate locations, and the flow from the emitter is often not adjustable

The components for such systems are sold at Lowe's, Home Depot and other home improvement stores, but they are also sold through a number of catalog vendors. The best one I have found is DripWorks (dripworks.com), which sells all types of systems and components, from simple to complex. The diagram above is from their website.

As you can see, it includes a filter because drip emitters will clog easily from even small particles of debris. It also incorporates a pressure reducer, which is usually required in most situations to keep high water pressure from blowing up your soft plastic lines and emitters.

A hose bib will usually put out a maximum of 5-10 gallons of water a minute. The simple drip emitters put out 1-4 gallons per hour. So you could water at least 60 roses simultaneously with such a system, which would put one-to-four gallons of water on each bush when run for an hour. I have also seen systems where people have multiple main lines that they either hook up to multiple hose bibs around the yard, or hook up to the same hose bib sequentially. This kind of a system is more work and expense to install, but its permanent, conserves water better, and gives much better control over where the water goes.

Hose Bib Watering System With a Timer

It's pretty easy to add a battery-powered timer to your hose bib system. They are just placed in-line between the hose bib and the filter, like so:

They run from $50 to $100 each, can work on a 9 volt battery so they don't need to be plugged into an electrical outlet, and can be set to run a pre-determined program. The latest versions can even be controlled remotely with an app from your cell phone (water your roses remotely while on vacation!) These devices are not that difficult to install, and will save you a lot of time and bother. One big advantage of an automated system is that you can set it to water at night or in the early morning, when the weather is cooler, less water is lost to evaporation, and the roses can take up the water in preparation for the hot sunny day.

Hard-wired System With a Controller

This is the more traditional fully automated lawn and garden irrigation system, where you install a controller box in your basement or garage that runs a more elaborate system of pvc pipes and electric valves. Depending on the size of the water line to your house, you can

run circuits off of this system that use up to 25 gallons per minute. Usually such systems do not use drip emitters, but rather a small sprayer, or "shrubbler", that is connected to a manifold with tubing, and placed on a small stake at each bush. One big advantage to these shrubblers is that they are typically adjustable, which allows you to compensate for pressure loss at the end of longer lines, and also allows you to put more or less water on larger or smaller rose bushes. At right are photos of the manifold that supplies water from the main pvc irrigation lines to the shrubblers, and a typical shrubbler in operation.

I have this type of system for much of my landscaping, and two of its circuits are dedicated to my roses. The system will water 100 bushes, at three-to-five gallons per bush, in less than half an hour. This saves a lot of hand watering time.

But installing such a system can get complex and expensive, and requires lots planning, digging, pipe cutting, etc. If you are a confident home handyman type, you can take this on yourself, but in most cases it is best left to a professional, both from the design and installation standpoint. It is important to know how to design each watering circuit to properly size and locate the supply lines, and to include allowances for pressure drops due to elevation changes, friction loss, etc. A good irrigation contractor can do such a design for you as part of your project.

Once such a system is installed, however, you are set for many years of trouble free watering. Modern system controllers have rain sensors that automatically adjust the watering schedule to compensate for rainy days, and some even tap into the local weather forecasts to adjust the watering cycles in advance. Their website: www.Rainbird.com is a good place to look at the kinds of controllers that are out there, though there are many different brands and styles.

A Pump Based System

If you have lots of roses and are fortunate enough to have a free water source like a lake, river, or pond, this can be a good option. Watering a lot of roses with potable city water can get expensive. I have a natural stream fed pond on my property, and have put a pump into it. But pond water is dirty, and if not filtered will clog drip or bubbler emitters. So a properly designed pump and a substantial filter system is a must. My setup begins with a commercial self-cleaning strainer that sits in the pond (*see bottom photo on page 68*).

SHRUBBLERS

SHRUBBLERS: manifold that supplies water from the main pvc irrigation lines to the shrubblers, and a typical shrubbler in operation. Photos Ken Sheppard.

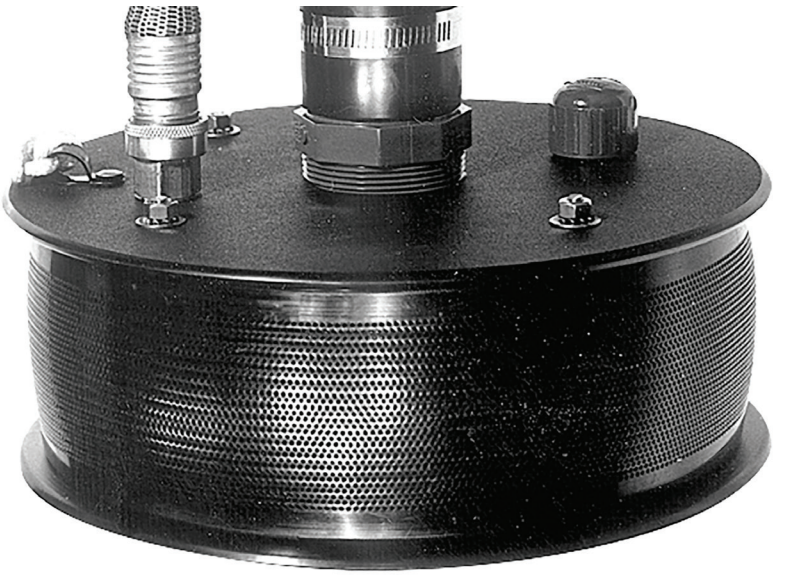
This type of system takes a small amount of the pump discharge and feeds it back down to the inside of filter, where it sprays from the inside at an angle that both spins the rotating casing and maintains positive water pressure from the inside of the filter. This keeps leaves and junk from getting sucked into, or plastered onto the filter. This works remarkably well to get most of the big stuff out of the pumped water, even in very dirty ponds. The water then flows through a large disc-type filter that removes all of the small stuff, so the water is then clean enough to go through the small emitters without clogging them. I do have to disassemble and rinse out the disc filter weekly when in use, but my emitters have never clogged.

Most modern controller panels have a "pump circuit" that will start up your pump whenever the controller turns on a watering circuit. To the right is a photo of the pump and filter, complete with a resident pumphouse frog.

There are other components required for a pump system, such as pump relays and float switches, so this type of system gets expensive fast. But my system (which waters all my lawns and landscaping, not just my roses) is set up to use either pond or city water, and I have found that if I run city water through it, my water bill goes up by at least $300 a month. Of course, your pond or water source needs to be big enough to provide a reservoir for the flows needed to water your roses.

So a pump system, even though expensive, can pay for itself under the right circumstances. But professional design is a must, since there are strict rules about preventing a pump system from cross-contaminating the public water supply, and installation can easily get too complex for all but the most confident homeowner. I find that an irrigation supplier, such as H.D. Fowler Company (www.hdfowler.com) is really excellent for assistance in designing and constructing more complex systems, especially ones with larger pumps.

ABOVE: photo of the pump and filter, complete with a resident pumphouse frog. BELOW: a commercial self-cleaning strainer. Photos Ken Sheppard.



But regardless of the method or system you choose, getting sufficient water to your roses in the summer will pay far more dividends in rose health and vigor than many people realize.

AWARD OF MERIT WINNERS 2018

Our sincere apologies to these authors who were inadvertently ommitted from the May/June issue.

AUTHOR	TITLE	DATE	SOCIETY	PUBLICATION	EDITOR
Abrahamson, Reed	An Ode to Our Native Rose	Sept-Oct	Arlington/Potomac RS	Capitol Rose	Joe Covey
Baer, Rich	Changing Climate, Changes Garden Problems	Aug	Portland RS	Rose Chatter	Rich & Charold Baer
Bartlett, Ann	Miss Ann's Musings: Roses in the Rearview Mirror	Winter	Tri State RS	Basal Breaks	Jeff & Cindy Garrett
Bolar, Suni	Planting Bare-Root Roses in New Jersey	ay/June	Jersey Shore RS	Rose Waves	Rafiq Bolar
Bolar, Suni	Pruning Roses Made Easy	Mar/April	Jersey Shore RS	Rose Waves	Rafig Bolar
Bolar, Suni	Attracting Birds to Your Rose Garden	Jan/Feb	Jersey Shore RS	Rose Waves	Rafig Bolar
Burg, Linda	Encourage Good Guys in Your Garden	Summer	NCNH District	The Criterion	Ted & Linda Burg
Burger, Donald	Time to Build a Rose Bed	Jan	Houston RS	Rose-Ette	Mary Fulgham & Elisabeth Eickhoff
Cairns, Tommy	Proud Legacy of 'Peace' The Rose of the 20th Century	Spring	PSW District	The Rose Outlook	Mary VanVlack
Chute, Mike	The Art of Training Climbing Roses	Nov	Rhode Island RS	RI Rose Review	Angelina P. Chute
Constant, Gregory	Crown Gall on Roses	July	Central Louisiana	Rosebud	Billie Flynn
Cooney, Tom	Rose Horticulture Tips For March	March	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Cooney, Tom	Fertilizer Basics - Organic Fertilizers	April	Orange Co RS	Rose Gazette	Carolyn Elgar
Covey, Joe	Scientists Sequence the Rose Genome	May/June	Arlington/Potomac	Capitol Rose	Joe Covey
Cunningham, Patsy	Raised Beds for Everyone	Aug	Rhode Island RS	RI Rose Review	Angelina P. Chute
Deck, Joanna	How I Grow Roses, Parts I-III		Tenarky District	Katnips	Mary Ann Hext
Degerhardt, Gervase	The Question of Winterizing	Oct	Portland RS	Rose Chatter	Charold Baer
Della-Piana, Elissa	Sub Rosa: "Under the Rose"	May	Rhode Island RS	RI Rose Review	Angelina Chute
Dorschel, Craig	Rose BS (Black Spot)	Aug	Yankee District	Rose Window	An Andy Vanable & Pam Murphy
Dorschel, Craig	Getting Started in Rose Exhibiting	May/June	New England RS	Rose Petals	Andy Vanable & Pam Murphy
Dunn, David	My Baker's Dozen	Nov	Connecticut RS	Connecticut Rose	Dave Long
Edwards, Carol	Impressions of a First Time Judge at the Biltmore International Rose Trials	Nov/Dec	Arlington/Potomac RS	Capitol Rose	Joe Covey
Ehrenreich, Irwin	Growing Roses From Cuttings	Summer	Yankee District	Rose Window	Andy Vanable
Elgar, Carolyn	Seaweed - A Mystery and a Miracle for Plants	June	Orange Co RS	Rose Gazette	Carolyn Elgar
Elgar, Carolyn	Foliar Spraying - Another Way to Fertilize	June	Orange Co RS	Rose Gazette	Carolyn Elgar
Elgar, Carolyn	Rose Bloom Color and Chemistry	March	Orange Co RS	Rose Gazette	Carolyn Elgar
Elgar, Carolyn	Stem Canker in Roses	Nov	Orange Co RS	Rose Gazette	Carolyn Elgar
Elgar, Carolyn	Springtime Rose Pests	Mar	Orange Co RS	Rose Gazette	Carolyn Elgar
Elgar, Carolyn	Easy Care - The Future of the Rose	Feb	Orange Co RS	Rose Gazette	Carolyn Elgar
Elgar, Carolyn	Prepare for Hot Times to Come	Sept	Orange Co RS	Rose Gazette	Carolyn Elgar
Elgar, Carolyn	Add Minerals to Your Soil - Use Rock Dust	May	Orange Co RS	Rose Gazette	Carolyn Elgar
Ernsberger, Karen	Roses in the Wine Country Wildfire	Spring	NCNH District	The Criterion	Ted & Linda Burg
Frechette, Cher	Famous Rose Gardens of Paris	Sept	Marin Rose Society	Marin Rose	Gail Trimble
Fredette, Caroline	Sima's Sweetheart... Forty Years in the Making	Spring	PNW District	Northwest Rosarian	Judy Heath
Fulgham, Mary	What Good Rosarians are doing in February	Feb	Houston RS	Rose-Ette	Mary Fulgham & Elisabeth Eickhoff
Fulgham, Mary	How We Make Potpourri	Oct	Houston RS	Rose-Ette	Mary Fulgham & Elisabeth Eickhoff

2018 AWARD OF MERIT WINNERS

AUTHOR	TITLE	DATE	SOCIETY	PUBLICATION	EDITOR
Fuss, Mike	Pruning Basics	May	Connecticut RS	Connecticut Rose	Dave Long
Fuss, Mike	Winter Protection	Nov	Connecticut RS	Connecticut Rose	Dave Long
Garrett, Jeff	Rose Review	winter	Tri State RS	Basal Breaks	Jeff & Cindy Garrett
Hammond, Gaye	Smart Phones, Smart Cars...Why Not Smart Pots?	Aug	Houston RS	Rose-Ette	Mary Fulgham & Elisabeth Eickhoff
Heath, Judy	Rose Arranging: Trials and Tribulations of a Novice	Summer	PNW District	Northwest Rosarian	Judy Heath
Heath, Judy	Thorns, Spines or Prickles – Oh My!	April	Twin Cities Rose Club	Twin Cities Rosarian	Carole Smuda
Horn, Suzanne	Ring of Fire Kindles National Recognition for Local Hybridizer	May	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	Frida Kahlo - A Unique Showy Floribunda Honors a Great Artist	Sept	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	Sunglow - The Challenge of Showing a Single Rose	June	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	Diamond Eyes, A Dazzling Decorative Gem from Tom Carruth	Oct	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	'Poppy' - The Legacy of the Rose and the Flower	Feb	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	The Godfather of Glass Inspires a Glorious Rose: Chihuly	March	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	A Superb Rose Honors a Great Rose Educator - Dr. John Dickman	April	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	The Story of Hello Gorgeous!	Jan	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Horn, Suzanne	Lavaglut - A Dazzling Floribunda from the German House of Kordes	Nov	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Hoy, Stephen	A Rose for Father Hugh	Winter	ARS Quarterly	Singularly Beautiful Roses	Stephen Hoy
Hoy, Stephen	Rosa roxburghii and its Legacy	Fall	ARS Quarterly	Singularly Beautiful Roses	Stephen Hoy
Ingram, Dave	Poor David's Almanac: A Few Clues About Powdery Mildew, Parts 1, 2 and 3	Sept,Oct, Nov	Denver Rose Society	The Rose Window	Pat Colburn
Karikas, Frank	The Art of Rooting Rose Cuttings	Aug	Rhode Island RS	RI Rose Review	Angelina Chute
Kolb, Pam	Roses, Kenzans & Water Pics: Wiring: Tips and Tricks	April	Augusta RS	The Monthly Bulletin	Pam Kolb
Kozemchak, Bill	Wooden Rose Supports	April	Philadelphia RS	The Rose	Bill Kozemchak
Kozemchak, Bill	Take Me to the Show	June	Philadelphia RS	The Rose	Bill Kozemchak
Londeree, Nanette	Think Before You Spray		NCNH District	The Criterion	Ted & Linda Burg
Londeree, Nanette	Use Them Wisely	Fall	NCNH District	The Criterion	Ted & Linda Burg
Longhini, Sue	Indoor Rose Propagation During the Winter Months	Oct	Denver Rose Society	The Rose Window	Pat Colburn
Macon, Carol	Old Garden, Older Gardener	May	Denver Rose Society	The Rose Window	Pat Colburn
Martin, Bob	Let Us Spray	Feb	San Diego RS	Rose Ramblings	Elaine Ornelas
Martin, Bob	Tool Tales: Transporting Cut Roses	March	San Diego RS	Rose Ramblings	Elaine Ornelas
Martin, Bob	Tool Tales: Containers for Roses	Jan	San Diego RS	Rose Ramblings	Elaine Ornelas
Martin, Bob	Tool Tales: Grooming Tools for the Show	April	San Diego RS	Rose Ramblings	Elaine Ornelas
Martin, Bob	Rose Arrangements 101	June	San Diego RS	Rose Ramblings	Elaine Ornelas
Martin, Bob	Forever 'Peace' Rose Stamp Issued	May	Pacific Rose Society	The Pacific Rose	Chris Greenwood
Martorelli, Becky	Recipes with Roses: Rose Hip Tea and Vitamin C	Aug	Connecticut RS	Connecticut Rose	Dave Long
Martorelli, Becky	Recipes with Roses: Stop and Eat the Roses	Feb	Connecticut RS	Connecticut Rose	Dave Long
Matlin, Julie	A Rose Mystery	March	Butte Rose Society	Rose Notes	Bill Reynolds & Sarah Williams
Matlin, Julie	Fertilizers or Amendments: Which is It?	Jan	Butte Rose Society	Rose Notes	Bill Reynolds
Matlin, Julie	The Case of the White Rootstock	Oct	Butte Rose Society	Rose Notes	Bill Reynolds & Sarah Williams
McKibben, David	Thrips: those little raspers	June	Pittsburgh RS	Newsletter	Fr. Gervase Degenhardt & David McKibben
McKibben, David	Landscape Fabric: good or bad for your garden	Oct	Pittsburgh RS	Newsletter	Fr. Gervase Degenhardt & David McKibben

AUTHOR	TITLE	DATE	SOCIETY	PUBLICATION	EDITOR
Mendes, Big Boy	Rose Roots	Summer	Yankee District	Rose Window	Andy Vanable
Morton, Collette	WFRS 2018 Convention in Denmark	Sept	Denver Rose Society	The Rose Window	Pat Colburn
Mott, Betty	Visual Impact	Spring	NCNH District	The Criterion	Ted & Linda Burg
Mott, Betty	Creative Interpretation in Rose Photography	Fall	NCNH District	The Criterion	Ted & Linda Burg
Myers, Wayne	February: Pruning for Better Roses	Feb	Jacksonville RS	Buds and Blooms	Lyndy Myers & Shirley Teerlink
Myers, Wayne	Are Fungicides Toxic to Bees?	Sept	Jacksonville RS	Buds and Blooms	Lyndy Myers & Shirley Teerlink
Myers, Wayne	June/July in the Garden	June	Jacksonville RS	Buds and Blooms	Lyndy Myers & Shirley Teerlink
Nemko, Marty	Rose Breeding is for Optomists	May	East Bay RS	Florosia	Martine LaBelle
Nickerson, Dacia	Beneath the Arbor: Fragrance	May	Rhode Island RS	RI Rose Review	Angelina P. Chute
Nickerson, Dacia	Beneath the Arbor: Spring Rose Care - A Shakespearean Spring	Feb	Rhode Island RS	RI Rose Review	Angelina P. Chute
Pavlovich, Lou	It's 110 Degrees... Now What Do I Do?	Sept	RS of Tucson	Thrip Hater	Donna Kamper
Pearse, Martha	Bugaboos	March	Denver Rose Society	The Rose Window	Pat Colburn
Prabhu, Satish	Pruning Roses: An article on pruning roses, really? Once again? Why?	March	Augusta RS	The Monthly Bulletin	Pamella Kolb
Rupert, Kim	Chip Budding, Parts 1 and 2	Sept/Oct	Rainy Rose Society	Rain Drops	Sue Tiffany
Rupert, Kim	Pushing the Rose Envelope, Part I & 2	May-June	Rainy Rose Society	Rain Drops	Sue Tiffany
Sawyer, Rosemary	The Magic of Rose Seeds	Feb	Mother Lode RS	The Rose Hips	Juliene Hiatt
Schmich, Krystal	Organic Options	Sept	RS of Tucson	Thrip Hater	Donna Kamper
Schramm, Darrell g.h.	A Lazy Time: Four Lingering Roses	Spring	NCNH District	The Criterion	Ted & Linda Burg
Sheard, Steve	Budding Roses	March	Mesa Valley East RS	Rose Lore	Mary Van Vlack & Lynn Twitchell
Smith, Elton	Rose Mosaic Virus-An Update	Spring	Buckeye District	Buckeye Rose Bulletin	Mark Miller
Smuda, Carole	Controlling Pests in the Garden	May	Twin Cities RS	Twin Cities Rosarian	Carole Smuda
Suvari, Mari-Ann	The Lighter Side of the Shovel: Growing Roses Keeps You Looking Young	May	Rhode Island RS	RI Rose Review	Angelina P. Chute
Toyn, Mirjana	Red Hot Love	Feb	Connecticut RS	Connecticut Rose	Dave Long
Toyn, Mirjana	A Snip in Time	Aug	Connecticut RS	Connecticut Rose	Dave Long
Vanable, Andy	Grandma's Garden Reincarnated	Summer	Yankee District	Rose Window	Andy Vanable & Pam Murphy
Van Vlack, Mary	Rose Shows – Why?	Oct	Mesa Valley East RS	Rose Lore	Mary Van Vlack & Lynn Twitchell
Wagner, Julie Craven	For the Love of Floribunda	Aug	Yankee District	Rose Window	Andy Vanable & Pam Murphy
Whitt, Doug	THE RAISED BED – A Beginning with A Future	Fall 2018	Carolina District	Carolina Rosarian	Rosalinda Morgan
Whitt, Doug	A GALLING DISCOVERY – The Subtle Rose Menace	Summer	Carolina District	Carolina Rosarian	Rosalinda Morgan
Williams, Patsy	Its Time to Prune	Feb	Houston RS	Rose-Ette	Mary Fulgham & Elisabeth Eickhoff
Wroble, Susan	Beetle Bash	Aug	Denver Rose Society	The Rose Window	Pat Colburn
Wroble, Susan	The Redneck Rosarian: Chris VanCleave at the SymROSEium	May	Denver Rose Society	The Rose Window	Pat Colburn
Wroble, Susan	PRACTICALLY PERFECT: Ideal Roses for Your Garden — and Their Secrets for Success	March	Denver Rose Society	The Rose Window	Pat Colburn
Wyckoff, Jeff	Are Singles Better?	Winter	Buckeye District	Buckeye Rose Bull.	Mark Miller
Young, Harlow	Bourbon Roses	April	Tri-City RS (Wash.)	Rose Herald	Jo Angelos
Young, Harlow	The Most Spiny Rose	Oct	Tri-City RS (Wash.)	Rose Herald	Jo Angelos

Prolific Polyanthas

The Story of One Breeder's Journey

by Dr. David C. Zlesak,
Professor of Horticulture,
University of Wisconsin-River Falls

I ABSOLUTELY LOVE POLYANTHA ROSES. Their sheer abundance of bloom and tidy, mounded growth habit make them exceptionally versatile. They are easy to nestle into smaller spaces in our gardens where they provide pops of color throughout the season. They are especially great to use in borders where they can be mixed with other compact plants or in containers as specimen.

The time feels ripe for these faithful workhorses of the rose garden to experience a resurgence in popularity, especially with smaller urban gardens and a growing interest in container gardening. I started breeding roses 35 years ago and have loved working with polyanthas from near the beginning. This next year I'm excited that four of my polyanthas are being released- three in the Pretty Polly™ series (lavender, pink, and white) through Star® Roses and Plants and Oso Easy® Peasy™ through Spring Meadow Nursery and the Proven Winners® program.

Origin of Polyanthas

The origin of polyanthas is a bit mysterious and goes back almost a century and a half. The famous Scottish plant explorer, Robert Fortune, traveled the Orient documenting and sending back hundreds of plants never seen before in Europe. This included a low growing form of *R. multiflora* that became a key ancestor of the first polyantha rose. Plants arrived in England in 1865 with one of them finding its way to a public park in Lyon, France. The details are a bit obscure, but the story goes that when gardeners in Lyon decided to remove the plant, Jean Sisley obtained it and shared it with his good friend and Lyon nurseryman, Jean-Baptiste Guillot. A couple generations of seedlings were raised from this rose and there was an advanced generation seedling that was compact and reblooming. It became 'Paquerette', the first polyantha rose. Jean-Baptiste Guillot introduced 'Paquerette' through his nursery in 1875. The name polyantha was first applied to 'Paquerette' and emerging similar roses in 1876 by the French horticulturist Carriére. Both multiflora (Latin) and polyantha (Greek) mean many-flowered. Polyantha is a very apt name for this commercial class of heavily blooming roses tracing back to *R. multiflora*.

People suspected that the strong rebloom characteristic of polyanthas had to come from hybridization with hybrid china roses, which are known for their strong rebloom. There is mounting evidence that the original polyanthas likely are not crosses involving hybrid chinas at all. There is a key flowering gene in roses that when expressed hinders flowering. Expression of this gene in most wild roses is suppressed in early spring to allow for flowering, but then as its expression kicks in for the remainder of the season, flowering is blocked to favor vegetative growth. This is a great mechanism for wild roses to flower only early in the season so their fruits have enough time to ripen by fall. This mechanism ensures energy isn't invested in additional flowers that cannot mature fruit before winter. When the DNA sequence of this flowering gene is disrupted or mutated (DNA added, removed, nucleotides switched, etc.), it may no longer have the ability to suppress flowering. Having only disrupted copies of this key gene leads to our much loved repeat flowering roses. Such roses behave as if it is early spring continually and flower cycle after cycle. Dr. Fabrice Foucher and his colleagues in Angers, France are studying this gene and sequenced it in multiple groups of reblooming and once flowering roses. They found that

LEFT: Pretty Polly™ Lavender ('ZLEpolthree'), photo Star® Roses & Plants. BELOW, L-R: Flowers and the resulting hips of many *R. setigera* descendants are borne in clusters that are more rounded versus pointed; First generation rambler hybrid of *R. setigera* x 95-1; *R. multiflora,* photos David Zlesak.

there are unique mutations/disruptions to this gene in the different major groups of reblooming roses — hybrid chinas, *R. rugosa*, and also the early repeat flowering polyantha roses out of *R. multiflora*. The unique mutation in the original *R. multiflora* based polyanthas suggests that their rebloom is due to a distinct mutation and not inheriting the disrupted gene from crosses with hybrid chinas.

Hybrids of the early *R. multiflora* based polyantha cultivars and hybrid china roses eventually did occur leading to a greater range of characteristics within the polyantha class (e.g. 'Mademoiselle Cécile Brünner' and likely also 'Marie Pavié'). Continued hybridization of polyanthas with other classes of roses eventually led to new classes such as floribundas and a greater range of characteristics in especially what became the hybrid musk, shrub, and miniature classes of roses. For instance, many of the compact groundcover roses classed as shrub roses today have polyantha roses in their near background (e.g. many trace back to the famous polyantha 'The Fairy' and its offspring 'Immensee').

The Beginning of My Story With Polyanthas

My first experience with growing polyantha roses was in the late 1980s. At the age of 13 I started breeding roses and soon after became a member of the Milwaukee Rose Society and eventually the American Rose Society. I had great nearby mentors, Will Radler and Elton Strack, that taught me techniques and helped me learn about and appreciate the wide diversity in roses. I was especially drawn to hybrid tea and floribunda roses at first, but was also open to trying other classes of roses. There was a seed variety of polyantha roses sold in specialty catalogs that went by multiple names including 'Fairy Rose' and 'Angel Wing' roses. I ordered seed and enjoyed the few plants that grew. The plants had small single or semi-double white to pink blooms and were compact and vigorous. They were marginally hardy in my zone 5 garden and eventually winterkilled.

In the mid-1990s, after I graduated from college and was living in northern Wisconsin (zone 3), I especially enjoyed growing hardier shrub roses. I had an idea to do an experiment looking at the effects of hydrogen peroxide on rose seed germination. It was already winter then and I didn't have enough collected seed to spare for the experiment. I remembered the 'Angel Wings' polyantha seed and ordered multiple packets for the experiment. Come spring I planted out more than 80 of them. Surprisingly, about five of them survived multiple years without winter protection and proved to be solidly zone 3 crown hardy. These polyanthas became the foundation of my future polyantha work, especially a double pink one that was the only thornless one in the group (code name 95-1). This thornless rose also became a critical rose for multiple scientific research studies (black spot resistance inheritance, reaction to Rose Yellow Mosaic Virus, chromosome doubling, etc.).

Just like earlier rose breeders, I have been and continue to be inspired to cross polyantha roses with as many other classes of roses as possible to see what happens. It has been fun to push the boundaries with them and use as my starting point the handful of hardier polyanthas selected in northern Wisconsin.

TOP, L-R: *Rosa maximowicziana* has bristly canes and imparts strong cold hardiness to its hybrids; Polyantha seedling 95-1 is a thornless and hardy polyantha that has been a key parent; Pretty Polly™ Pink ('ZLEpolone'); A tall growing hybrid of a polyantha seedling x 'Thérèse Bugnet'.

BOTTOM, L-R: Young polyantha seedlings blooming under lights; Plant stands in winter filled with young rose seedlings; Rose seedling beds in full flower in the spring of their third year. All photos David Zlesak.

Here are some highlights of the different polyantha breeding directions I took culminating with descriptions of the four new polyantha introductions:

Hybrids with Rugosas

I love the Grootendorst collection of hybrid rugosas that are about a century old now. They are a cross of a hybrid rugosa and polyantha and have good cane hardiness and performance in the North. I love their abundant small blooms with jagged edges that look like small carnations. Unfortunately, the Grootendorst roses are almost completely sterile. Mutations over the years have given us the various colors in the group. I repeated polyantha/rugosa crosses to hopefully find some seedlings with better fertility to move these hybrids forward multiple generations. Seed production for the rugosa/polyantha crosses was abundant when rugosas were the female parent. However, due to the wide cross most of the seedlings grew in a confused manner and most died very early on. Out of the couple thousand or so seedlings that germinated only five survived and matured to flower. Surprisingly, there were a couple with the same jagged edges as the Grootendorst roses, even though neither of the parents have this trait. Only a single pink hybrid with small narrow petals demonstrated some minor fertility and I still have it more than 20 years later. It is my hope this rose will be the bridge to move this line of breeding forward, but after all this time not much progress has come from it yet. I nicknamed this slightly fertile hybrid "Swan" because of the hope that someday this "ugly duckling" will help give birth to a beautiful swan.

Crossing polyanthas with the complex rugosa/*R. blanda* hybrid 'Thérèse Bugnet', however, has been much more fruitful. This led to Catherine Guelda™ ('ZLECatherine', named for a friend's daughter), which is a compact more purple version of 'Thérèse Bugnet'. Catherine Guelda™ won a silver certificate in the ARS ARC trials in 2006. Another hybrid I've saved is as tall as 'Thérèse Bugnet' with cheerful, single blooms and slightly darker pink edges. These 'Thérèse Bugnet'/polyantha hybrids have limited, but high enough fertility to consistently obtain seedlings. I look forward to continue to work with them due to the extra cold hardiness 'Thérèse Bugnet' imparts and the wide variation among the seedlings.

Trying Hybrid Musks

Many of the hybrid musks have polyanthas in their background and cross well with polyanthas. I like to think of many of them as larger growing, lankier polyanthas.

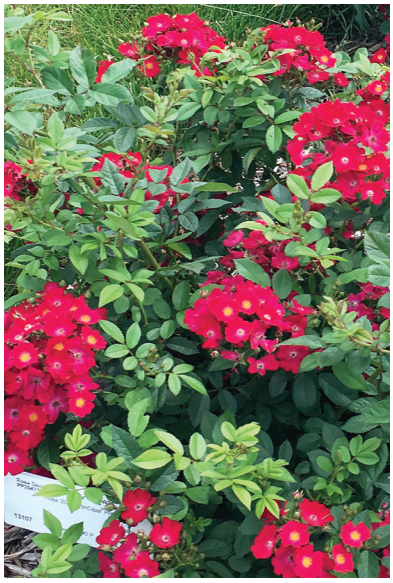
I wanted to add richer color into the hardier polyantha selections which were mainly white to medium pink. I loved the cherry-pink/red color of the hybrid musk 'Robin Hood' and crossed it with the hardy polyantha hybrids. One hybrid became Oso Happy® Candy Oh! (ZLEMartinCipar). Both this rose and Catherine Guelda™ share the same polyantha seedling as their female parent. I nicknamed their mom Candy Coated because the blush white blooms were edged in pink. Oso Happy® Candy Oh! has a larger plant habit than Candy Coated, closer to that of 'Robin Hood', and the single rich red blooms are a darker color than either parent. Sometimes the edges of the petals of Oso Happy® Candy Oh! intensify in color in full sun, a trait that likely comes from 'Candy Coated'.

Chromosome Doubling Polyanthas

Polyanthas are diploid, meaning they have two sets of chromosomes, while many modern shrub and hybrid tea roses are tetraploid, having four sets. I treated some shoot tips of polyanthas with chemicals known to arrest cell division part way through the process. If treated cells survive, they can go into the next cell cycle with twice as many chromosomes. This has led to a number of tetraploid polyanthas. Having a higher chromosome number typically leads to thicker and wider plant parts (leaves, petals, etc.), slower growth, and less branching. The hope is that these tetraploid polyanthas would cross better with modern tetraploid roses. To a limited degree doubling their chromosome number seems to have helped.

The hybrids with tetraploid polyanthas are quite diverse and many show only minor influences of the polyantha parent. Honeybee™ ('ZLEhoney') is one such hybrid from a cross of 'Rise 'n' Shine' and a single soft pink tetraploid polyantha. I love the strong fragrance of Honeybee™. Hybrids can also be possible crossing tetraploids directly with diploid polyanthas leading to triploid hybrids (three sets of chromosomes), and my Hannah Ruby™ ('ZLEhanruby' - named for a friend's daughter) is triploid and from such a cross.

TOP, L-R: Oso Happy® Candy Oh! ('ZLEMartinCipar'); Oso Happy® Smoothie ('ZLECharlie'); "Swan", a fertile hybrid of a polyantha and hybrid rugosa; Oso Happy® Candy Oh! ('ZLEMartinCipar'); polyantha hips.



Moving To a More Botanical Approach

In 1999 while helping my friend Kathy Zuzek with her rose breeding for the day, we were making some crosses onto species roses. *Rosa setigera* was in bloom and we were pollinating it with pollen from various Buck and other modern rose hybrids. I had some polyantha pollen with me and we used some of that as well. It was only the polyantha rose pollen that worked, and it worked very well with almost every pollinated flower leading to a hip packed with seed. *Rosa setigera* and *R. multiflora* are in the same subgroup of roses (section Synstylae) and this likely accounts for the better crossing success than polyanthas with rugosas, which are in a different subgroup (section Cinnamomeae). Synstylae members are primarily lanky climbing roses with blooms in clusters and fused elevated styles in the middle of their flowers. Kathy shared some of the seedlings with me and we have both used them to eventually generate repeat blooming polyantha hybrids. Oso Happy® Smoothie ('ZLECharlie') is a great grandchild of *R. setigera* with multiple crosses along the way back to polyanthas. Its thornlessness traces back to the hardy thornless pink polyantha (95-1) selected in northern Wisconsin. 'September Celebration' is also from this line of breeding and grows taller and can be used as a small repeat blooming climber or pillar rose. 'September Celebration' was shared with Jim Delahanty years ago by its code number. Jim was a great advocate for polyanthas and an opportunity came up for it to be propagated, named, and sold for the September fundraiser of the Ventura County Rose Society — thus the name 'September Celebration'.

I love how *R. setigera* produces its clusters of flowers in a rounded plane versus an elongated pointed cluster. This leads to a very nice mounded plant habit with flowers tidily produced around the perimeter of the plant. With *R. setigera* being one of very few suspected sources of rose rosette resistance, my work with *R. setigera* hybrids has intensified in recent years, and I've shared my hybrids with breeder friends to help push their efforts forward as well.

BOTTOM, L-R: 'September Celebration'; Oso Happy® Smoothie ('ZLECharlie'); Pretty Polly™ Lavender ('ZLEpolthree'); Pretty Polly™ White ('ZLEpoltwo'); Pretty Polly™ Pink ('ZLEpolone'). All photos David Zlesak.

The success with *R. setigera* inspired me to seek out and try as many other Synstylae section species with polyanthas as possible. Dr. Peter Ascher, a retiring geneticist from the University of Minnesota, shared *R. maximowicziana* with me in about 2000. It is a very cane hardy relative of *R. multiflora* with bristly stems and single white flowers that are larger than *R. multiflora*. He obtained his plant as seed from a botanical garden in Siberia many years before that. It is the most cane hardy of the Synstylae section roses I've grown. First generation hybrids are beautiful hardy spring blooming ramblers with a range of flower characteristics depending on which polyantha was used. In the next generation, repeat blooming polyanthas can be recovered that range in habit from tight mounds to spreading groundcovers.

About a decade ago cercospora leaf spot came full force into my region. Many of the polyanthas I've been working with to that point have been selected to have good resistance to black spot, but not this other disease. In fact, very few roses in my garden have much cercospora tolerance. This led me to realize I needed to work to bring greater health onto the polyanthas. *Rosa wichurana* 'Basye's Thornless' held up pretty well to cercospora. *Rosa wichurana* is also in the Synstylae and contributed to some past polyantha hybrids from about a century ago (i.e. 'Yvonne Rabier' and 'The Fairy'). Crosses took well, and with multiple generations in now, there are much healthier polyanthas popping up. I love the glossy foliage *R. wichurana* contributes. I've been working hard to select against the tendency of lanky spreading canes that comes along with this species and now there are descendants that combine health and more mounded, compact growth habits.

Another species I'm beginning the process to add to the mix is *R. arvensis*. This species is native to Europe and grows along the forest floor and has good shade tolerance. Additionally, this species has been reported to have resistance to downy mildew, a problematic disease that can quickly explode especially in greenhouse production when conditions are cool and moist. I obtained seed of this species from a couple sources and purchased a plant from a Canadian nursery. Hopefully next year some of these plants will flower to initiate first generation hybrids with polyanthas.

Continuing the Vision Into the Future

Continuing to work with polyanthas, I will emphasize winter hardiness for my zone 4 climate (if they aren't crown hardy, they will be lost in my outdoor uncovered beds), increasing resistance to as many diseases as possible, and selecting for manageable and tidy plant habits. Since most of the healthier polyantha seedlings now are white, blush or pink, I am working hard to bring in red and purple into these lines and warmer colors such as coral, orange, and hopefully someday yellow. I am excited to continue working with the chromosome doubled polyanthas and bridging their genetics with popular modern classes of roses. I'm also very excited to bring together polyanthas with different Synstylae section species backgrounds to see what unique characteristics emerge.

This spring the plant stands in the basement were busting at the seams with new seedlings. I'm excited to see how each of the few thousand new polyantha hybrids develop in the outdoor seedling beds.

Is a new wave of popularity for polyanthas on the horizon?

While working at a hometown garden center and nursery in Rhinelander, Wisconsin in the mid-to-late 1990s, I was able to convince my boss to introduce some of the hardier polyanthas. We produced three of them as nursery exclusives. They looked great in quart and gallon pots and were covered in flowers when we brought them to the sales floor. Interestingly, when we put them with

the other roses they didn't sell well, but when we put them with the herbaceous perennials they sold great. When customers in the perennial area learned they bloomed all season long and had a great plant habit, they saw them as wonderful additions in their gardens. When placed with the other roses, customers unfortunately overlooked the polyanthas in favor of the larger flowered roses with more traditional bloom forms. The general gardening public seems to have a vision for what they expect roses to be, and, unfortunately, for most gardeners polyanthas fall outside of these expectations.

With today's gardeners mixing and matching flowering and colorfully-leaved plants of all kinds in their garden spaces (regardless if a plant is an herbaceous annual or perennial, woody plant, or even traditionally a vegetable), perhaps now is a great time to reintroduce polyantha roses to mainstream horticulture. They can be appreciated based on their own great merits and their contributions to today's garden spaces.

In an effort to connect with today's results-oriented consumers, Star® Roses and Plants is introducing a new brand being launched in 2020 called Bloomables™. The subline is "everything that blooms™." I'm excited my three new polyanthas with them will be included. It will be optional for growers to produce and sell the approved Bloomables™ varieties in the branded pots and use the branded labels. Not only will the new Pretty Polly™ line of polyanthas be part of the Bloomables™ brand, but also 14 other abundantly flowering roses along with a number of other floriferous herbaceous and woody plants.

My newest polyantha introductions for 2020

• Pretty Polly™ Lavender ('ZLEpolthree') *See page 72.* Very double soft lavender-pink blooms are borne on nearly thornless stems. Plants are full and slightly more compact than the other two in the series.

• Pretty Polly™ Pink ('ZLEpolone') *see page 77*: Bright, rich pink blooms come in loose clusters on a mounded to spreading plant. The semi-glossy foliage contrasts nicely with the blooms. This rose won a silver certificate at the Monaco International Rose Trials. This trial is unique in that the roses are trialed in containers.

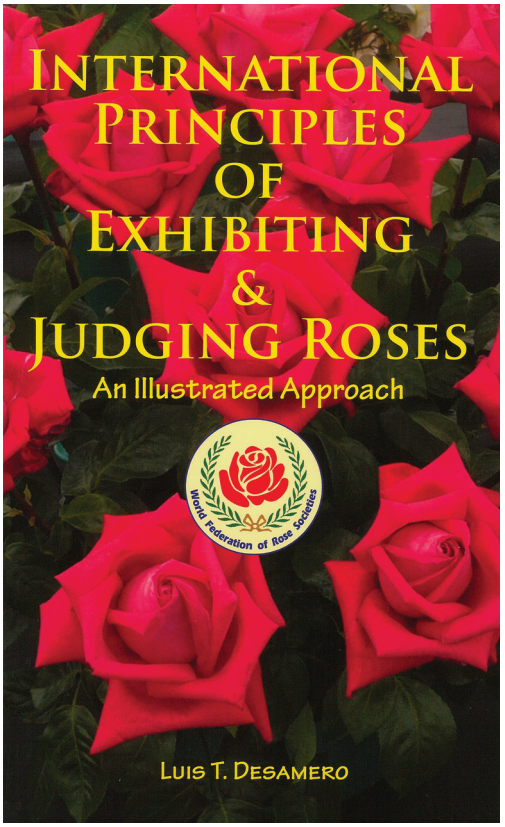
• Pretty Polly™ White ('ZLEpoltwo'): Abundant double white blooms are produced on vigorous rounded plants with nearly thornless stems. The dark blue-green foliage is a great backdrop for the abundant pure white flowers.

• Oso Easy® Peasy ('Phyllis Sherman') (Spring Meadow Nursery-Proven Winners®): This polyantha won the ARS Award of Excellence in the no spray division in 2017. Double raspberry-pink flowers with wavy edges are produced on a compact, slightly spreading plant.

TOP, L-R: Diploid polyantha on the left and the induced tetraploid of the same polyantha on the right; Hannah Ruby™ ('ZLEhanruby'); Catherine Guelda™ ('ZLECatherine'); Honeybee™ ('ZLEhoney'); Pretty Polly™ White ('ZLEpoltwo'), photo Star® Roses and Plants.
BELOW: Oso Easy® Peasy ('Phillis Sherman'). All photos David Zlesak, except where noted.

Book Review

by Jeff Wyckoff



INTERNATIONAL PRINCIPLES OF EXHIBITING & JUDGING ROSES
An Illustrated Approach
Luis T. Desamero, Editor

THE NEW BOOK from the World Federation of Rose Societies, *International Principles of Exhibiting and Judging Roses*, contains three noticeable, and notable, features:

1. The title clearly states "principles of exhibiting and judging"; no guidelines and no rules. Just right!
2. The lavish use of color photos of excellent roses to illustrate these principles.
3. Despite intensive searching, no mention of disqualifications could be found in the book. Hallelujah!

As you would expect, trying to assimilate the judging information of different countries into a unified whole was a daunting task. This is addressed with the following statement: "Member Countries who regularly stage amateur rose shows already have established guidelines and rules as to how their shows will be staged and judged. The WFRS International Principles are in no way intended to supersede such existing national guidelines…" Most WFRS member countries do not stage competitive rose shows, and most of those that do are influenced by practices in the United Kingdom and/or the United States.

The first 45 pages of International Principles – "Evolution of Roses" contributes little to rose judging per se but is an excellent discussion of the history of the rose.

The next three chapters unfold in a rather odd sequence; first come seven pages dealing with judging sprays. This contains a somewhat superfluous discussion of spray types (umbrel, corymb, raceme,) before moving on to "preferred inflorescence shapes": "the ideal geometry… should approach a circular outline with the florets forming a flat top…" An oval outline is also deemed acceptable for both floribunda and hybrid tea sprays (and presumably sprays of all other rose types).

The next segment discusses one bloom per stem entries, with a point scoring system that is the same as that of the American Rose Society. It is here that one of the most important features of the book appears, where color images of blooms with excellent form are critiqued and compared to those with various faults.

The third chapter in this grouping is "Judging One Inflorescence per Stem" (the terms "inflorescence", "spray" and "cluster" are used rather indiscriminately). It would seem that this should follow immediately after the first chapter, also dealing with judging sprays, rather than interposing that on 1 b.p.s. In any case, the point allocation here differs from that of the ARS as follows:

Exhibition form of florets	25
Inflorescence shape	25
Color	15
Condition/Freshness (i.e. substance)	15
Stem and Foliage	10
Balance and Proportion	10

This point breakdown is important for two things: 1) it separates and emphasizes the importance of spray

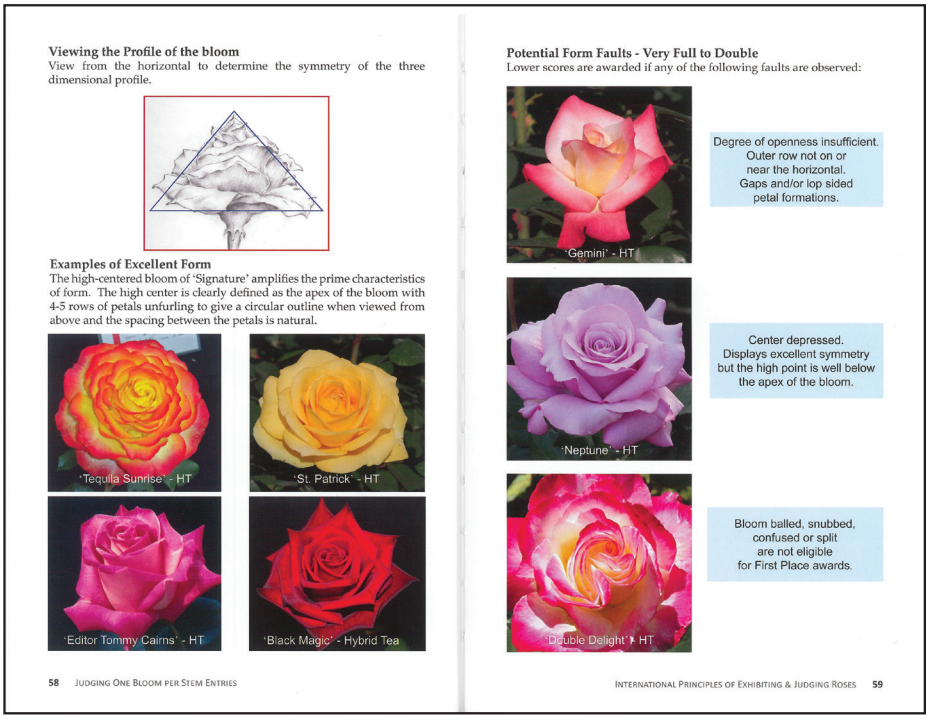
form, rather than lumping it and bloom form together, and 2) its removal of "size" as a prime element would seem to suggest that bigger is not better in judging sprays, something often lost on American judges. However, on the very next page "size" reappears, combined with "inflorescence shape". Confusing! Finally, a dozen examples of good sprays are given, but, unlike in the previous chapter, none with faults are shown and critiqued.

The last half of the book is devoted to the judging of challenges and collections. The scoring system here mirrors that of the ARS, but the 20 points for presentation/appearance/staging is broken down into four components: 1) uniformity of bloom and stem length; 2) uniformity of degree of openness; 3) color arrangement, and; 4) geometrical staging. Following this are 25 pages devoted to bowls and baskets of roses, exhibits seldom seen in U.S. shows, with faults pointed out on some of the displays. More helpful are the pages dealing with boxes and palettes, where two or more exhibits are pictured and evaluated, and the winning entry is acknowledged.

In my opinion, the main fault of the book is that, strictly from a judging/exhibiting standpoint, much of the space could have been better used. History and great photos of beautiful blooms are nice, but more critiques of examples could have helped, as would more comparisons between excellent exhibits and those of lesser quality. However, this is overshadowed by the wealth of information therein and the three prime assets listed earlier.

Author/editor Luis Desamero is to be congratulated and thanked for his efforts on this publication, as are the judges from several countries who contributed to the work. International Principles should serve as model for the long-overdue edition of the *ARS Guidelines and Rules for Judging Roses*, with its outdated black-and-white illustrations. Now that the *Guidelines* are available on line, a color revision is eminently doable, and would, in the words of Paul Simon's *Kodachrome* , "make you think all the world's a sunny day."

This book is $25 (North America, includes shipping) and available by visiting: www JudgingROSES.com



Viewing the Profile of the bloom
View from the horizontal to determine the symmetry of the three dimensional profile.

Examples of Excellent Form
The high-centered bloom of 'Signature' amplifies the prime characteristics of form. The high center is clearly defined as the apex of the bloom with 4-5 rows of petals unfurling to give a circular outline when viewed from above and the spacing between the petals is natural.

'Tequila Sunrise' - HT
'St. Patrick' - HT
'Editor Tommy Cairns' - HT
'Black Magic' - Hybrid Tea

58 JUDGING ONE BLOOM PER STEM ENTRIES

Potential Form Faults - Very Full to Double
Lower scores are awarded if any of the following faults are observed:

'Gemini' - HT
Degree of openness insufficient. Outer row not on or near the horizontal. Gaps and/or lop sided petal formations.

'Neptune' - HT
Center depressed. Displays excellent symmetry but the high point is well below the apex of the bloom.

'Double Delight' - HT
Bloom balled, snubbed, confused or split are not eligible for First Place awards.

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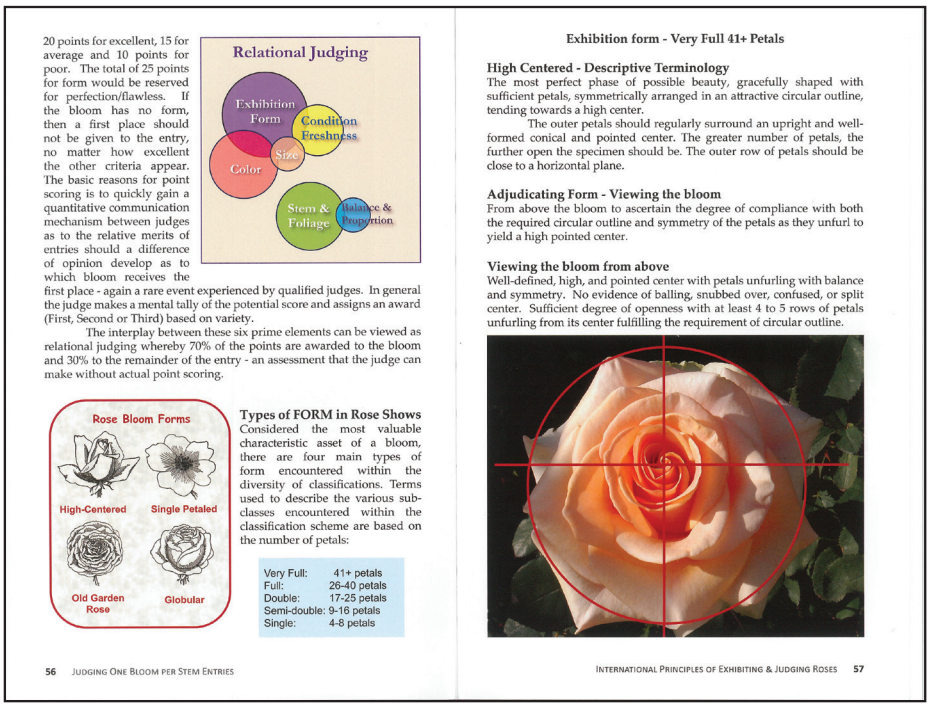

20 points for excellent, 15 for average and 10 points for poor. The total of 25 points for form would be reserved for perfection/flawless. If the bloom has no form, then a first place should not be given to the entry, no matter how excellent the other criteria appear. The basic reasons for point scoring is to quickly gain a quantitative communication mechanism between judges as to the relative merits of entries should a difference of opinion develop as to which bloom receives the first place - again a rare event experienced by qualified judges. In general the judge makes a mental tally of the potential score and assigns an award (First, Second or Third) based on variety.

The interplay between these six prime elements can be viewed as relational judging whereby 70% of the points are awarded to the bloom and 30% to the remainder of the entry - an assessment that the judge can make without actual point scoring.

Relational Judging
Exhibition Form
Condition Freshness
Size
Color
Stem & Foliage
Balance & Proportion

Rose Bloom Forms
High-Centered
Single Petaled
Old Garden Rose
Globular

Types of FORM in Rose Shows
Considered the most valuable characteristic asset of a bloom, there are four main types of form encountered within the diversity of classifications. Terms used to describe the various sub-classes encountered within the classification scheme are based on the number of petals:

Very Full:	41+ petals
Full:	26-40 petals
Double:	17-25 petals
Semi-double:	9-16 petals
Single:	4-8 petals

56 JUDGING ONE BLOOM PER STEM ENTRIES

Exhibition form - Very Full 41+ Petals

High Centered - Descriptive Terminology
The most perfect phase of possible beauty, gracefully shaped with sufficient petals, symmetrically arranged in an attractive circular outline, tending towards a high center.

The outer petals should regularly surround an upright and well-formed conical and pointed center. The greater number of petals, the further open the specimen should be. The outer row of petals should be close to a horizontal plane.

Adjudicating Form - Viewing the bloom
From above the bloom to ascertain the degree of compliance with both the required circular outline and symmetry of the petals as they unfurl to yield a high pointed center.

Viewing the bloom from above
Well-defined, high, and pointed center with petals unfurling with balance and symmetry. No evidence of balling, snubbed over, confused, or split center. Sufficient degree of openness with at least 4 to 5 rows of petals unfurling from its center fulfilling the requirement of circular outline.

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Music City Roses

2019 ARS National Miniature Conference & Rose Show

Franklin, Tennessee • Oct. 4-6, 2019

www.musiccityroses.com

by Mary Bates, Publicity Chair

MARK YOUR CALENDARS as excitement is growing and growing much like a crescendo as the date for the 21st Annual American Rose Society National All-Miniature Conference & Rose Show is just around the corner. The weekend begins Friday, Oct. 4 and ends on Sunday, Oct. 6, 2019 and is completely packed full of fun and roses. We sincerely hope that you will join us in Franklin, Tennessee for fun, fellowship with old acquaintances plus the opportunity to make new friends with Rosarians from across our great country. This is the only ARS National event this year, so if you have not registered for the Conference & Rose Show, time is of the essence. Hotel and Registration information is at the end of this article.

Fun will begin Friday morning as Nancy Redington, former National Chair of Arrangement Judges and Craig Dorschel, National Chair of Arrangement Judges will present an Arrangement Seminar. Participants will create arrangements which will be critiqued by a team of expert arrangers. Those interested in learning how to create award winning arrangements will receive hands-on instruction on how to improve their skills in creating award winning arrangements. The Seminar will also serve as an audit for current Arrangement Judges. For those who desire to become Arrangement Judges the opportunity to take the ARS test will also be part of the program. Actual point scoring of arrangements for

those taking the test will occur during the National Rose Show Saturday after judging is completed.

Friday evening, while the rose show is being set up, there will be a wine and cheese social along with a cash bar for those who enjoy the bubbly. The prep rooms will open at 1:00 a.m. and close at 9:30 a.m. with judging of the rose show to begin shortly thereafter. Exhibitors may use their own English Boxes, Palettes and Picture Frames. All other rose supplies will be available. Supplies may not be removed from the prep area.

Curtis Aumiller, National Photography Judges Chair, will oversee the Photography section of the rose show. There is a National Challenge Class which will consist of three photos of the Cycle of Bloom for one variety of either a miniature or miniflora rose. One photo is a Bud beginning to unfurl with sepals that are down. The second photo is of an Exhibition Bloom at its most perfect phase and the third photo is of an Open Bloom with fresh stamens showing. This class is expected to have several entries.

The Horticultural Section of the Rose Show will have all of the traditional classes that are found at most National Miniature Rose Shows and also some new and interesting fun classes for exhibitors to compete in. As this is the only ARS National Rose Show in 2019, there are nine National Miniature and Miniflora Challenge Classes. Exhibitors will need to indicate on the Registration Form their intent to enter one or more National Challenge Classes. A drawing will be held to determine placement position for each National Challenge Class. There is a Basket Challenge Class where exhibitors will place a minimum of 18 roses and a maximum of 36 miniature or miniflora roses in a basket. This can be a challenge but a fun entry. Another fun class is a Vase of Five roses hybridized by the same hybridizer. As there are several miniature and miniflora roses that have a Country Music theme, connection or name, we have added a unique class with a collection of five roses that are applicably named.

Now the fun really continues as the Deep South District and the Tenarky District are holding a Combined District Rose Show that encompasses all classifications of roses from hybrid tea, floribunda, shrub, OGRs, polyantha, miniflora and miniature roses. There will be eight total Queens and courts for the National and Combined District Rose Show. If you grow roses this will be the biggest and best rose show of the year.

OPPOSITE PAGE, LEFT: Arrangement by Joan Singer, photo Nancy Redington; RIGHT: 'Conundrum', miniflora. Photo Andrew Hearne. ABOVE: 'Fitzhugh's Diamond', miniflora, examples of "Cycle of Bloom" - bud, exhibition, open bloom, photography. Photos Bill Kozemchek.

LEFT, TOP: Basket of 'Joy', miniature. Photo Brenna Bosch; LEFT, MIDDLE: 'Halo Fire' miniature spray. Photo Bill Kozemchak; LEFT, BOTTOM: 'Whirlaway', miniflora. Photo Bill Kozemchak; ABOVE: 'Solar Flair', miniflora. Photo Bill Kozemchak.

Continuing the fun on Saturday is a fantastic line up of exciting and informative nationally recognized speakers beginning with:

• Dr. Mark Windham an expert on Rose Rosette disease will inject humor and up-to-date information on this very serious disease as only he can do;

• Dr. Satish Prabhu will be the second speaker and he will debunk what many have believed as gospel when it comes to pruning roses. Satish as he prefers to be called is generally considered the top exhibitor in the country;

• John Smith, owner of Silver Run Roses and hybridizer of 'Sunny Sundays' and 'Randy Scott' will wow us with his expertise on fertilizing roses. If you have ever seen John's roses at a National Rose Show this is one presentation that you will not want to miss;

• Linda Clark, a top national exhibitor with nine National Queens of Show to her credit will follow John. She will talk about floribundas and have something for all rose growers to enjoy. We are more than pleased that Linda is traveling from California to be with us.

• John Hefner, a top national exhibitor who has come out of a 10 year hiatus from exhibiting at rose shows will entertain us with his explanations about winning National Challenge Classes. John reminds many of fellow Indiana great Larry Bird in that he is at his best when competing against the best;

• The final speaker of the day is Jeff Wyckoff, former ARS President and past National Chair of Horticultural Judges. Jeff is an expert writer as those who followed his *Judges Jottings* will appreciate. Jeff will discuss judging miniature and miniflora roses which is a topic you will not want to miss.

Traditionally, the ARS National Miniature Conference has honored someone who has contributed toward the betterment of roses over a lengthy period of time. This year Jim Sproul, an extraordinary hybridizer who specializes in highly disease resistant roses and Drs.

IMPORTANT INFO

Primary Hotel: Franklin Marriott Cool Springs, 700 Cool Springs Blvd., Franklin, TN 37067; 615.261.6100.
Overflow Hotels: Courtyard Franklin Cool Springs, 2001 Meridian Blvd., Franklin, TN, 615.778.0080; Residence Inn Franklin Cool Springs, 2009 Meridian Boulevard, Franklin, TN, – 615.778.0002.

Conference & Rose Show Registration: www.musiccityroses.com

CONTACTS: *Those who are interested in Judging please contact the indicated individual(s) below.*

Arrangements: Nancy Redington at rosered1@comcast.net or Craig Dorschel at craig.dorschel@charter.net
Horticulture: Don Myers at rokirose@nc.rr.com
Photography: Curtis Aumiller at americanrosephoto@yahoo.com
Volunteering: Richard J Anthony at rja4cpa@aol.com or Cindy Dale at rosepro@bellsouth.net

Satish and Vijaya Prabhu, considered the top exhibition team in the country, are being honored at the conference.

In addition to the awards presentations at the banquet on Saturday evening, the keynote after dinner speaker is immediate past President of the ARS, Pat Shanley. Pat will entertain everyone as she will expand on what she envisions is the "Future of the Miniature & Miniflora Roses" in the years to come. Pat is an articulate speaker and highly knowledgeable rosarian as can be attested to by those who have enjoyed her many presentations over the past several years.

Continuing on with the conference will be a Sunday morning devotional presided over by Nancy Jones, ARS Chaplain. A short time later tour buses will leave the Franklin area to visit several rose gardens in Nashville and surrounding area. One of the five gardens to be visited is Ron Daniels' garden. Ron grows more than 250 roses which include all classes of roses. The next stop is the Belmont University Rose Garden — a unique public garden containing OGRs from the original late 1800s planting. It is always enjoyable to see how roses grow in different parts of the country. After a brief stop mid way through the tour to enjoy a box lunch, the tour will continue with several more very enjoyable rose gardens.

All good things come to an end and many will head home later Sunday or early Monday. Others will take a few days and stay in the Nashville area to enjoy the country music capital of the world. For those who will stay and visit, a stop in Cool Springs and Franklin along with Nashville is mandatory.

BELOW, L-R: 'Joy', miniature; 'Autumn Splendor', open bloom, miniflora. Photos Bill Kozemchak.

Pacific Southwest District

By the Albuquerque Rose Garden Committee

Albuquerque Rose Garden + Albuquerque Rose Society

THE ALBUQUERQUE ROSE GARDEN is within the Pacific Southwest District of the American Rose Society. The rose garden is a "jewel" located on the grounds of the Tony Hillerman Library at 8205 Apache Ave NE, Albuquerque, New Mexico. Visitors to the library and the garden are greeted by a myriad of roses in a beautiful setting of interesting trees, beds of roses, pergolas, arbors and park benches. The rose garden is managed, financed and maintained by the Albuquerque Rose Society and its member volunteers. The City of Albuquerque installed all of the original irrigation systems and continues to help with repairs of major irrigation problems. Claudia Bonnett and Beth Baker, co-chairmen of the Rose Garden committee, along with Debbie Butcher, the president of the society are the current stewards of the garden. This garden has always been and continues to serve as the centerpiece for the society in promoting the rose.

The Rose Garden was originally planted on the east library property in 1962. An AARS Public Display Rose Garden was added on the west side of the library in 1972. When the library was renovated and expanded in 1993 the Rose Garden had to be redesigned. A landscape architect worked with the society to design a unique rose garden that would completely surround the library, ensuring that beds of roses would greet anyone visiting or driving by the library. The design would include varied plantings of roses that would exemplify the versatility of roses in the landscape. Two years later the newly designed rose garden was officially opened by the Albuquerque Rose Society during the 1995 combined American Rose Society and Pacific Southwest District Convention. In 2010 the garden received the PSWD Garden of the year award for best large public rose garden.

The Garden design has remained as it was in 1995, with few changes. It contains approximately 1,100 rose

TOP: Southeast corner sign, photo Charlene Bacchus;
LEFT: Albuquerque Rose Garden, photo Bill Farmer.

plants. The garden was designed so that each side of the library has beds of different types of roses. The east side contains arbors and benches with large beds of floribundas, shrubs and old garden roses. The south side is planted with modern and classic shrubs. On the west is an alcove that contains raised beds of miniatures and climbing miniatures. Also featured is a huge stand of yellow 'Lady Banks', flanked by white, pink and burgundy 'Icebergs'. The north side showcases formal beds of hybrid teas and a long walkway lined with park benches and covered by a large pergola planted predominately with 'Mermaid'. The walkways to the library entrances are lined with fragrant varieties of hybrid teas.

The Albuquerque Rose Society uses the garden to promote and provide knowledge on how to grow beautiful roses in the community. The rose garden is in bloom from early May to late October. The roses in the garden are chosen for their hardiness, vigor and disease resistance. Different types of roses are planted in areas of the garden that best suits the ideal growing conditions for the type of rose. The roses are watered by a combination of drip and overhead sprinklers. The roses are not sprayed for disease or insects because this best demonstrates the disease resistance of the varieties. It also encourages better ecological balance in the garden. The roses are fertilized several times a season and mulched. Visitors to the garden can see and evaluate which varieties will grow best in their gardens.

In any given year, volunteers work more than 700-800 hours to care for the garden. The garden is financed by an endowment fund established by the Albuquerque Rose Society, a memorial fund for members, society fund raising projects, and donations.

Rose pruning demonstrations are held in the garden for three weekends in March. Deadheading sessions are scheduled from June until mid-September on Tuesday evenings from 6:30 p.m. to sunset. The public is always invited to help or just attend to get their rose questions answered. There is a steady stream of visitors strolling in the garden and volunteer members working there are always approached by these people with rose questions and positive comments.

The garden is a perfect venue for society social events. Celebration of the First Bloom is scheduled in May and features a rose decorated hat contest. Members celebrate August with an Ice Cream Social, complete with homemade ice cream.

ABOVE: 'Lady Banks'; BELOW: Hybrid tea garden, photos Bill Farmer.

Carolina District

By Sara Hill, President, Rowan Rose Society

Rowan Rose Society + Triangle Rose Garden

SALISBURY, NORTH CAROLINA, is a destination not just a sign you see on I-85 traveling north from Charlotte. Exit into a friendly, southern town of 34,000 people, filled with large historic homes, museums, three performing art theaters, three colleges, a metropolitan gifted symphony, unique bed and breakfast homes and the Rowan Rose Society. Oh, yes! I forgot to mention barbecue!

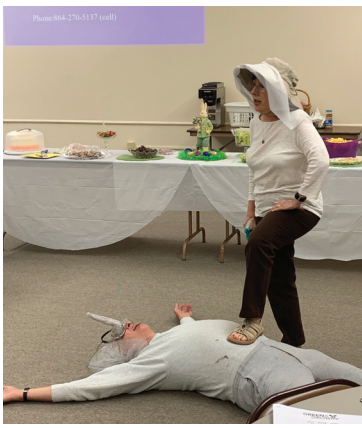
Traveling through town on West Innes Street, you'll pass the Rowan Rose Society Triangle Rose Garden located between City Memorial Park and the Summersett Funeral Home. This garden is home to about 250 roses, planted and maintained by our society with members Ben and Frances Agner as coordinator and manager. The garden was designed by John Lowery, one of our charter members, and became a reality in 1976 when it was presented to Salisbury and Rowan County as a focal point of beauty for the community. The mayor rededicated the garden to the city on its 40th anniversary which dated back to the country's bicentennial celebration. We are honored to provide roses from the Triangle Rose Garden to decorate the Dr. Josephus Hall House museum during the tour of historic homes each year in October. Dr. Hall was Chief Surgeon of the Salisbury Confederate Prison during the Civil War in 1859 and his home is on the National Register of Historic Places.

In the city as well as the county (Rowan County), parks and recreational facilities are abundant. This year the Rowan Rose Society helped to celebrate "Spring in Hurley Park" with many other organizations, artists and the Salisbury Swing Band that ushered in spring's resurrection with music, sunshine, flowers and the community. Offering to win a sizable gift card from a local garden center brought many interested rose growers and flower lovers to our table and helped to promote our rose society.

With Spring, the activity in our rose garden starts to buzz and crawl. Rita and Frank Van Lenten from Greenville, South Carolina visited our society's monthly meeting to educate our rose growers on using chemicals and fertilizers which served as continued education for our consulting rosarians. We were amazed and entertained by the "Big Thrip" they brought with them. Our petite rose grower, Rita, sprayed the biggest insect I've ever seen and he plopped to the floor. All six feet-plus of him (Frank dressed as a bug)! I highly recommend this dynamic duo if you're looking for information on how to zap those thrips.

Our 60th Rose Show in May served as the Carolina District Show (North and South Carolina) honoring Becky Lowery, widow of John Lowery, and our only remaining charter member. The show was amazing. The exhibitors were wonderful, the experienced and the novices. And the roses... well, what can you say about the most perfect flower that God created? They filled the room with their beauty and fragrance creating a

BELOW, LEFT: Rowan Rose Society Triangle Rose Garden, photo Jack Page; BELOW, RIGHT: Rowan RS members at the Hurley Park celebration, photo Sara Hill.



ABOVE: District Rose Show winners; ABOVE, RIGHT: Rita and Frank's presentation on chemicals, photos by Jack Page.

difficult challenge for the judges. It has always amazed me as how you determine the most beautiful of the most beautiful. We were so pleased to have 14 entries in the Artistic (Arrangements) Division and especially, novice entries. Many visitors stood in line to buy their favorite rose or to be able to buy a dozen at the end of the show. We owe much of our success to local businesses and individuals who sponsored awards for each class and to our local newspaper, the *Salisbury Post*, for its support.

June brings a special time to relax, bask in the success of the rose show and fellowship with members, families and friends at our annual ice cream social. Our members are multi-talented. Some are churners — lime, vanilla, chocolate and peach. Those who don't churn, bake cakes, cookies, pies and apple dumplings. Can hardly wait until September for our annual picnic. Next to growing roses, this group really knows how to cook and enjoy times together.

So you see, the Rose in all its glory brings people together. Our membership is 27 strong and strong describes not only their willingness and desire to get a job done but the type of friendships formed. Ours is a diverse group ...engineer, beautician, homemakers, business owners, architect, banker, insurance executive, retired nursery owner/landscaper, sales people, doctor, master gardeners and others who find therapy, satisfaction, and pure joy in planting, growing, then finding a most beautiful result at the end of their effort.

The love of the Rose has also encouraged those who are able to go the extra mile, to share their talents in many leadership roles. We are fortunate to have as members, Jack Page and Robert Myers who co-own The Perfect Rose, specializing in rose garden installation and maintenance. Jack is editor of our newsletter, treasurer of the Carolina District and the ARS. Robert is VP of the Rowan RS, a Master CR, a member of the permanent jury for the International Rose Trials at the Biltmore, Hort Judging Chairman of the Carolina District. Their formal garden of 1,000 roses makes that extra mile so pleasant and exciting to visit. They open their gardens to many clubs and visitors from the surrounding area.

I really enjoy the passion of our ARS President, Bob Martin, who said that roses are for everyone. That we are guardians of the Rose and by giving, we receive. This is such a biblical and spiritual truth. I, also, enjoy reading special "thoughts of the day" quotes from different devotional books. Some of my favorites: "God gave us memories that we might have roses in December; "Don't wait for people to be friendly, show them how" (give them a rose, right?); "The world is a rose; smell it and pass it to your friends" (a Persian Proverb).

I have considerably fewer than 1,000 roses but have gained many friends from neighbors and others dropping by while I'm working in my garden. One older gentleman stopped by to ask my opinion on what color of rose should he get for a lady that he was enamored with. I just knew he was a gentleman when he used that word. Another visitor thought I should put a bucket at the garden and charge a fee to stop and smell the roses. He was actually complimenting my roses. Many just stop by to chat and tell me their favorite rose in the garden. Isn't it satisfying and just simply beautiful the power of a rose?

BELOW: Jack Page and Robert Myers' garden contains 1,000 roses, photo Jack Page.

Rocky Mountain District

By Georgie Bever

Prickles in Pueblo

Riverwalk Rose Society + Pueblo Riverwalk

Pueblo, Colorado, is a small city located 100 miles south of Denver. It originated as a small fort at the location where Fountain Creek joins the Arkansas River. The current population is just over 115,000. It is the home of the Pueblo Riverwalk on the Arkansas River.

In the spring of 2017, Georgie Bever, then District Director of the Rocky Mountain District, was approached by friends and family living in Pueblo asking what they would need to do to start a local rose society in Pueblo. Georgie jumped at the chance to start a new local society. Georgie's son, Ed Bever, had a business associate whose husband owned a garden center in Pueblo West. Ed and Georgie talked to the owner about being in the rose section of the facility the Saturday before Mother's Day to talk to people purchasing roses about starting a local society. The owner was excited about having them and provided advertising about the event.

The inaugural meeting of what became the Riverwalk Rose Society was held in June. Along with electing officers and approving an agenda, the first order of business was a suggestion by Paulette Moore that the new society approach the HARP Foundation about planting a rose garden at the Pueblo Riverwalk. The HARP Foundation's mission statement is: "To accept and disburse funds for the planning, design and construction of the Historic Arkansas Riverwalk of Pueblo." The members approved the idea, and Paulette became the Chair of the Riverwalk Garden Committee. Less than 10 months later, the garden became a reality. The garden is located at the corner of Greenwood Street and Victoria Avenue on the north side of the Riverwalk near the pavilion.

Paulette continues as the Chair of the garden committee, and Georgie is the current president. Every member helps with the garden in one way or another. During the summer members sign up for a week of responsibility to deadhead and weed the garden. From October through April members fill a 50-gallon rain barrel with water and haul it to the garden to water the roses. Anyone available on the two major "work" days shows up to either prune and fertilize in April or winterize in November. In April there were 17 members on hand to spring prune 37 roses. It took about 15 minutes to finish the task.

The garden currently contains 20 large roses donated by Bailey Nursery, 15 miniatures and minifloras donated by For Love of Roses, and three Austin climbers donated by two members of the society. After a very successful rose sale this June, the society already has plans to expand the garden — it should double in size in 2020.

It is interesting to note that the garden has no mulch. Mulch is not allowed on the Riverwalk because it tends to blow or be thrown into the river. The only fertilizer used on the rose garden is all-natural *Mile-Hi Rose Feed and Kelp*.

BELOW, LEFT and RIGHT: The finished Riverwalk rose garden, photos Ed Bever.

Winterizing the garden means waiting until after the ground has cooled sufficiently after one or two hard freezes. Then some of the longer canes that might be damaged or do damage to other canes can be trimmed back to about waist height. Some bigger bushes are tied with heavy twine to keep them from damaging themselves in the wind. Then a layer of dried, shredded maple leaves is placed around the base of the plants, and soil is then placed over the dried leaves. Members watered the plants thoroughly.

ABOVE: Tom Keilers and Ron Wasil tying 'Tess of the D'Urbervilles'. Photos Georgie Bever.

Winters in Pueblo can be chaotic. Sustained winds over 50 mph are not uncommon. The winds will freeze-dry certain plants. The temperature in the winter varies radically. One week in January you could have 70 degrees with a light breeze followed by three days of low temperatures below zero and wind. The worst winter damage to roses in Pueblo is not from the cold, but from lack of moisture.

For this reason, members of the Riverwalk Rose Society rotate watering the garden from late October to mid-April using a rain barrel and a garden hose. The rain barrel is filled at the HARP Foundation building and hauled in the back of a pick-up to the garden, about half a mile away. All other sources of water on the Riverwalk are drained in late October.

In Colorado the standard rule is to spring prune after the Forsythia blooms. The danger of that is the forsythia often blooms well before the last freeze of the year. This means that you may end up doing two spring pruning. Since there are no hybrid teas in the garden, the roses can be pruned in mid-April, and any dead that is caused by a late freeze, can be cut away later. Since many of the members of Riverwalk work and have children involved in a myriad of activities on Saturday, the membership decided to prune on April 15th at 5 p.m. Fifteen members were on hand to prune 38 roses. To make this a learning experience, less experienced rose growers were teamed with members who had been growing roses in Colorado for years. Members followed the rule of "The Five D's." Prune the DEAD, DISEASED, DAMAGED, DIAOGNAL and DINKY.

After inspecting the roses, it was determined that one of the miniatures died. Consensus was it was killed by dog urine. Plants on either side of it showed signs of urine damage, but were pruned in hopes that they would recover. The plants were fertilized after pruning, and the irrigation system was turned on and tested. Soil was then pushed back around the plants, and the plants were watered using water from the rain barrel. It would be another two weeks before the irrigation system was pressurized and available for use.

It was during this time that it was discovered that the David Austin rose variety donated by members was not a shrub, but a climber. A few days later trellises made from materials donated by the Pikes Peak Rose Society in Colorado Springs were installed.

RIGHT: Tom Keilers and Paulette Moore install the trellis on 'Tess of the D'Urbervilles'.

ABOVE: Dan and Angela Yaeger, Paulette Moore, and Heather Bever planning the garden.

ABOVE: The members who removed the unwanted plants. Front, L-R: Heather Bever, Poky Hanten, Paulette Moore, Georgie Bever, Angela Yaeger. Back, L-R: Ed Hanten, Tom Keilers, Paula Davis, Mike Eckley, Dan Yaeger.

Riverwalk Rose Society Activities

RIGHT: There were some overcrowded, neglected roses in the garden. The decision was made to remove those plants to make room for our new garden. Boy Scout Troup 8 partnered with Riverwalk Rose Society to remove the plants. Member of both the rose society and the boy scouts took the plants home and planted them. It was later learned that the roses were 'The Fairy'.Riverwalk donated some of the plants to Northern Moore to use as part of his Eagle Scout project.

LEFT: Planting the garden – Phase one – large-flowered plants, May 9, 2018.

RIGHT: Miniatures and minifloras planted – September 8, 2018. Using the map created at the planning meeting, the locations for the miniatures and minifloras were marked in the garden. When the irrigation was installed in May, those sights were noted, and drippers were prepared for each rose. All photos Georgie Bever.

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Inside Roses

A personal investigation into the anatomy and physiology of the rose
by Gary A. Ritchie, PhD, Master Rosarian

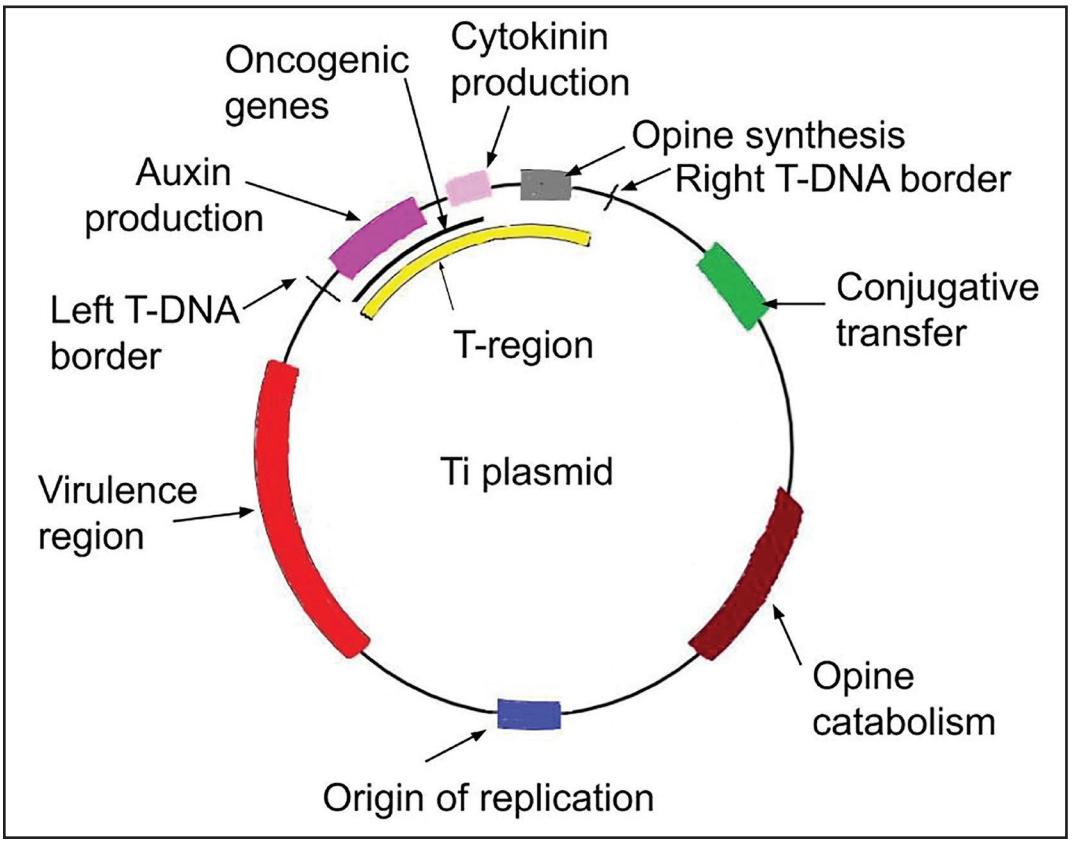
Plant Hormones: Cytokinin, Part 3

IN THE LAST COLUMN OF INSIDE ROSES, we outlined some of the ways in which cytokinin affects the development of roses and other plants, and I promised to close out our investigation of cytokinin by discussing the fascinating role it plays in the disease we call crown gall. If you have been actively growing roses for very long, you have probably encountered this disabling, often fatal, disease in your garden.

Unlike most rose diseases, crown gall is caused by a bacterium called Agrobacterium tumefaciens - aptly named because it lives in the soil (agro) and forms tumors (tumefaciens) on plant stems. In roses these tumors typically occur at the crown of the plant, on the roots, and at the pruned ends of stems because it is transmitted by infected pruners. To learn to diagnose crown gall please refer to my new book, The Rose Doctor, now available on Amazon.com.

The manner in which this pathogen infects rose plants is as ingenious as it is insidious. Unlike most organisms, this bacterial pathogen contains two different types of DNA. Its primary DNA packet is called chromosomal DNA. Cells of all plants and animals contain chromosomal DNA, which is located in the cell nucleus. But the crown gall bacterium also contains ring-shaped DNA molecules called Ti (tumor inducing) plasmids *(Figure 1, left)*.

Figure 1. Illustration of a Ti plasmid in a crown gall bacterial cell.



The Ti plasmid contains a number of entities. For the purposes of this discussion, let's focus on the upper portion of the ring, the T-region, shown above the yellow curve. Note that it contains genes, indicated by colored bars, that code for production of the hormones auxin (purple) and cytokinin (pink), along

with opine (gray) and tumor forming genes, called oncogenic genes. This is called the T-region of the plasmid because the bacterium literally transfers this portion of the ring into a wounded plant cell.

Wounded plant cells produce chemicals called phenolics that attract bacteria to the wound area (Figure 2). After the tumefaciens bacterium has attached itself to the wounded cell, the T-DNA breaks loose from the Ti plasmid, exits the bacterial cell, and enters the plant cell through a gap in the cell wall. Once inside the plant cell, the T-DNA migrates through a pore in the cell nucleus and inserts itself into the plant's nuclear DNA. By doing this it literally hijacks the plant's DNA for its own nefarious purposes.

Once incorporated into the plant's DNA, the bacterial DNA goes to work making cytokinin, and auxin, along with a chemical called opine. Recalling our discussion of the ability of cytokinin to cause mature cells to rejuvenate and form callus, this is exactly what it does inside your rose plant. Working in tandem with auxin, the cytokinin forces the rose cells to rejuvenate and form the callus galls that give the disease its name. The opines that are produced serve as a source of nitrogen for the galls, keeping them well supplied with food as they rapidly develop. As the galls enlarge, they begin to rob nourishment from the rose plant to feed the growing colony of bacteria that they harbor. This results in a gradual decline in vigor of the rose plant, leading ultimately to its demise.

That's the dark side of cytokinin – without cytokinin there would be no crown gall.

An interesting footnote to this story is that clever scientists have developed methods for using Agrobacterium tumefaciens as a vector for introducing foreign genes into plants. Using a specific bacterial enzyme, called a restriction enzyme, desired DNA fragments can be sliced from an organism and hooked onto the end of a cleaved Ti plasmid. The plasmid then carries this DNA into a host plant where it becomes part of the plant's chromosomal DNA. Specific genes coding for desirable attributes have been used in this manner to improve such plant properties as drought and disease resistance, enhanced nutritive value, herbicide resistance and other desired traits. This technique has also yielded valuable clues on how various genes are regulated and expressed in plants.

This concludes our three-part discussion of the plant hormone cytokinin. In the next column we'll introduce a powerful and enigmatic plant hormone that exists as a gas. Called ethylene, this hormone is probably abundant in your refrigerator.

If you enjoy reading about plant hormones and other plant science topics you may want to check out my new book Inside Plants: A Gardeners' Guide to Plant anatomy and Physiology*, now available on Amazon.com.*

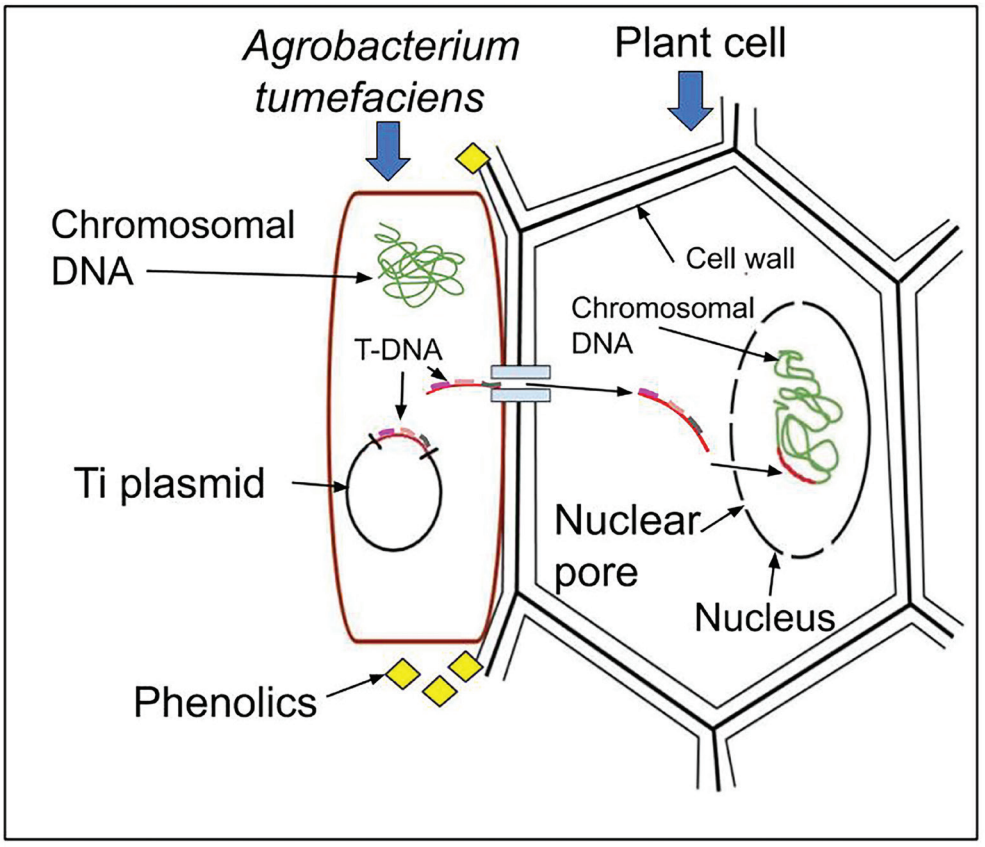


Figure 2. When a crown gall bacterium attaches itself to a wounded rose plant cell, transfer DNA from the bacterial Ti plasmid enters the chromosomal DNA of the plant, taking control of the cell's development.

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2019 Roses in Review

DON SWANSON • RIR NATIONAL COORDINATOR • DONSWAN45@AOL.COM
6336 N 105th Avenue • Omaha NE 68134-1065

Your Help is Needed to Evaluate New Roses!

The 2019 Roses in Review Survey (RIR) marks the 94th time members of the American Rose Society will evaluate new rose introductions. A broad base of participation is needed to make this project worthwhile. We need your evaluations, whether you grow one of the varieties on the survey list or dozens of them. We welcome evaluations from you whether you are a new rose grower, a "garden" rose-grower or a seasoned veteran grower; whether you grow roses for your landscape and garden or if you also grow them to exhibit or arrange. We are happy to get reports from non-ARS members as well, so pass a copy of this insert along to all your rose-growing friends (and encourage them to try an ARS Trial Membership as well.)

Results of the survey will be included in the January/February 2020 issue of *American Rose* and will determine ratings in the ARS *Handbook for Selecting Roses* as well. For these results to be meaningful, we need everyone to participate. So please, take a few minutes of your time to evaluate your new roses. We hope you will use the online reporting method at the ARS website, www.rose.org, but if you are not computer proficient, fill out and mail the form on the following pages (make photocopies if needed) to your district's RIR Coordinator. *(See the list of Coordinators in this insert to find your coordinator.)* The website may not be ready until the end of June. Only evaluate the roses you grow that are on the list of cultivars following the forms.

Note we are rating with whole numbers only. We hope this will provide a more definitive rating than 7.5 for every rose.

Roses included in the survey have generally been on the market one to four years and are available commercially, although some on a limited basis.

This year again, we have a "Special Group" of cultivars which did not attain a rating first time through the RIR. Hopefully we can get ratings for these older roses as well.

Page three of this insert contains some directions for using the online survey method or for completing your paper report form. Please read the directions carefully to learn how the system works. Page four lists the ARS districts with the name and address of the RIR Coordinator for each district. If you use the paper form, you should send it to the coordinator for your district. (If you do not live in the U.S., and want to use the paper form, please send it to me, Don Swanson.)

The online survey at www.rose.org will close at end of day, September 26. Any paper forms submitted must also be in the hands of your district coordinator by that date. We urge you to use the online system, it's easy and it saves everyone a lot of work transcribing forms. Please take the time to report on all the varieties you grow that are on the RIR survey list.

Last year, the NCNH district won the race for the most reporters as usual; I challenge the other large districts to try to beat them. North Central district won yet again with the highest ratio of reporters to ARS members. These districts won bragging rights for their interest in growing new roses. Help make your district a winner in the survey by your participation and by encouraging your fellow rose-growers to participate.

If you are a Consulting Rosarian, check that box online or on the form. (If you are a CR and grow none of the listed roses, there is a check box online and on the form for you to report that.)

Please, participate! We want the benefit of your experience gained in growing these new roses to help others in selecting new roses for their gardens.

HOW TO COMPLETE THE RIR SURVEY

The first step, whether reporting online or on paper is to evaluate your roses that are on the survey list using the criteria below and recording it on the form for ease of reporting. Some of the information entered is not used at the National RIR level but will be used by your District RIR Coordinator in a district summary.

- **Cultivar and Class** record the name of the rose and the class (HT, Fl, Min, S, etc.) Keep all the roses of a given class together on the form for ease of reporting;

- **No. of Plants** the number of plants of this variety that you grow;

- **Years Grown** the number of years you have grown this variety. The year planted is the first year;

- **Garden Rating /Exhibition Rating** determine the ratings using the numerical system explained below. The garden rating is required, exhibition rating is optional;

- **Winter Hardy** check "Yes", "Borderline" or "No". If this is a new variety that has not been through a winter of if winter hardiness is not an issue in your area mark,"Don't Know";

- **Height** indicate if the cultivar grows "Tall", "Medium" or "Short" for its type. A hybrid hea between two or three feet tall would probably be marked "Short" while a miniature of the same height would likely be "Tall";

- **Mildew-Blackspot** check the level of disease you experience for the cultivar in each column;

- **Fragrance** put a check at the appropriate level;

- **Like-Dislike** note the things you find uniquely satisfying or frustrating about this rose.

RATING THE ROSE

10 ..... **Outstanding** – One of the best roses ever. These scores should be seldom used.
9 ..... **Excellent** – Has major positive features and minor negatives – the top one percent.
8 ..... **Very good rose** – You would recommend it without hesitation.
7 ..... **Average** – Solid rose. Good features easily outweigh the negatives.
6 ..... **Below Average** – You can find better roses easily.

Garden Rating Consider the vigor and growth habit of the plant, the number of blooms and how quickly it repeats, the beauty and lasting quality of the blooms in the garden, fragrance, disease resistance, winter hardiness, and quality of the foliage. Don't consider exhibition perfor mance here.

Exhibition Rating Only consider the primary competition class for this rose. Consider the form of the bloom or spray, its lasting quality, substance, color, stem and foliage, all other attributes that make for a successful show rose. Include the ability to bloom at show time.

Selecting a Rating Number Determine which rating describes the performance of the rose. Don't hesitate to use high or low ratings if they accurately describe the performance of the rose. If your plant is doing badly but you have seen it doing well elsewhere, and you believe you received a bad plant, don't penalize the rose. It's better to leave it out or rate it as you have seen it grown elsewhere. You can consider how this rose performs against another, older, rose you grow. For instance, 'Mister Lincoln' is rated 8.3 (would be an 8 this year) – does the new rose grow better or worse than 'Mister Lincoln' for you? By the same reasoning, if

a rose is fragrant, or disease-prone, or tall or short, indicate that in the correct column don't just select average. Most roses are not average but rather above or below average.

Finally! Report Your Survey

We hope you will use the online reporting method – if not, mail your survey form to your district reporter at their address found on the accompanying map/address page.

TO REPORT ONLINE

- Go to the American Rose Society web page www.rose.org.
- Click on the Roses in Review box in the upper right hand corner.
- Scroll down and watch the instructional video or click to download and read the instructions.

Review Your Roses

- Click on "Click Here to begin Reviewing Roses".
- If you grow as a household, enter both names – John and Mary Jones, or Mary Jones and Sam Smith.
- Please enter all of the requested information. You will be able to access the survey page again using your email address.
- Be sure to select your ARS district (refer to map on next page).
- If you are an ARS Consulting Rosarian, check that box. (If you are a CR and grow none of the listed roses, check that box also.)
- On the report page, select the correct group of letters for the rose you are reporting for example S-Z.
- Enter your survey results.
- Click on "Submit" and repeat the process until you are done reporting.
- After you save a reviewed a rose, you may still go back and review and change that report.
- Enter your e-mail address with each rose you review so we may keep your reviews together.
- When done, close the page.
- You may return to review more roses using the e-mail address you used in your first review.

THANK YOU FOR PARTICIPATING IN THE ROSES IN REVIEW SURVEY!!

RIR District Coordinators

BUCKEYE DISTRICT
Jim Hering
1050 Kingwood Drive
Marion, OH 43302-6840

CAROLINA DISTRICT
Ken Schmidt
698 Winterfield Drive
Winterville, NC 28590-8483

CENTRAL DISTRICT
John Riley
9167 W 92nd Terrace
Overland Park, KS 66212

COLONIAL DISTRICT
Pam Powers
14106 Rock Canyon Drive
Centreville, VA 20121-3859

DEEP SOUTH DISTRICT
Jill Haisten
496 County Road 3316
Brundidge, AL 36010-4676

GREAT LAKES DISTRICT
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144 Hartshorn Street
Bad Axe, MI 48413-1358

GULF DISTRICT
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Lake Charles, LA 70605-6941

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South Wales, NY 14139-9731

NORTH CENTRAL DISTRICT
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Port Washington, WI 53074-1408

NCNH DISTRICT
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San Carlos, CA 94070-1616

PACIFIC NORTHWEST DISTRICT
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Renton, WA 98059-4966

PACIFIC SOUTHWEST DISTRICT
Kathy Monge
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Santa Ana, CA 92705-7831

PENN-JERSEY DISTRICT
Tim and Mary Hahn
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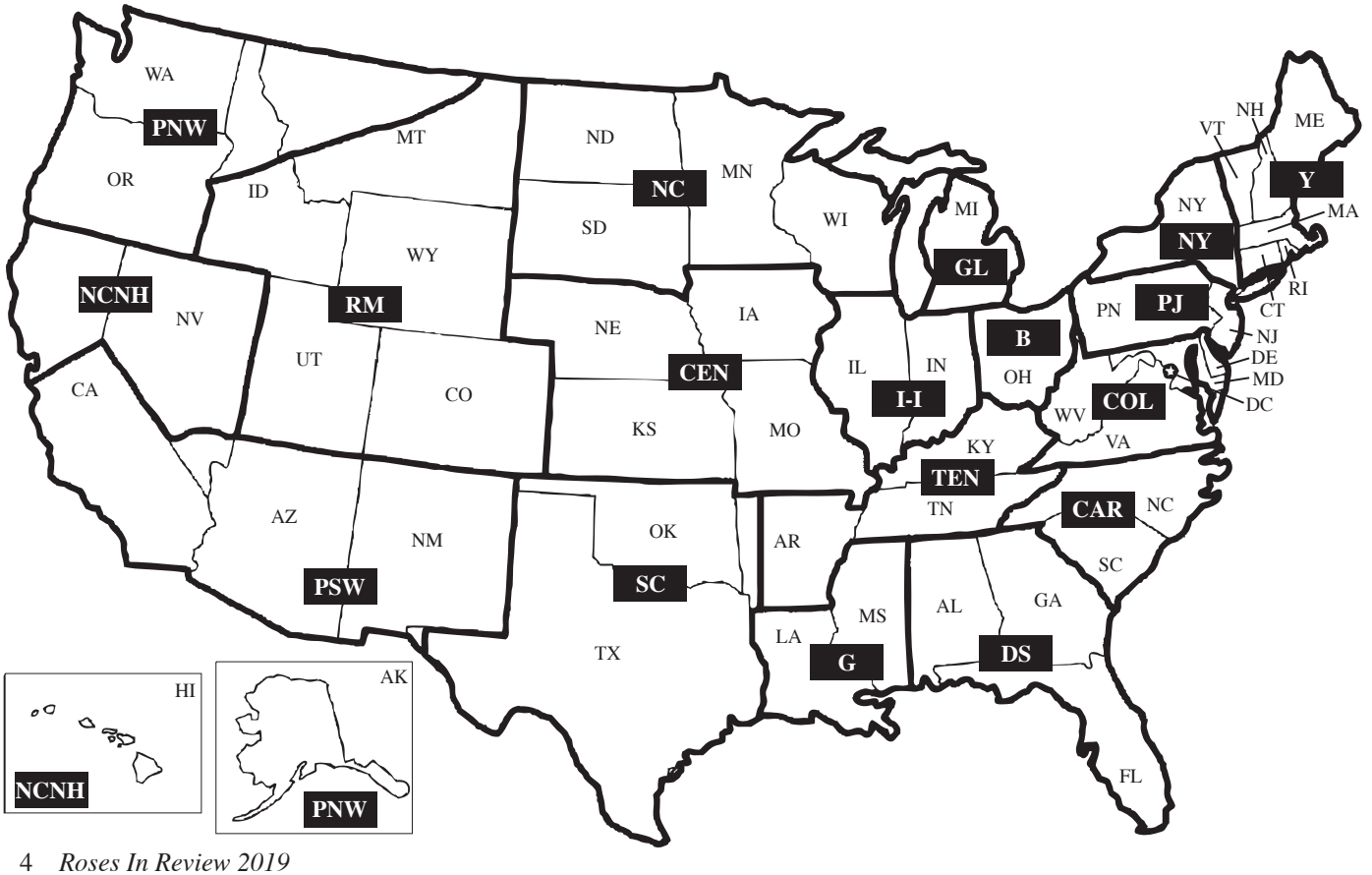
Parlin, NJ 08859

ROCKY MOUNTAIN DISTRICT
Collette Morton
4593 Hope Circle
Broomfield, CO 80023-8497

SOUTH CENTRAL DISTRICT
Carol Shockley
550 Evening Drive
Conway, AR 72032-4757

TENARKY DISTRICT
Jeff Garrett
2049 Linwood Circle
Soddy Daisy, TN 37379-8139

YANKEE DISTRICT
Paul Raymond
69 Seaview Avenue
Swansea, MA 02777-1117



Roses in Review Rating Evaluation Sheet

Please use this evaluation form for rating your roses unless you are using the web site approach. You may photocopy this page. **COMPLETED FORMS SHOULD BE IN THE HANDS OF YOUR DISTRICT RIR COORDINATOR BY SEPT. 26, 2019.** Please fill out the forms as completely as possible, including any comments that will help us understand the performance of the roses.

IMPORTANT: LIST ALL VARIETIES IN THE ORDER THEY APPEAR ON THE FOLLOWING PAGES. FIRST SORT BY CLASS, THEN ALPHABETICALLY WITHIN EACH CLASS.

Name #1 & Address:_____ CR? Y( ) N( )

Name #2 & Address:_____ CR? Y( ) N( )

E-mail:_____ Do you spray regularly? Y( ) N( ) Do you exhibit? Y( ) N( )

List unusual conditions, if any_____ Local Rose Society _____

( ) I (we) don't grow any of the roses listed.

Cultivar	Class	No. of Plants	Years Grown	Garden Rating / Exhib. Rating	Winter Hardy?	Height	Blackspot	Mildew	Fragrance
					( ) Yes ( ) Borderline ( ) No ( ) Don't Know	( ) Tall ( ) Medium ( ) Short	None ( ) Slight ( ) Moderate ( ) Severe ( )	( ) ( ) ( ) ( )	( ) None ( ) Light ( ) Moderate ( ) Heavy
What do you particularly like or dislike about this cultivar?									

Cultivar	Class	No. of Plants	Years Grown	Garden Rating / Exhib. Rating	Winter Hardy?	Height	Blackspot	Mildew	Fragrance
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					( ) No	( ) Medium	Slight	( )	( )	( ) Light
				Exhib. Rating	( ) Don't Know	( ) Short	Moderate	( )	( )	( ) Moderate
							Severe	( )	( )	( ) Heavy

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					( ) No	( ) Medium	Slight	( )	( )	( ) Light
				Exhib. Rating	( ) Don't Know	( ) Short	Moderate	( )	( )	( ) Moderate
							Severe	( )	( )	( ) Heavy

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					( ) No	( ) Medium	Slight	( )	( )	( ) Light
				Exhib. Rating	( ) Don't Know	( ) Short	Moderate	( )	( )	( ) Moderate
							Severe	( )	( )	( ) Heavy

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				Exhib. Rating	( ) Don't Know	( ) Short	Moderate	( )	( )	( ) Moderate
							Severe	( )	( )	( ) Heavy

What do you particularly like or dislike about this cultivar?

Roses In Review 2019 Cultivars

FLORIBUNDA & POLYANTHA

Abracadabra F, rb
At Last F, ab
Bliss Parfuma F pb
Bloody Mary see Brick House
Bordeaux F, mr
Brick House (Bloody Mary) F mr
Brilliant Flower Circus (Brilliant Veranda) F, ob
Brilliant Veranda *see Brilliant Flower Circus*
Candy Cane Cocktail F, pb
Canyon Road *see Scarlet Bonica*
Cherry Bonica (Double Red) F, dr
Double Red see Cherry Bonica
Earth Angel F, lp
Easy Spirit F, w
Easy to Please F, mp
Emma Hafti F pb
Foxy Lady F, r
Frida Kahlo F, rb
Gilded Sun *see Rayon de Soliel*
Grape Jelly F, m
Jean Cocteau (Tequila Supreme) F ob
Jolie Veranda F op
La Park F ab
Lone Star see Sunstar
Madison Grace F, lp
Mango Veranda F ob
Midnight Mystique F m
Our Anniversary F, dr
Peppermint Candy F, rb
Plum Perfect *see Vodacom*
Polynesian Punch F ob
Pretty Dancer F mp
Rag Doll F, pb
Rayon de Soliel (Gilded Sun) F, my
Rose der Hoffnung (Rose of Hope) F yb
Rose of Hope *see Rose der Hoffnung*
Rosie the Riveter F ob
Roxanne F mr
St Tropez F ab
Scarlet Bonica (Canyon Road) F, mr
Shining Moment F dp
Sierra Lady F, ob
Soaring to Glory F dy
Sol Desire F dy
Soul Sister F ab
Sriracha F ob
Sultry Sangria F m
Sunbeam *see Sunbeam Veranda*
Sunbeam Veranda (Sunbeam) F dy
Sunset Dream F ab
Sunstar (Lone Star) F ly
Sweet Jane F, dy
Tequila Gold F dy
Tequila Supreme *see Jean Cocteau*
Tupelo Honey F my
Violet's Pride F m
Vodocom (Plum Perfect) F m

GRANDIFLORA

Honey Nectar Gr, ab
Madame Anisette Gr ab
Miss Congeniality Gr w
Oh Happy Day Gr ab
Parade Day Gr, pb
Simply Magnificent Gr, m

HYBRID TEA

Alice Hart HT, dr
All My Loving HT, dp
Apricots n' Cream HT, ab
April Moon HT, dp
Beloved HT, mr
Bugatti HT m
Call Me Beautiful HT, pb
Cherry Lady (Fiji) HT, dp
Clair Elyse HT, or
Court of Honor HT, mr
Diane Loomer HT yb
Dr Jane Goodall HT pb
Dr Monica Valentovic HT, ob
Duftjuwel (Princesse Charlene de Monaco) HT ab
Fiji *see Cherry Lady*
Gemini's Charm HT, pb
Grateful Heart HT, rb
Gypsy Soul HT, dr
Heart Song *see Traumfrau*
Jimmy Jean HT, dp
King Kong HT ab
Kristen Singer HT, lp
La Rose du Petit Prince (Le Petit Prince) HT m
Le Petit Prince *see La Rose du Petit Prince*
Lauren Leigh HT, pb
Loving Mom HT, ab
Miranda Lambert HT dp
Miss Shelby HT, pb
Moonlight Romantica HT my
Peach Swirl HT, ab
Pilgrim Maid HT w
Pinkerbelle HT w
Pretty Lady Rose HT dp
Princesse Charlene de Monaco *see Duftjuwel*
Ring of Fire HT, ob
Royal Welcome HT pb
Shirley's Bouquet HT w
Smokin' Hot HT ob
Stone Wall Manor HT, ob
Sweet Mademmoiselle HT pb
Traumfrau (Heart Song) HT mr

CLIMBER

Above and Beyond LCl ab
Anne Belovich HWich lp
Bathsheba LCl ab
Dr Prevatt LCl, op
Dream Land LCl, pb
Fruity Petals LCl, pb
Good Day Sunshine LCl dy
Highwire Flyer LCl dp
Honeymoon LCl w
Kiss Me Kate LCl lp
Lady in Red LCl, dr
Quick Silver LCl, m
Seminole Fire LCl, op
Tangerine Skies LCl ob
The Lady of the Lake LCl lp
Tropical Lightning LCl ob

Roses In Review — 2019 Cultivars, continued

MINIATURE & MINI-FLORA

Alakazam MinFl, yb
Angel Grace MinFl, ly
Ann Marie Harris MinFl, op
Bernie MinFl, lp
Bob Martin Min dy
Bold Ruler MinFl, mr
Bronze Medal MinFl, ab
Brookstown Inn MinFl, rb
City of Torrance MinFl m
Coconut Shrimp MinFl, ob
Code of Honor MinFl rb
Covington Ridge Min, ab
Cupid's Kisses ClMin, mp
Cutie Pie Min, yb
Donerail Min, rb
Dream Catcher Min rb
Dreamsicle Min ob
Edith's Darling MinFl, ab
Ellie Marie Min, pb
Eternal Hope Min dy
Evening Star MinFl, m
Fr Gervase Min, rb
Ffion Min, ab
Francesco Min m
Heart of Love MinFl, pb
Hot & Sassy Min or
Hours Change Min or
Houston Levee ClMin, ab
Hugs & Kisses Min ly
Little Queen MinFl, pb
Marita Lindner Min lp
Maroon Eight MinFl dr
Meddlin Mary Min, mr
Mega Ty MinFl dy
Megan Dawn MinFl mr
Millstone Min, rb
Morning Star MinFl ly
Moskoot Min my
Moskoot's Daughter Min, my
Nancy Mae MinFl, pb
Old Tappan MinFl op
Pat Shanley MinFl pb
Pumpkin Pie Min ob
Quite Contrary MinFl mp
Richard H Hughes Min rb
Robin's Star Min dr
Rosemarie MinFl pb
Showtime MinFl op
Sierra Foothills MinFl yb
Sweet Casandra Min, rb
Swing Time MinFl pb
Swirly Pop Min yb
Tom Mayhew MinFl m
Toots MinFl, pb
Vernon's Laugh MinFl pb
Violet Hour Min, m
Yoyo Min, rb

SHRUB & OGR

Ann Harder S, ob
Ann's Beautiful Daughter S pb
Apple Dapple
see The Look-A-Likes Apple Dapple
Archbishop Desmond Tutu
(Desmond Tutu) S, mr
Barbara Louise S, my
Belinda's Blush S lp
Canadian Shield S dr
Children's Hope S, mr
Crazy Love *see La Villa Cotta*
Cyd's Compassion T, pb
Dependable Beauty S, mp
Desdemona S w
Desmond Tutu
see Archbishop Desmond Tutu
Doreen's Centennial S mp
Easy on the Eyes S, m
Eyeconic Mango Lemonade S ab
Gaye Hammond S, yb
George Manners S, dr
Gypsy Sue S ab
Harlow Carr S mp
Hot Paprika S or
Imogen S ly
La Villa Cotta (Crazy Love) S ob
Lavender Crush S m
Marjorie Kinnan Rawlings HKor, mr
Maura la Cava T, pb
Mauvelous S m
Miss Linda Bischoff S mp
Mrs Howard Moore S mp
Mrs Sam Houston S mp
Never Alone S, rb
Northern Encore (Polar Joy) S lp
Olivia Rose Austin S mp
Oscar Peterson S, w
Oso Easy Urban Legend
see Urban Legend
Peachy Keen
see The Peachy Keen Rose
Peachy Knock Out
see The Peachy Keen Rose
"Peggy Martin" (The Katrina Rose)
HMult mp
Pink Splash Flower Carpet S pb
Polar Joy *see Northern Encore*
Promises S pb
Rainbow Happy Trails S yb
Rita Dennis S dr
Roald Dahl S ab
Screaming Neon S mr
The Ancient Mariner S mp
The Billington Rose S dp
The Look-A-Likes Apple Dapple
(Apple Dapple) S w
The Peachy Keen Rose
(Peachy Keen Rose, Peachy
Knock Out) S pb
The Poet's Wife S dy
Thomas á Becket S mr
Top Gun S mr
Urban Legend
(Oso Easy Urban Legend) S mr
Watercolors Home Run S yb
Xiuhcoatl HKor, mp
Xuchitl N, lp

SPECIAL GROUP

Bajazzo LCl or
Caribbean Breeze F op
Friend's Embrace F dy
Mango Salsa S op
Secret Lady HT pb