

Volume 26, Number 2 Spring 2014

The Cut Flower

QUARTERLY

Association of Specialty Cut Flower Growers Inc.

for growers of field and greenhouse specialty cuts

Inside this Issue

From the President _____ 3

Education is a never-ending process, and vital at all levels of the horticulture industry.

Grower Profile _____ 6

Jim and Sue Cummings's Redwood Farms is a perfect model of a family-run farm, and they're happy to sell their flowers to local wholesalers.

IPM Update _____ 8

Boxwood may not be the best choice for filler material. Stanton Gill describes another pest for cut flower growers: boxwood blight.

Culture Profile _____ 10

Robert McNeil shares hydrangea evaluations for field hardiness, in container production systems, and in-ground production under hoop houses.

Cornell-copia _____ 13

A chance overwintered larkspur leads to fall-sowing experimentation at Cornell University.

Small Things Considered _____ 14

Just how ethical are you? Gay Smith presents a quiz for the taking.

Research Updates _____ 16

Zinc improves gladiolus cut flowers; effective fungicides for gladiolus rust; water and nitrogen needs for gladiolus.

Postharvest Handling _____ 18

Does 7Up really make cut flowers last longer? NCSU researchers tested several homemade postharvest solutions.

Book Review _____ 23

Fresh from the Field Wedding Flowers is a welcome—and beautiful—addition to any florist's or grower's bookshelf.

Regional Reports _____ 24

ASCFG News _____ 32

From the Director _____ 38

Cover photo courtesy of
Lisa Ziegler

Guts from Harris Seeds

SEEDS PLUGS & LINERS GROWING SUPPLIES

Let us help your business bloom!



Whether you're a new or experienced grower, look to Harris Seeds for head-turning, high quality cut flower varieties. You'll find over 150 varieties in seed form, plus many more offered as pre-started plugs. We research, trial, and select cut flower varieties for exceptional field performance, appearance, and vase life. Find a wide selection of essentials like sunflowers, statice, and zinnias, along with less-common cuts and professional-grade supplies.

800-544-7938 • www.harrisseeds.com

Harris Seeds Professional Ornamental Growers' Seed Catalog
Harris Seeds Professional Ornamental Growers' Plug & Liner Catalog



HARRIS® SEEDS
A Grower Friendly Company

355 Paul Rd., PO Box 24966

Rochester, NY 14624-0966

www.harrisseeds.com

A035

The Cut Flower
QUARTERLY

is published by
The Association of Specialty
Cut Flower Growers, Inc.
MPO Box 268, Oberlin, OH 44074

Judy Marriott Laushman, editor.
Linda Twining, layout.
2014 ASCFG
ISSN 1068-8013

PUBLISHING SCHEDULE

ISSUE	DEADLINE
Spring	March 1
Summer	June 1
Fall	September 1
Winter	December 1

All articles, features, and display advertising must be received by these deadlines for publication. *The Cut Flower Quarterly* welcomes advertising. Contact ASCFG for advertising insertion order form.

Contact Judy Laushman
(440) 774-2887 or ascfg@oberlin.net
www.ascfg.org

Subscription is included with ASCFG membership. No part of this publication may be reproduced in any form without the written permission of the ASCFG. No endorsement of named or illustrated products or companies is intended, nor is criticism implied of products or companies not included.



Education is the Key to Growth

Frank Arnosky

A few years back, the editor of a farming publication asked a number of growers to name the one thing they considered most important in making them a success as a farmer. I think the answers the editor had in mind were something tangible, like a new piece of equipment, maybe a specific crop, or a great location or market. I said, “Education.” I felt it was my education in horticulture that made it so that we could withstand all the adversity that Texas had to throw at us and still take advantage of the incredible market that we had for locally-grown flowers. But my answer didn’t get published. I was told that it really wasn’t feasible that new growers go back and get an education in horticulture, so that answer wouldn’t work.

I still believe that I had the best answer, even though I understood that most people were not going to enroll in a four-year program in horticulture. But without knowledge, how can you take your project to the next level? How can you be the very best?

For over twenty-five years, the ASCFG has been the leading resource in educating growers about producing and marketing specialty cut flowers. That is still the main focus of the association. “Growing

Growers”, the theme of this year’s National Conference in Delaware, puts our focus front and center. The Conference highlights what makes our organization unique: our members are so willing to share information and lift up other growers with their enthusiasm for what they do.

also need to look at recruiting young people into our industry to grow our businesses. To that end, the Dave Dowling scholarship was established, and this year we were able to award scholarships to two students enrolled in horticulture programs. I can tell you firsthand how important

time recruiting people to work at our farm. We recently posted an internship opportunity on the Texas A&M University’s “Aggies for Hire” website. We offered a chance to work and learn with us in all we do, \$10 an hour, housing, and a \$500 scholarship toward the fall semester when they finished the summer. We had zero responses. None. Zip.

There are fewer and fewer students studying agriculture and horticulture every year. Enrollments are down, and we have a very hard time recruiting people to work at our farm.

It reminds me of something the writer Bill Moyers once said when asked if he was a “Liberal”. He told the interviewer, “If by ‘Liberal’ you mean that I believe that collectively we can accomplish more than we can working as individuals, then yes, I am a Liberal.” Politics aside, that is what I think is best about this group. Collectively, we all do better when we come together and share our strengths.

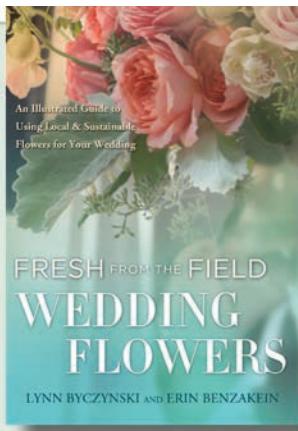
But education within our group is only one way we can grow better growers. We

that is because our son Janos received this same scholarship before I knew I would be on the ASCFG Board. Aside from the financial support, these scholarships tell students that there is an industry out here that needs and supports them, and that they are making a good choice to pursue a career in floriculture.

This is becoming a serious issue. There are fewer and fewer students studying agriculture and horticulture every year. Enrollments are down, and we have a very hard

I can’t help compare this with what I saw during a recent trip to Ecuador. The farm we visited had a dedicated and well-trained team of young graduates managing the farm. The two-year Vo-Ag programs there turn out capable, enthusiastic people willing to work in the cut flower industry. Ecuador has a lot of advantages over us, and I found myself green with envy over the availability of young people with a real passion for growing.

I think our industry is finally waking up to the seriousness of the matter. Recently, a group of leading horticultural institutions, including the American Society for Horticultural Science, Longwood Gardens, The American Public Gardens Association, and others have put together a program to promote horticultural awareness among the general public. The program seeks to improve the public’s perception of horticulture as an important industry through outreach to young students in



A NEW BOOK PROMOTING THE USE OF LOCAL FLOWERS FOR WEDDINGS

Created for the eco-conscious couple who wants to have a greener wedding, floral designers who want to jump on the locally grown trend, and specialty cut flower growers who want to enhance their floral design skills.

- Four in-depth videos totaling 75 minutes teach you the basic mechanics and overall thought process involved in creating lush, seasonal wedding flowers.
- Four step-by-step photo essays demonstrate how to make a hand-tied bouquet, boutonnieres and corsages, mason jar centerpiece, and tall arrangement.
- Dozens of photographs of local flowers used in real weddings.
- Information on growing more than 100 flowers, foliage, and other botanicals for weddings.

SOFTCOVER, 7"X10", 112 PAGES, DVD WITH VIDEOS. \$40 (\$32 TO GFM SUBSCRIBERS) + \$5 S/H. GROWINGFORMARKET.COM; 800-307-8949

programs such as 4-H and FFA, with the long-term goal of increasing the number of young people who see horticulture as a valuable and fulfilling career. This is still in the planning stages, but the ASCFG has been asked to be a participant in this project, and I believe our support is very important.

We have also been asked to support a national effort to promote and market American-grown flowers through a logo program that will be available to American growers. The ASCFG has contributed \$2000 to the development of a "Certified American Grown" logo. This is not part of any federal marketing or promotional order, or government organization. The group, led by the California Cut Flower Commission (CCFC), includes grower organizations from Florida, Alaska, and Hawaii. This is a grassroots effort, led by growers themselves, to increase awareness of local, American-grown flowers. The logo will be available to all American growers to use on a fee-based system. The fees will be on a sliding scale according to sales volume, and the CCFC will administer the program until a group can be formed to manage the logo program. As I write, the logo design is complete and will be released as soon as the legal and trademark matters are finished.

This program is an effort to increase awareness that local, American-grown flowers are available year-round and that consumers can make a choice between imported flowers and American-grown flowers. This might seem like a no-brainer, but even the White House didn't understand this until recently. At a recent State Dinner given for French President Francois Hollande, the White House (finally!) used American-grown flowers for the table arrangements. USDA Deputy Secretary Krysta Harden wrote about this on the USDA blog, and received almost 150 responses, more than just about any other blog the USDA ever posted! You can see the blog and add your encouragement at <http://1.usa.gov/1m9Ipj7>

Why haven't the White House and other U.S. governmental agencies been using American flowers all along? Education. As with most consumers, they probably didn't know they had a choice. But right now we are building momentum for educating the American public that they do have a choice. In late February, a group of growers visited congressmen in Washington, D.C. to stress the importance of our industry and the challenges we have from imports and other factors. In response, Rep. Lois Capps(D) and Rep. Duncan Hunter(R), both of California, launched a bipartisan Congressional Cut Flower Caucus to promote the interests of American growers in Congress. This is a huge step towards getting recognition for our industry, and the caucus will focus on educating members of Congress and their staff about the importance of the domestic cut flower industry. Floriculture is the third-largest agricultural crop in the nation, and it's about time we flexed a little muscle!

Bringing it back home, I think that education has to be a never-ending process. After 20 plus years of farming in Texas, we have taken a left turn and started a peony farm in northern Minnesota. Talk about a learning curve! But that is what keeps it fun. And getting back to my original thoughts about education, I have to point out the inspirational story of Mimo Davis.

At the recent Growers' School in Fort Worth, she gave an amazing presentation about greenhouse growing, but her personal story is even better than that. Starting from New York City, she ended up growing cut flowers in rural Missouri. After growing for many years, she realized that there was just SO much more to learn, and she went back to college. Mimo got a degree in horticulture, followed that with a master's degree from North Carolina A&T, and is now a Regional Horticulture Specialist at Lincoln University in St. Louis.

On top of that, she is back growing cut flowers, and with her partner Miranda Duschack, she now runs Urban Buds in St. Louis. They are currently restoring an old florist greenhouse in the middle of town. It is one of the coolest projects I have ever seen. I hope Mimo will be presenting her story at the Growers' School this fall, and I can tell you, it's not to be missed. At one point in Fort Worth, there wasn't a dry eye in the room.

We'll see you in Delaware.



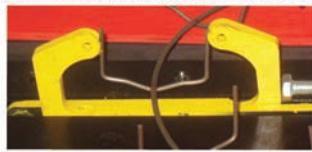
SunflowerSelections.com™
QUALITY SEEDS FOR PERFECT FLOWERS

Expand your sales season making floral wreaths, swags, etc. or Christmas greens available locally (or from us).

Maple Ridge Supply offers a full line of supplies and materials to help you make products for continued sales through year-end.



Our stapler-clamp machine folds wire clamps flat to hold smaller stems tighter than other wreath making machines or devices.



MapleRidgeSupply.com
800-968-9627

Call for catalog

The beauty still begins right here.



For more than 30 years, Headstart Nursery has been one of the nation's top producers of specialty cut flower plugs. Our extensive product list includes all of the most popular crops, including Asters, Delphiniums, Statice, Lisianthus, Snapdragons, and Godetia. Newer specialty product lines include Cyclamen, Primula, and Begonia, as well as perennials, annuals, herbs, and vegetables.

**HEADSTART
NURSERY INC.**
Rooted In Quality.

408.842.3030
HeadstartNursery.com

Gilroy, CA • Mecca, CA • Castroville, CA

**Johnny's
Selected Seeds**
NEW FOR 2014



'Chim Chimine' Rudbeckia



'Aromatto' Basil



'Eternity Improved' Celosia



'White Finch' Orlaya



Visit Johnnyseeds.com to view our online exclusive 2014 Cut Flowers Catalog

Johnnyseeds.com 1-877-564-6697

Jim and Sue Cummings, Redwood Farm

Megan Bame

Sue Cummings grew up in rural southern New Jersey across the road from her grandparents' flower farm, established in 1970. Her father had to talk her mother into taking over the flower business (and moving it across the road to their horse farm) when she was a young adult. In 2009, when her father, Martin Baptist, was diagnosed with stage 4 lung cancer, Sue talked her husband, Jim, into becoming third-generation flower farmers. Sue, an only child, couldn't bear to see all of her parents' hard work waste away.

Jim and Sue lived in northeast Maryland, about an hour away. But over the course of two years they moved back to New Jersey to care for her father and the farm. Her father spent his last years training Jim and Sue in the ways of growing, maintaining and harvesting woody cuts. In 2010, after his passing, Jim and Sue took over full operation of Redwood Farms, a wholesale flower business. Because he had been slowing down, many of the plants had become overgrown and it took substantial time and money to refurbish the farm's inventory.

While Jim and Sue enjoyed gardening and took special pride in their home landscape, neither had any formal education in horticulture. Jim has a degree in philosophy and had a corporate career, and Sue has been a full-time school bus driver for 30 years, something she continues to do. Sue says, "In five years working on the farm, we're already looking and planning ahead to our retirement crops; more woodies that will allow us to stay out of the field in the summer." Right now, the 8-acre farm is one-third woodies, one-third peonies, and one-third annuals.

Diversified Markets Prove Successful

They utilize a field hoop house, a greenhouse (that goes mostly unheated due to the cost), and four low tunnels. They spend January and February cutting pussy willow, fantail willow and curly willow. Lilacs, though a less dependable crop, usher in spring and by May, they are busy with the six-week peony season. Lisianthus, a few other annuals, and hydrangea carry them through summer, and for the fall they grow deep jewel tone celosias and cut red twig dogwood. December had previously been a month of little to cut, but Jim found a new niche this past year, foraging plant material from the farm and creating "grave blankets", 2 x 4' evergreen sprays customarily laid on the grave of loved ones at Christmas.



The foray into grave blankets and an increased interest in annuals is due largely to a farmstand their daughter established last year in front of the farm. The stand, called Punky Turners, is located on a busy road with ample room for cars to pull in, and runs on the honor box system. Their daughter grows and sells vegetables, but they found that, even with a limited supply of annuals, the flowers always outsold the vegetables. In particular, bunches of sunflowers, mixed flower bouquets and mason jars of zinnias were fast and reliable sellers. Jim is the designer in the family, but Dianna, their oldest daughter, has started designing some bouquets under Jim's tutorial. This year they have added at least 20 more annual varieties to improve the offerings at the

I got a season-long bouquet list from the Bulletin Board, from everyone's favorite advisor, Joe Schmitt. I check the Board daily and have learned so much from the postings; such shared knowledge is priceless.

farmstand. Sue says, "I got a season-long bouquet list from the Bulletin Board, from everyone's favorite advisor, Joe Schmitt. I check the Board daily and have learned so much from the postings; such shared knowledge is priceless."

Despite the recent retail venture with the farmstand, the Cummings consider Redwood Farms a wholesale flower farm. They market their stems to Delaware Valley Wholesale Florist, located only 20 minutes from the farm.

Peony is their primary crop. They grow 18 different varieties and marketed 23,000 stems last year. Sue's mother was a meticulous recordkeeper, noting that 20 years ago peonies sold for \$1 per stem. Today, Sue gets \$1.10 per stem. While they were a premium earner for her parents, they're just another part of the product mix today.

Sue acknowledges that selling to a wholesaler means accepting a slightly lower price, but she says, "The check always cashes, and I don't have to spend time chasing the money." They typically cut twice a week and deliver cut stems within 24 hours of harvest. She communicates with the product manager by phone, e-mail or text message, letting him know a week in advance what will be available. Jim and Sue usually deliver, but in cases of a large order, the wholesaler will send a truck.

Sue has observed, "The new color trend for peonies is definitely coral. They are the first to bloom here in zone 7 and the florists can't wait to get them." She says bulb and root suppliers also know this and wholesale prices have increased substantially. For the farm, that means expanding only by digging and dividing, a long and drawn-out process, but a tried and true method.

Dealing with Disease

According to Sue, "Being so close to the ocean, humidity—and the subsequent disease pressure—is our number one enemy." Soil health is on her "most important to learn about 'to-do list'." Every year, her understanding and management improves, but she says, "We deal with every mildew out there, starting as early as March." White varieties take the biggest hit, including total crop failure of white peonies and white lilacs, in different years. She tries to be proactive and diligent with spraying of fungicides, realizing timing is key. To avoid getting a pesticide license, she uses as many OMRI-rated products as possible.



The lilacs were hit with phytophthora and it has taken three years to turn that around, but she's hopeful for a good cut this year. Pruning has been another big learning curve, and obviously an important one with woody cuts. She says, "It seems every year we learn a little more and screw something up at the same time."

Jim and Sue may not have envisioned themselves as cut flower growers, but they have reinvigorated the farm and have an enthusiasm for the future. Their dedication and success would surely have made her parents and grandparents proud.

*Megan Bame
is a freelance writer in
Salisbury, North Carolina.
Contact her at meganbame@yahoo.com*

Diversify Your Filler Options – Not With Boxwood

Stanton Gill

Boxwood (*Buxus*) provides versatile filler material for cut flower designs, and is especially popular around the winter holiday seasons.

In 2013 I compiled a summary of the best boxwoods for cut stems, based on evaluations we had conducted over several years. We were looking for species and cultivars that were least susceptible to boxwood leafminers and boxwood mites, and were good for cut stem use. Leafminers and boxwood mites are important considerations for those harvesting stems, as they make the foliage unattractive—if not completely unusable—for commercial use. So these data are still valid.

Times change, and sometime very rapidly. Boxwood may no longer be such a good choice for cut flower growers unless you already have established plants, and are not bringing in plants from outside sources. What changed? The answer is boxwood blight, caused by *Cylindrocladium buxicola*, an invasive fungus that hit the United States and hit it hard. This disease has been around in Europe, where it was described by a plant pathologist, and is now an American problem. It is not known how it got to Europe or how it entered the United States.

Boxwood blight was first confirmed in the U.S. in October of 2011 and has spread rapidly. Since it was found first in Connecticut and North Carolina, it has also cropped up in Ohio, Delaware, Oregon, Massachusetts, Maryland, New Jersey, New York, Rhode Island, Pennsylvania, and Virginia, as well as British Columbia, Ontario, and Quebec. The disease is introduced with new plant material or infested plant parts. If your

plants are well established, I recommend you not bring in new boxwoods until we have a really good way of ensuring new material is clean. If you must bring in other plants I would make sure the supplying nursery is following the American Nursery and Landscape Association's standards for monitoring and treating this disease.

Blight Symptoms

Boxwoods have always had lots of disease problems but this one is very serious. Severe infestations can result in complete defoliation. Some species of boxwood suffer from milder cases, which still result in significant leaf drop and stem lesions, creating bare and brown patches.

Initial symptoms appear as dark or light brown spots or lesions on the leaves, often with dark borders. The spots enlarge and then coalesce, often with a concentric pattern. Infected leaves then turn brown or straw colored. Defoliation often occurs very quickly after foliar symptoms. Stems can develop black to brown colored cankers with angular, diamond-shaped patterns.

Samples of boxwoods can be double bagged (plastic bags) and sent to your state university plant pathologist or the pathologist at the state department of agriculture for identification.

North Carolina State University published a list of boxwood varieties they felt were somewhat resistant to boxwood blight which gave us a glimmer of hope in 2012. Since then research showed this hope may have been premature.

Plant pathologists from NCSU recently shared pre-publication results regarding what they have called their “Boxwood Blight Trojan Horse Study.” In the study, graduate student Miranda Ganci and her professors Drs. Kelly Ivors and Mike Benson evaluated the ability of cultivars to be tolerant of boxwood blight. According to their report, the tolerant varieties, which showed minimal symptoms of infection following inoculation, were still able to produce viable spores and efficiently spread the infection. These results suggest that boxwood plants considered tolerant are still capable of carrying and spreading the disease despite a general healthy appearance.

Not Just Boxwood is at Risk

The pathogen *Cylindrocladium buxicola*, (=*Calonectria pseudonaviculata* old name) has shown an ability to infect every species of the Buxaceae. A recently published article includes the native Allegheny spurge (*Pachysandra procumbens*), which is found in isolated pockets from Florida to Pennsylvania, as a potential host.

Plant Health Progress published an article, by lead author Dr. Jim LaMondia of the Connecticut Agriculture Experimental Station (CAES), describing the ability of boxwood blight to infect native pachysandra under lab conditions. The same lab had conducted similar work last year showing the susceptibility of Japanese spurge to the pathogen. Subsequently, more than twenty infections of Japanese spurge have been found in landscapes in Connecticut.

Adding to the concern is the study's conclusion that the infections on Allegheny spurge appear to be more aggressive than what was found on Japanese spurge. In the case of our native pachysandra, necrotic lesions occurred on the stems and leaves. Stems are eventually girdled, causing shoot and/or plant death. Furthermore, sporulation of boxwood blight was greater on Allegheny spurge than its Japanese counterpart.

If you use spurge foliage as filler, avoid planting it near boxwood.

Research scientists continue to pursue new identification and treatment tools while the Agriculture Research Service of the USDA has begun evaluating varieties for boxwood blight-resistant genes. The Boxwood Society of America is conducting a special seminar on boxwood blight on May 12 at the USDA facility in Beltsville, Maryland. The pathologist that originally identified the disease in England will be presenting at the conference as well as Dr. Kelly Ivor, one of the NCSU researchers.

If you're growing boxwoods for cut stems, check them regularly during the season for cankers on the stems, spotting of foliage, and defoliation. Visit <http://americanhort.theknowledgecenter.com> to see pictures of symptoms. You do not want sell cut stems from infested plants to be used in arrangement and chance spreading this disease to new sites. If you are willing to spray fungicides you can look at the recommendations from North Carolina State University Extension at the Americanhort website.

It would not be a bad idea to start looking around for other plant material that can be used as fillers in arrangements until this whole boxwood blight problem is sorted out and a really good control or resistant varieties are developed. Just like the stock market: it is best to be diversified.

Stanton Gill
is Extension Specialist in IPM,
University of Maryland Extension and
Professor, Landscape technology Program,
Montgomery College.
Contact him at sgill@umd.edu



THE BELLE OF THE BALL NEEDS A CROWD TO STAND OUT IN.

Casting about for a fabulous filler?

Your big, bright blooms steal the show on the retail shelf. But in the vase, your stars need a supporting cast.

Artemisia 'Powis Castle' is a great foil for your dazzling divas.

- Feathery silver foliage enhances every hue.
- Elegant accent for wedding work.
- Tolerates heat, humidity and stingy soils.
- Rarely flowers
- Hardy in Zones 5 - 9

Surround your headliners with *Artemisia 'Powis Castle'*, ready for the field in 72s.

Call today to place your order!

Toll Free: 1.877.804.7277

www.ECGrowers.com

sales@ecgrowers.com



Scan to access our mobile web site

Congratulations to
ASCFG's
700th Member!

Dawn Smith
Bellaire Blooms
Bellaire, Michigan



Hydrangea - Nice Niche

Robert E. McNeil

Cut flowers in the United States is a niche market for greenhouse growers, but some plants may provide some growers with the right opportunity to meet the needs of consumers clamoring for locally grown items. (See sidebar.) One such opportunity may come in the form of hoop-house-grown hydrangea. Here's why: From about 1995 – 2010, the University of Kentucky had an active research program evaluating hydrangea production for cut flowers, which could be sustainable in the Ohio River Valley. When visiting production sites for *Hydrangea macrophylla* in Brooks, Ore., Nantucket Island or Varengeville-sur-Mer, France, one observes hydrangea growing at their best outside even though they're outside their native Japan. The environment of the Ohio River valley, however, could not duplicate this growth.



Flower color shades result from different cultivars or the amount of aluminum applied

STEP 1 in the research program at the three UK sites started by evaluating about 250 cultivars of *H. arborescens*, *macrophylla*, *paniculata*, and *serrata* in outdoor field production. Cultivars of *H. arborescens* and *paniculata* survived and produced normal production for cut flowers. With *H. macrophylla* and *serrata*, one of three things occurred: 1) plants were not hardy for zone 6 and died; 2) plants survived and produced excellent foliage but few if any flowers, 3) plants thrived with foliage and sufficient flowers. The most flower productive *H. macrophylla* were the remontant cultivars. The 250 cultivars included selections, which had originated as landscape plants or floriculture pot plants.

STEP 2 in the research was to evaluate plants in a container production system since both greenhouses and nurseries were producing these cultivars successfully for their respective customers. Plants were grown in No. 5 containers in unheated overwintering hoop structures with white poly in the winter and 55 percent shade in the summer. Still, there were mixed results in number of flowers produced with plants from landscape or floriculture origins. Flower buds are produced in late summer or early fall for the next season's flower crop. *H. macrophylla* non-acclimated flower buds appear to be injured around 28° F. This is the limiting factor for success in step 2 above or with floriculture pot plants.

To gain additional temperature control during the overwintering process, plants were covered with a layer of poly directly on the pruned plants in the hoop structure. Ground heat helped provide additional temperature protection for flower buds and as a result more flowers were produced.

STEP 3 in the research was to place cultivars in overwintering hoop structures but grow them in the ground. These were also covered with poly inside the house during the winter. During June-July 2004, 288 plants representing various cultivars produced 7,000-plus flowers.

This was also the time that Highland Moor propagation nursery in Midway, Ky., entered the business world in 2002. Half of Highland Moor's business plan was to produce cut flowers. A 35-foot x 297-foot hoop structure (retrofitted from float bed tobacco production) became the primary cut flower production house. The house is covered with four-year opaque poly. Ventilation is via rollup side walls and endwall openings. About 1,400 plants representing twelve *H. macrophylla* cultivars and 280 plants representing three *H. paniculata* cultivars are grown in No. 5 containers.

Substrate: pine bark mix

Fertilization is an 18-8-10 standard product and not the hydrangea mix. The hydrangea mix was initially used and it kept stem length shorter for plants being marketed for retail or landscape sales. For cut stem production, short stem length is not ideal, therefore, the standard fertilizer mix was used to achieve longer stems. Irrigation is with a spray stake rated at 2.5 gph and the application is three times per day for 3 minutes each during the hot summer months. Since plants are under poly and irrigation is at the container surface, no water touches the flowers while in production.

Pest control is a must

Spider mites and aphids have been the primary insect infestations. Beneficials have been used to control both. Since chemicals are not used we have a healthy praying mantis population in the house. Powdery mildew, phytophthora, etc. have been the disease problems and there are definite cultivar differences. All plants have been treated with biologicals.

Without aluminum in the substrate, *H. macrophylla* cultivars will be pink. Where blues or off colors are desired, aluminum sulfate has been applied. The application occurs three times during the year. The white flower cultivars of *H. macrophylla* or the flowers of *H. paniculata* do not respond to aluminum application.

Ninety to 100 days after new growth starts, flowers are saleable. For us, late February or early March is when buds break. Blooms are ready the last days of May or first days of June. Once spring was early enough for blooms to be available for Mother's Day. The season ends in early November when an outside temperature drops to 25° F. The remontant cultivars *H. m.* 'Oak Hill' and 'Decatur Blue' are the first to produce blooms.

By July, these cultivars can be harvested in the green stage. Cultivars such as 'Masja' and 'Red Star' are only harvestable during June and July. No good second color is produced. In July, *H. paniculata* 'Limelight' and 'Pinky Winky' come into bloom as white or creamy white. With the remontant cultivars producing new lateral growth in June, they will be in bloom again in 90 to 100 days. Flowers on the second flush tend to be a little smaller than the first of summer flush as they are produced from mid-September until a freeze. Differing from what I have seen farther north, our *H. p.* 'Limelight' flowers start turning green in September and will hold the color until a freeze. I believe *H. p.* 'Pinky Winky' requires 50° F fall nights in order to develop their best fall red flower color. Both cultivars have value as fresh or dried cuts.

Cutting a niche

Although greenhouse cut flower production dates back to the mid-1700's, most cut flowers are imported from South American countries these days, particularly Colombia, where the climate is favorable and labor is cheap. In short, cut flowers are a niche market in the United States.

However, as a University of North Carolina Cooperative Extension study (A Brief History of Specialty Cut Flowers) noted, "when one door closes, another opens." Consumers, tired of the usual fare of imported cut flowers and supportive of the "locally grown" movement, have given greenhouse cut flower growers a little boost of late.

Today, consumers have a more varied assortment of cut flowers from which to choose. These include oriental lilies, hydrangea, and sunflowers, fresh-cut from the greenhouse and fields. These, according to the study, are grown in a "hodge podge" of structures ranging from heated greenhouses and minimally heated greenhouses, to unheated high tunnels, in addition to being field grown. Consumers can purchase these cut flowers directly from growers via farmers markets, roadside stands, and the occasional "u-pick-'em" operations.

There is also a push for more locally grown cut flowers, thanks to Debra Prinzing, author, floral designer, and champion of the "Slow Flowers" movement.
— Neil Moran

Neil Moran is a horticulturist and freelance writer based in Sault Ste. Marie, Mich.



From left to right: *Hydrangea paniculata* 'Limelight', *Hydrangea macrophylla* 'Mathilda Gutges' with aluminum, *Hydrangea macrophylla* 'Red Star', *Hydrangea arborescens* 'Annabelle' in the green stage.

CULTURE Profile

Our hydrangea cut flowers are sold in several different markets. Event Planners consume the greatest number of stems at any one time and their counts will vary from week to week. Florists tend to use a constant number from week to week. Internet sales are sporadic and our entry into this distribution system occurred because we had Highland Moor shipping boxes and Arrive Alive packaging. The fourth market is two large Farmer's Markets where both cut stems of hydrangea and hydrangea vases are sold weekly from May to November.

H. macrophylla stem length can vary depending on how the designer uses it. Most stems are bundled in 14-inch plus lengths for event planners, florists and Internet sales. At times 8-plus-inch stems can be used by designers. For *H. paniculata*, small flowered stems can be in the 18 – 24-inch range. While the larger flowered stems are cut at 44-plus inches. All plants from both species produce some small flowers. These are cut at 6 inches and five stems are bunched and banded before placing in a vase for a Farmer's Market product. The vases are small with wide bases and are purchased by the pallet.

End users in each market dictate what colors are sold annually. Articles have been written on hydrangea, with emphasis on techniques to produce uniformity of size and color (pink or blue) for the crop. Other than with an individual sale, uniformity does not exist with cut flower production. In one week there can be demand for light pink, medium pink, bright pink, light blue, medium blue, dark blue, blue-green, raspberry, lavender, peach, antique, etc.

The competition for a local hydrangea cut flower grower is the international trade and production from Europe, Africa, and South America. For a local designer, color is always important and the traditional wholesale industry has not been able to consistently bring the right or best color to the end user.

Breeders in Europe and U.S. have been creating some marvelous new remontant color combinations for hydrangea landscape use. Cut flowers growers should benefit from this.

In addition, Highland Moor will be bringing into production two new cultivars in 2014 that are now up to size. in 2014 for production in 2015 or 2016.

Robert E. McNeil is a retired professor with emeritus status from the University of Kentucky. He has been involved with the Hort Alliance Group and assisted with the formation and function of Highland Moor propagation nursery in Midway, Kentucky

All photos courtesy of Robert E. McNeil

This article was originally published in the February issue of *Greenhouse Management*, www.GreenhouseMag.com.

www.ameriseed.net

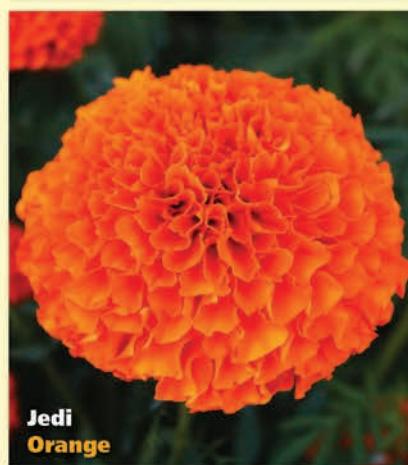
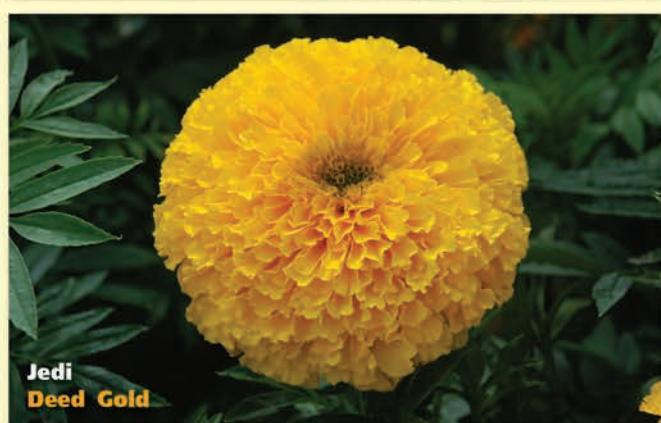


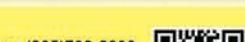
AmeriSeed
Quality F1 Hybrid Marigold Seed

Jedi Series
The Highest Marigold Cut Flower

Large and firm flowers with a long shelf life. Good flower shape. Continuous flowering in the field. Tolerant to soil borne diseases such as Fusarium. Excellent adaptability to a wide range of climates.







For more information
AmeriSeed, Inc Tel : (805)733-2500 Fax : (805)733-2600
3877 Via Parte, Lompoc, CA 93436
E-mail : sales@ameriseed.net
www.ameriseed.net



What is a Good Planting Time for Larkspur?

Chris Wien

In the Northeast, many of our annual cut flowers are sown in a greenhouse in the spring, and then transplanted into the field or a high tunnel. Some species, however, are tough enough to survive winter in the seedling stage for a head start in the spring. Larkspur (*Consolida*) is one of these. We recently conducted an experiment that illustrates the effect well. The idea was generated from a chance seedling that overwintered in our high tunnel from fall 2011, and produced great stems in spring 2012, three weeks ahead of our spring-transplanted larkspur.

To compare the two practices, we sowed two varieties of larkspur ('Sublime Bicolor' and Cannes Mix) in the high tunnel on Oct. 24, 2012, and the same varieties in a greenhouse on Feb. 13, 2013. The spring planting was put in the tunnel on April 8.

The fall-sown crop survived the winter in the high tunnel without secondary protection, and came into flower in early June (see Table). This crop had 13 percent longer stems, but the number of cut stems were comparable.

The spring-planted crop flowered about two weeks later (see Figure). Cannes Mix had slightly higher yields of stems than 'Sublime Blue'.

The results of this trial indicate that fall direct sowing of larkspur is a preferable method of establishing the crop, as long as high tunnel space is available. If you typically pinch larkspur in the spring to produce multiple stems per plant, you can still accomplish this by putting 2 to 3 seeds per hole in the fall planting. Fall sowing avoids the need for greenhouse transplant production, and if an even earlier harvest is desired, using a low tunnel over the seedlings would probably accomplish that.

Is fall sowing of larkspur also possible in the field? It should certainly be tried: we sowed some outdoors in this trial on October 24, but only a few survived the winter. An earlier sowing date might have improved survival.

Acknowledgements: I am grateful for the excellent technical help of Priscilla Thompson and the financial assistance of a federal 'Hatch' grant for part of this work.



**Larkspur trial, showing spring-planted plots in front, and fall-sown plants behind.
Photo taken June 10, 2013.**

Table: Effect of planting season and variety on stem length, yield and relative earliness of larkspur.

Season	Variety	Stem length, cm	Stems per plant, no.	First flower date
Fall	Sublime Blue	72	3.6	June 6
	Cannes	70	6	June 6
Spring	Sublime Blue	59	3.6	June 17
	Cannes	64	4	June 22

*Chris Wien is Professor of Horticulture at Cornell University.
Contact him at hcw2@cornell.edu*

Practical Wisdom

Gay Smith

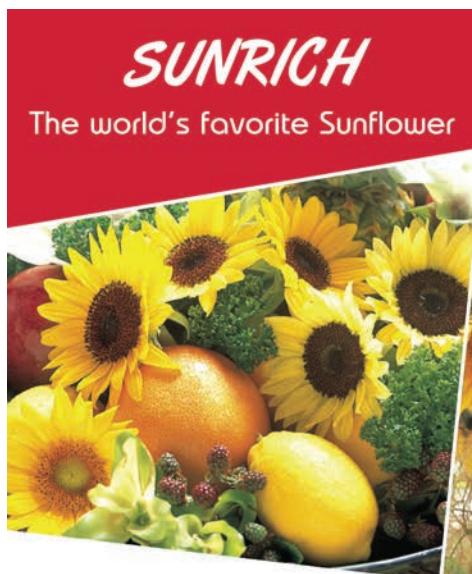
One of the pleasures of interacting with ASCFG members is getting to know people who make their living in the entrepreneurial endeavor of growing flowers. Working close to the land is very different than being an employee in the corporate world or in a small company. It's fascinating to gain insight on what it means to produce what you sell. For me, farm visits rouse feelings of admiration and wonder about how much energy, common sense and tenacity it takes to create a business that allows you to live what you believe. Contemplating the courage it takes to stay true to your values and belief system got me thinking about ethics and what defines ethical behavior. Digging

Farm visits rouse feelings of admiration and wonder about how much energy, common sense and tenacity it takes to create a business that allows you to live what you believe.

nor the name of the presenter, but the questions on an ethics quiz the speaker distributed got me thinking about how we describe and quantify ethical behavior.

No doubt, ethics are an important part of business life, but it's not easy to agree on a uniform definition or guidelines of applying ethical principles in the day-to-day work world. Basically, ethics means translating life-guiding values such as truth, honesty, and respect for others into daily behaviors and concrete actions. Although there may not be one specific definition of ethical behavior, most people recognize it when they see it in action.

through files, I found notes from some class taken at a conference several years ago discussing the ethics of business. I don't recall the name of the convention



SUNRICH
The world's favorite Sunflower

Sunflower F1 Sunrich Series:



Gold



Lemon



Orange



Lemon Summer*



Orange Summer*



*5 to 10 days earlier than Sunrich Lemon and Orange, suitable for sowing & growing under long day conditions



AMERICAN TAKII
www.takii.com

For more information contact your preferred broker or American Takii, Inc. at 831-443-4901

TAKII SEED TAKII SEED TAKII SEED TAKII SEED TAKII SEED TAKII SEED TAKII SEED

Here is the ethics quiz. Score your responses using 2, 1 or 0. If you strongly exhibit the trait - 2; if you moderately exhibit - 1, and if you don't exhibit the trait at all - 0. According to the author, the closer your score is to 60, the more you exhibit behaviors that the people around you are likely to consider ethical. More important than your score, perhaps, is that considering these questions gives insights to traits that foster strong workplace relationships.

Ethics Quotient (author unknown)

1. (2, 1, 0) I'm knowledgeable about the needs of my employees or clients.
2. (2, 1, 0) I'm loyal to my customers, clients, or employer even when my actions may cause me short-term financial losses.
3. (2, 1, 0) When I hear negative comments that might affect the organization, I'm quick to let my superiors or peers know.
4. (2, 1, 0) I maintain the privacy of confidential and proprietary information.
5. (2, 1, 0) I demonstrate respect for people who have different backgrounds than my own.
6. (2, 1, 0) I treat subordinates and peers equally, and am careful not to show personal favoritism.
7. (2, 1, 0) I ask others to perform only tasks consistent with high professional and personal standards.
8. (2, 1, 0) When in the company of people who speak ill of my organization, I defend my organization.
9. (2, 1, 0) When I can't meet a request from a superior or customer, I'm candid about my limits.
10. (2, 1, 0) When I notice waste, I report it and try to stop it.
11. (2, 1, 0) I transmit only information I know to be accurate to other people.
12. (2, 1, 0) When I make a mistake, I'm quick to apologize.
13. (2, 1, 0) I accept legitimate authority even when I disagree with it.
14. (2, 1, 0) While I am decisive in word and action, I watch out for the feelings of others.
15. (2, 1, 0) When I suspect a problem with a product or service, I point it out to a client or customer rather than conceal it.
16. (2, 1, 0) My comments about the competition are truthful and fair.
17. (2, 1, 0) In my daily activities, I take care not to damage the earth's environment.
18. (2, 1, 0) When I'm praised or thanked for what I've done, I quickly give credit to others who helped.
19. (2, 1, 0) I give honest answers to questions, even when the answers cast me in an unfavorable light.
20. (2, 1, 0) I'm quick to share information that might help the people around me.
21. (2, 1, 0) I avoid gossip.
22. (2, 1, 0) If an employee or customer makes an error to my benefit, I'm quick to point it out.
24. (2, 1, 0) I help colleagues who are in trouble, even if I have to spend scarce, valuable time doing so.
25. (2, 1, 0) I'm careful not to distribute an unsafe product.
26. (2, 1, 0) When solving business problems, I maintain personal standards that are higher than legal standards.
27. (2, 1, 0) I refuse gifts or other goods of significant value from vendors or other business associates.
28. (2, 1, 0) When I see a rule or procedure that doesn't appear proper, I'm quick to report it to others before deliberately breaking it.
29. (2, 1, 0) I give an honest day's work for the salary or fees I receive.
30. (2, 1, 0) I don't try to gloss over bad news I must deliver to employees or customers.

Thinking over my answers to these questions compelled me see how others defined ethical behavior. A Google search offered many discussions and definitions, but one that caught my attention in terms of clarity and directness was from Aristotle. It was in a blog post by Brad W. Merrill (5/6/11) titled *What is Ethical Behavior?*

"Aristotle defined ethics as "practical wisdom". Why practical? Because it involves an action (behavior) – both at the individual and societal/corporate level. Aristotle... believed that ethics related to what should or should not be done with regard to the things are good or bad for an individual. He...said 'we are not studying in order to know what virtue is, but to become good, for otherwise there would be no profit in it.'"

Here's hoping we all strive to act as ethically as possible in our personal and professional lives.

Gay Smith
is the Technical Consulting Manager for Chrysal USA.
Contact her at gaysmith@earthlink.net



Megan Bame

Zinc Improves Gladiolus Cut Flowers

Researchers in Pakistan evaluated the postharvest effects of zinc applied preharvest in gladiolus. Previous research has shown that zinc concentrations in biological systems is higher than other micronutrients. Zinc nutrition may play a role in a plant's ability to cope with oxidative stress, one of the primary factors leading to early senescence in ethylene-insensitive cut flowers.

Potted *Gladiolus hortulanus* cv. "White Prosperity" were raised under greenhouse conditions. Zinc sulphate was applied at rates of 0, 2, 4, 6, 8 and 10 mg/kg. It was noted that the soil had a starting zinc content of 0.85 mg/kg. Spikes were harvested at 2-3 open florets and placed in distilled water for vase life evaluation.

Plant growth was improved with zinc treatment compared to the control. The highest values for leaf area, spike length and fresh weight were achieved at a rate of 6 mg Zn/kg. The highest flower count and largest flower size was also observed at 6 mg/kg, while a treatment rate of 8 mg/kg brought about the earliest flowering. The percentage of opened florets and vase life duration were greatest at 6 and 8 mg Zn/kg.

With symptoms of mild toxicity exhibited at 10 mg Zn/kg, the study suggests zinc applied to the growing media at a rate up to 6 mg/kg produce the best results with improved growth and quality. The extended vase life was attributed to enhanced biochemical attributes, membrane stability and increased antioxidative enzyme activity.

Saeed, T., I. Hassan, G. Jilani, and N.A. Abbasi. 2013. Zinc augments the growth and floral attributes of gladiolus and alleviates oxidative stress in cut flowers. *Scientia Horticulturae*. 164:124-129.

Effective Fungicides for Gladiolus Rust

Gladiolus rust, *Uromyces transversalis*, is a pathogen of quarantine significance in the United States. In 2006, this disease was introduced in California and Florida. Detection of the fungus on two Florida farms resulted in mandatory and costly quarantine and eradication. The disease, which can result in total crop loss, has become endemic in several production areas in Mexico. This study, a collaborative effort between Mexico and the United States, was a preliminary investigation to determine the best fungicide active ingredients for disease management. Sixteen active ingredients were applied as individual products, as combinations of two products, and as rotations of different individual products or combinations.

All trials were conducted in commercial gladiolus fields naturally infected with *U. transversalis*. Fungicides were applied at the third-leaf stage and applications were made four times at 2-week intervals. The control was untreated.

All the products tested provided some level of rust management. Those that provided "very good to excellent" management included triazole, strobilurin and SDHI (succinate dehydrogenase inhibitor) fungicides. The most effective disease management was achieved by using combinations of a triazole fungicide with a strobilurin fungicide and rotating to a different product or combination of products.

Valencia-Botin, A.J., S.N., Jeffers, C.L. Palmer, and J.W. Buck. 2013. Fungicides used alone, in combinations, and in rotations for managing gladiolus rust in Mexico. *Plant Disease*. 97:1491-1496.



'White Prosperity'

Water and Nitrogen Needs of Gladiolus

While too much water for gladiolus may cause bulbs to rot and slower growth, insufficient water results in shorter stems, smaller flowers and tip burn. Researchers in Brazil evaluated irrigation management and optimal nitrogen fertilization of greenhouse-grown *Gladiolus x grandiflorus* L., 'White Friendship'.

Irrigation treatments consisted of five levels of water replacement: 50%, 75%, 100%, 125% and 150%. For this experiment, the water tension equivalent to soil moisture at field capacity was defined as 6 kPa. Five nitrogen concentrations (from urea) were also evaluated: 0, 30, 60, 90 and 120 mg/dm³. The nitrogen doses were divided into three applications at 20, 31 and 40 days after planting.

The maximum number of leaves was observed at a water replacement level of nearly 150%, while maximum plant height and maximum floral stem length occurred at around 130%. While floral stem length was unacceptable (for the Brazilian market) at a water replacement level of 50% (49.87 cm), all treatments with a rate of at least 75% resulted in stem lengths within commercial standards (95-135 cm). The floral spike length linearly increased as water replacement level increased. The maximum number of flowers and highest flower diameter were observed at around 130%. The shortest time to flowering (62 days) was also observed at a water replacement level of 130%.

The only reported significant response to nitrogen fertilization was for floral stem dry mass. Dry mass was almost 20% less in stems with no applied nitrogen compared to those receiving 120 mg/dm³.

de Andrade Porto, R., M. Koetz, E.M. Bonfim-Silva, A.C. Polizel, T.J.A. da Silva. 2014. Effects of water replacement levels and nitrogen fertilization on growth and production of gladiolus in a greenhouse. Agricultural Water Management. 131:50-56.

Megan Bame
is a freelance writer in
Salisbury, North Carolina.
Contact her at meganbame@yahoo.com



121 Gary Road
Hodges, SC 29653

864-227-2117

Toll Free: 888-645-2323

Fax: 864-227-5108



GeoSeed
For FLORICULTURE
Professionals

svc@geoseed.com

www.geoseed.com

Homemade Floral Preservatives for Handling Specialty Cuts

Funded by the ASCFG Research Foundation

Iftikhar Ahmad and John M. Dole



Floral preservatives or flower foods are an important part of proper postharvest handling of cut flowers. Flower foods are widely recommended and extensively used by the industry and consumers for maintaining quality and extending cut flower vase life. Depending on the product, flower foods supply carbohydrates, maintain water uptake, increase flower opening and size, and improve flower color development. Moreover, they are used to lower the pH of water to optimum level of 3.0-4.0 and control microbial contamination in the solutions.

Several companies produce different types and brands of floral preservatives including 1.) hydrators, used immediately after harvest, dry storage, or transit for improving water uptake, 2.) clarifiers, used to control microbial growth in the solutions, or 3.) holding/vase solutions, used to provide carbohydrates for longer vase life and continued flower opening. Moreover, several specific purpose preservatives are available, such as anti-yellowing or anti-ethylene preservatives, which contain

plant growth regulators or other compounds, and are used for postharvest handling of specific cut flower crops.

Commercial floral preservatives have been well researched and developed by the companies through decades of work. The preservatives are easy to use and readily available in the U.S. and other developed countries, but in developing countries the preservatives are relatively expensive and difficult to obtain. Moreover, commercial products are not yet labeled for handling organically-grown cut flowers. And to be honest, specialty cut flower growers include a few contrarians who like to do things their own way. With all of this in mind, we tested several folk recipes prepared from common products that were suggested and used by the industry and consumers.

In first set of studies, seven homemade recipes containing lemon/lime soda, lemon juice, citric acid, aluminum sulfate, vinegar, and/or household bleach were compared with two popular commercial preservatives and tap water for cut lisianthus, marigold, rose, and zinnia (Table 1). All ingredients were mixed with tap water and stems were

treated either for 48 hours (grower/wholesaler treatment) followed by shifting in tap water, or continuously in one of these preservative solutions until end of vase life (florist/consumer treatment). Every time, fresh solutions were prepared and used after one hour of preparation.

Lisianthus stems had longest vase life when placed continuously in preservatives containing citric greenshield, lemon/lime soda, and citric-Kathon, while short-term application of preservatives except citric-al had no effect (Tables 2 and 3). For cut marigold stems, continuous use of soda extended vase life, while for cut rose or zinnia stems, continuous use of preservatives either had no effect or reduced vase life (Table 2). However, short-term (48 hours) application of citric-al extended vase life of all tested cut flowers longer than continuous use of the preservatives (Table 3). Short-term treatment of marigold stems with soda or citric-

Kathon also extended vase life. Moreover, it was observed that continuous use of household bleach, vinegar, or aluminum sulfate had detrimental effects on cut stems of tested species, which reduced vase life and

quality, increased pH and EC of the solutions, and allowed microbial contamination in vase solutions. However, citric-al proved best preservative for extending vase life when used as a 2-day treatment. For florists or consumers, citric-Kathon, soda, and citric-Greenshield were the best recipes for extending the vase life of tested cut flowers.

Based on the findings of these studies, the preservative formulations were revised (Table 1) to make sure all solutions had a uniform pH within the optimum range of 2.8-3.2 by altering the amount of the acidifier, excluding ingredients that were detrimental to previously tested cut flowers, and applying them for both short-term (2 day grower/wholesaler treatment) or continuously (florist/consumer treatment). Moreover, three additional cut flower crops, snapdragon, stock, and sunflower, were tested along with the previously tested cut lisianthus, marigold, rose, and zinnia.

Cut stems of majority of tested species had longer vase life when placed continuously in the preservative solution until senescence (Table 4). For preservatives, lisianthus and stock stems had longest

vase life with citric-Kathon, while snapdragon and zinnia stems with solutions containing citric-GreenShield (Table 4). Moreover, stems placed continuously in solutions with soda (except zinnia) or citric acid plus sugar also had longer vase life compared to tap water and were similar to those with commercial preservatives. For marigold stems, all preservative recipes had longer vase life compared to the stems in tap water (Table 5). For roses, all preservative recipes resulted

in a similar vase life in both studies except continuous use of soda or lemon juice plus sugar, which reduced the vase life. Similarly, the recipes had no effect on vase life of sunflower except lemon juice plus sugar, which reduced the vase life (Table 5).

In summary, these studies demonstrated that some of homemade floral recipes can be used as alternative to commercial preservatives as they increased postharvest longevity of the popular

specialty cut flower crops while a few ingredients, such as bleach or vinegar, should not be used for handling of cut flowers. For majority of tested crops, continuous use of preservative solutions extended the vase life longer than short-term treatment followed by shifting them into tap water until termination. Among preservatives, citric-Kathon, citric-GreenShield, soda, and/or citric acid plus sugar performed best and proved best preservative recipes for growers, wholesalers, florists

and consumers, while citric-al can also be used by growers for short-term treatment of cut lisianthus, marigold, rose, and zinnia. However, household bleach, vinegar, citric-al, or lemon juice had detrimental effects on cut stems longevity when used for longer period of time. Therefore, these should not be used for extended periods for handling cut flowers to avoid phytotoxicity, increase in microbial contamination and pH and EC of solutions, and reduction in vase life.

Table 1. Recipes for preservatives. Amounts listed were added to one liter of water or $\frac{1}{2}$ liter of water in the case of the soda.

Experiment 1:

1. Tap water
2. 300 ppm citric acid + 200 ppm aluminum sulfate + 20 gram sugar
3. 300 ppm citric acid + 10 ml household bleach + 20 gram sugar
4. 300 ppm citric acid + 0.05 ml GreenShield + 20 gram sugar
5. 300 ppm citric acid + 7 ppm Kathon CG + 20 gram sugar
6. 500 ml lemon/lime soda (1:1 soda:water, not diet soda)
7. 37 ml lemon juice + 10 ml household bleach + 20 gram sugar
8. 6 ml vinegar + 10 ml household bleach + 20 gram sugar
9. 10 ml Floralife Clear Professional Flower Food
10. 10 ml Chrysal Clear Professional 2

Experiment 2:

1. 500 ml lemon/lime soda (1:1 soda:water, not diet soda)
2. 6 ml lemon juice + 20 gram sugar
3. 100 ppm citric acid + 20 gram sugar + 200 ppm aluminum sulfate (citric-al)
4. 400 ppm citric acid + 20 gram sugar alone
5. 400 ppm citric acid + 20 gram sugar + 0.5 ml GreenShield (citric-GreenShield)
6. 400 ppm citric acid + 20 gram sugar + 7 ppm Kathon CG (citric-Kathon)
7. 10 ml Floralife Clear Professional Flower Food (Floralife)
8. 10 ml Chrysal Clear Professional 2 (Chrysal)

POSTHARVEST Handling

Table 2. Effect of continuous (vase) application of homemade and commercial floral preservative solutions on vase life of ‘ABC Blue’ lisianthus, ‘Double Eagle’ African marigold, ‘Red Bentley’ rose, and ‘Deep Red’ Benary’s Giant zinnia. Stems were placed in jars containing 300 mL of solutions. See table 1 for recipes. Data represent means of 15 stems with three stems per vase.

Preservative solutions	Vase life (days)			
	Lisianthus	Marigold	Rose	Zinnia
Tap water	9.7 b	9.3 bc	9.6 abc	11.4 b
Citric acid + aluminum sulfate + sugar	11.8 b	8.7 bcd	10.8 ab	3.3 e
Citric acid + bleach + sugar	10.1 b	5.9 e	9.4 bcd	4.7 de
Citric acid + Greenshield + sugar	20.4 a	10.9 ab	6.8 b	8.5 bcd
Citric acid + Kathon CG + sugar	18.1 a	8.5 bcd	8.5 cde	9.3 bc
Lemon/lime soda	19.9 a	12.1 a	7.5 de	8.3 bcd
Lemon juice + bleach + sugar	11.4 b	6.8 de	8.6 cde	6.3 cde
Vinegar + bleach + sugar	10.7 b	7.5 cde	9.1 bcd	5.9 cde
Floralife Clear Professional Flower food	16.9 a	9.5 bc	10.7 ab	16.6 a
Chrysal Clear Professional 2	17.5 a	9.4 bc	11.5 a	15.9 a
Significance	<0.0001	<0.0001	<0.0001	<0.0001

Table 3. Effect of short-duration (holding) application of homemade and commercial floral preservative solutions on vase life of ‘ABC Purple’ lisianthus, ‘Double Eagle’ African marigold, ‘Red Bentley’ rose, and ‘Deep Red’ Benary’s Giant zinnia. Stems were either placed in one of the solutions for 48 hours, then moved to jars containing 300 mL tap water. See table 1 for recipes. Data represent means of 15 stems with three stems per vase. Experiment 1.

Preservative solutions	Vase life (days)			
	Lisianthus	Marigold	Rose	Zinnia
Tap water	8.4 b	12.2 ab	9.5 b	12.0 bc
Citric acid + aluminum sulfate + sugar	11.1 a	15.4 1	11.5 a	16.9 a
Citric acid + bleach + sugar	10.1 ab	12.4 ab	10.9 ab	14.4 ab
Citric acid + Greenshield + sugar	10.1 ab	12.5 ab	10.5 ab	15.1 ab
Citric acid + Kathon CG + sugar	9.7 ab	14.9 a	11.3 ab	15.2 ab
Lemon/lime soda	10.0 ab	15.2 a	11.2 ab	14.7 ab
Lemon juice + bleach + sugar	10.0 ab	10.9 b	10.9 ab	10.6 c
Vinegar + bleach + sugar	8.5 b	12.7 ab	11.2 ab	12.1 bc
Floralife Clear Professional Flower food	9.3 ab	15.1 a	10.7 ab	13.8 abc
Chrysal Clear Professional 2	9.3 ab	12.3 ab	10.7 ab	13.7 abc
Significance	<0.0007	<0.0001	0.0492	<0.0001

Table 4. Effect of homemade and commercial floral (holding or vase) preservative solutions on vase life of ‘ABC Blue’ lisianthus, ‘Maryland Plumbblossom’ snapdragon, ‘Midseason Cheerful Apricot’ stock, and ‘Deep Red’ Benary’s Giant zinnia. Stems were placed in preservative solutions for 48 h, then moved to tap water, or continuously placed in one of the solutions until termination. See table 1 for recipes. Data represent means of 15 stems with three stems per vase. Experiment 2.

Preservative solutions		Vase life (days)			
First 48 h	Vase	Lisianthus	Snapdragon	Stock	Zinnia
Tap water	Tap water	10.2 de	12.3 cd	17.4 gf	8.7 ef
7Up	Tap water	13.4 cde	11.8 cd	8.5 defg	12.7 abcd
Lemon juice + sugar	Tap water	13.0 cde	11.3 cd	9.3 bcdef	13.6 abc
Citric acid + sugar	Tap water	13.1 cde	10.8 cd	8.8 cdefg	13.7 abc
Citric acid + sugar + aluminum sulfate	Tap water	9.3 e	13.9 bcd	8.3 efg	10.0 cdef
Citric acid + sugar + Greenshield	Tap water	12.8 cde	13.4 bcd	8.5 defg	12.1 bcde
Citric acid + sugar + Kathon CG	Tap water	13.7 cde	13.7 bcd	8.7 cdefg	9.3 def
Floralife Clear Professional	Tap water	13.3 cde	10.4 cd	8.7 cdefg	9.4 def
Chrysal Clear Professional 2	Tap water	12.5 cde	11.7 cd	9.1 bcdef	8.0 f
7Up	7Up	19.8 ab	15.7 abcd	10.1 bcde	8.3 ef
Lemon juice + sugar	Lemon juice + sugar	15.0 bcd	9.5 d	7.6 gf	9.8 cdef
Citric acid + sugar	Citric acid + sugar	18.7 ab	13.0 bcd	10.3 abcde	6.7 f
Citric acid + sugar + aluminum sulfate	Citric acid + sugar + aluminum sulfate	12.3 cde	10.4 cd	6.4 g	16.3 a
Citric acid + sugar + Greenshield	Citric acid + sugar + Greenshield	18.7 ab	22.3 a	11.1 abc	14.9 ab
Citric acid + sugar + Kathon CG	Citric acid + sugar + Kathon CG	22.1 a	19.5 ab	12.7 a	15.8 ab
Floralife Clear Professional	Floralife Clear Professional	15.9 bc	16.4 abcd	10.9 abcd	15.2 ab
Chrysal Clear Professional 2	Chrysal Clear Professional 2	15.9 bc	17.1 abc	11.5 ab	
Significance					
Overall		<0.0001	<0.0001	<0.0001	<0.0001
Holding (H)		<0.0001	NS	0.0273	<0.0001
Vase (V)		<0.0001	<0.0001	<0.000	<0.0001

POSTHARVEST Handling

Table 5. Effect of homemade and commercial floral (holding or vase) preservative solutions on vase life of ‘Double Eagle’ African marigold, ‘Red Bentley’ rose, and ‘Sunbright’ sunflower. Stems were placed in preservative solutions for 48 h, then moved to tap water, or continuously placed in one of the solutions until termination. See table 1 for recipes. Data represent means of 15 stems with three stems per vase. Experiment 2.

Preservative solutions		Vase life (days)		
First 48 h	Vase	Marigold	Rose	Sunflower
Tap water	Tap water	7.9 b	10.3 abc	11.7 abcd
7Up	Tap water	11.4 ab	12.7 a	12.7 abc
Lemon juice + sugar	Tap water	13.7 a	11.8 ab	11.5 bcd
Citric acid + sugar	Tap water	13.5a	11.5 ab	12.4 abc
Citric acid + sugar + aluminum sulfate	Tap water	15.5 a	12.1 a	12.2 abc
Citric acid + sugar + Greenshield	Tap water	11.8 ab	12.7 a	11.9 abcd
Citric acid + sugar + Kathon CG	Tap water	12.5 ab	13.1 a	13.0 abc
Floralife Clear Professional	Tap water	11.4 ab	12.9 a	13.1 abc
Chrysal Clear Professional 2	Tap water	11.5 ab	11.5 ab	13.2 ab
7Up	7Up	15.7 a	7.8 d	13.0 abc
Lemon juice + sugar	Lemon juice + sugar	12.8 ab	7.5 d	8.9 e
Citric acid + sugar	Citric acid + sugar	12.7 ab	9.2 bcd	9.9 de
Citric acid + sugar + aluminum sulfate	Citric acid + sugar + aluminum sulfate	12.9 ab	13.1 a	10.9 cde
Citric acid + sugar + Greenshield	Citric acid + sugar + Greenshield	13.7 a	10.6 ab	13.5 ab
Citric acid + sugar + Kathon CG	Citric acid + sugar + Kathon CG	15.5 a	11.4 ab	13.5 ab
Floralife Clear Professional	Floralife Clear Professional	14.7 a	12.4 a	13.7 ab
Chrysal Clear Professional 2	Chrysal Clear Professional 2	14.0 a	11.2 ab	13.9 a
Significance				
Overall		<0.0001	<0.0001	<0.0001
Holding (H)		<0.0001	NS	0.0273
Vase (V)		<0.0001	<0.0001	<0.0001

*Fresh from the Field Wedding Flowers**An Illustrated Guide to Using Local & Sustainable Flowers for Your Wedding*

Lynn Byczynski and Erin Benzakein

ISBN 978-0-9779781-3-7

112 pages

Reviewed by Ann Sensenbrenner

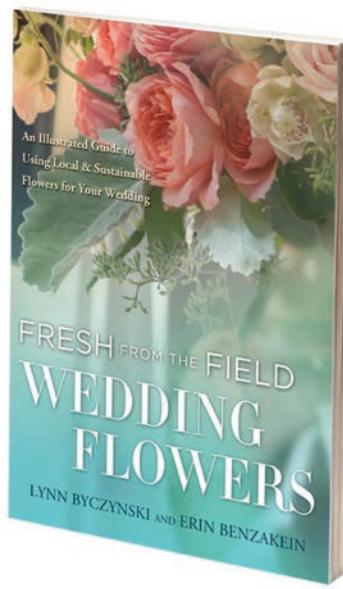
Here is the excellent design primer the local flower movement has been waiting for: *Fresh From the Field Wedding Flowers*. With bouquet construction tips, flower care and bloom time information, and even 75 minutes of video tutorial, anyone from a DIY bride to an experienced flower farmer will appreciate learning from this lovely book.

The authors, Lynn Byczynski and Erin Benzakein, smartly focus on wedding flowers, but the reader gains insight about floral design and the floral industry in general. The argument for using local flowers for weddings, as they note, is not just ethical or ecological—it's also romantic and sentimental. Local wedding flowers will bloom every anniversary, and they have a meaningful sense of place. In 1840, for example, Queen Victoria planted the myrtle used in her bouquet. Sprigs cut from that same myrtle were used in 2011 in Kate Middleton's bouquet and every other British royal wedding along the way.

The inspiring photo essays draw not just from Benzakein's work as a designer and grower, but from designers and growers across the country, and the book lists them in its directory. The video, which can be viewed on the included DVD or online via link/password, includes four tutorials: boutonniere and corsage, bouquet, low centerpiece, and French flower bucket. Each segment is engaging, encouraging, and could serve as a budget-friendly alternative for a bride or grower who might otherwise pay to attend a design workshop. I found the online viewing to be the easiest, because I could more quickly move forward and back within the segments.

Florists marketing their use of locally-grown flowers might fear this book will serve to pull back the wizard's curtain, exposing the methods and teaching anyone to "do" her own flowers. But the degree of detail the authors provide on every topic related to using locally-grown flowers will ensure an ambitious bride will have much more realistic expectations of the time commitment, expense, and expertise needed for a successful floral presentation. After reading these pages filled with friendly warnings, many brides will be very comfortable with the choice to hire an experienced floral designer. Those who do decide to tackle the project will find themselves well prepared. At 112 pages it is the perfect length for a busy bride to read in an afternoon, giving her ample inspiration as well as practical advice.

Although the reader is shown many examples of "trending designs" including wildflowers, edibles, succulents, mismatched silver containers, etc., the book as a whole seems timeless. When I finished this book and put it on my shelf of flower design reference books, I felt like I was placing a classic book in its rightful place. It is at home next to my old copy of Jane Embertson's *Pods* (1979), and my even older copy of Mary Cokely Wood's's *Flower Arrangement Art of Japan* (1951). Of course historically ALL wedding flowers were fresh from the field, and this book would have been useful to brides of eras long ago. But with the modern additions of the instructional DVD, the mentions of online directories like <http://slowflowers.com/>, a list of on-trend blogs to follow like <http://flirtyfleurs.com/>, and over 100 luscious photos of fresh, current designs, any fan of floral design will feel the past and the present blooming at once. Cheers to a wonderful addition to our bookshelves, and another beautiful tool to help propel the discussion and interest in local, sustainable flowers.



NORTHEAST



Diana Doll

StrayCat Flower Farm

diana@straycatflowerfarm.com

Greetings fellow flower growers. In early February I attended my first ASCFG board meeting; a full two-day agenda that moved along at a productive clip due to the snowstorm, and last-minute scramble to get to the airport as flights were being cancelled in every direction.

It was a pleasure to be in the company of five other Regional Directors, our new President and Vice president, our Executive Advisor, our Secretary, Treasurer, and the gals (Linda and Judy) who manage the daily activities of our association headquarters in Oberlin, Ohio. There we were, 13 flower geeks weighing in on current issues, swapping tales about ‘lemons & lemonade’, and how to best inform and represent the ASCFG membership.

I look forward to our next board meeting in conjunction with the ASCFG National Conference October 19-22 in Newark, Delaware.

Thanks to those of you who responded to the four survey questions I e-mailed back in January. Here are some excerpts:

Are you attending, or presenting at, any ag-related conferences?

“There were two conferences on Long Island in January, but

I did not attend because I did not find the sessions relevant to me as a small cut flower grower. The focus was more on landscape, nursery, vegetable and ‘big-box’ six packs.”

“We are anxiously awaiting arrival of the paper chain pot components that we saw in use at the Rhode Island meeting last fall.”

“I gave talks on cut flowers at meetings in Delaware and Ontario counties (New York), and at the Empire Fruit and Vegetable Extension Show in Syracuse. Interesting from all those meetings is that the participation by males seems to be increasing. Traditionally, audiences for cut flower meetings have been predominantly

women, and I don’t know what is causing this change in gender of people interested in cut flowers.”

“I gave a presentation at the New England Vegetable Growers Conference in December entitled the ‘The Tipping Points of Growing Our Flower Business: Taking Cut Flowers from Sideshow to Main Event’.”

“I attended UVM Extension’s ‘Holistic Farm Management’ workshop and connected with three other cut flower growers (one of whom is a new ASCFG member). We also created a Vermont cut flower growers group e-mail list to refer customers to, since we get a lot of requests for bulk DIY flowers and can’t accommodate them all.”

Garden club, horticulture club, or university extension events?

“We teach design classes during our slow time in late February and March. This year we are trying out a new class: how to arrange the bouquet you just brought home in your vase or other container, with tips to make it look like a floral design. We’ll hand everyone a bouquet (or two) and show them some tricks of the trade.”

“We do give several design presentations throughout the year (using as many of our own flowers as possible) to garden clubs, church groups, women’s groups etc.; part promotion, part public service.”

Fun Northeast Facts

- As I write, there are more than 700 active ASCFG members, 159 are from the Northeast Region.
- The Northeast has 19 new members thus far in 2014.
- Our new member counts—from north to south—are: Nova Scotia one, Maine-four, New Hampshire-one, New York-eight, Massachusetts-four, Rhode Island-one.

“I have been doing some public presenting: I gave a talk to a regional Cooperative Extension Cut Flower Conference about growing my top ten favorites and promoted the ASCFG. I have also been giving my ‘sharpest tool in the

shed’ class on choosing the right tools and keeping them sharpened to several garden club groups as well as at several libraries.”

“I have three more cut flower presentations to make this winter; one is at Plantasia, our regional garden showcase, and one is at the Frank Lloyd Wright Darwin Martin House where I manage the landscape.”

“Around Christmastime I did a design demonstration for a garden club about making seasonal arrangements without Oasis. We used a lot of twigs, so that was fun.”

“I’m doing a design workshop at one of our wedding venues,

Shelburne Vineyard. We'll be making a 'living arrangement' using spring flowers on the bulb, dogwoods & willows, and succulents. Anytime you're doing a presentation, contact Judy or Linda at the ASCFG office and they'll send you promo materials to spread the word about our association!"

Anyone dabbling in winter production during this deep freeze?

"I decided to make an effort to have product available for Mother's Day. The first lily bulbs should arrive this week and hopefully after a few weeks rooting the "Polar Vortex" will have passed and the days will be longer. Ko Klaver says keep the heat up. If I succeed it will have cemented relationships with my florists and wholesaler. If not, at least I will have learned what I did wrong."

"I successfully tried season extension in my small greenhouse this past fall. My last farmers' market was the last Saturday in October, but I was still picking lilies on December 17th."

"I am thinking a lot about these cold temps, this week is when I usually start my greenhouse minimal heat. I am considering building a mini hoophouse within my greenhouse and heating the mini house only."

"We planted pre-germinated anemone and ranunculus in mid-December in our high tunnel. Much to my surprise, the anemone is already coming up. I hope they survive the frigid conditions we have been having. We are also trying to overwinter eucomis (pineapple lily), both in the tunnel and outside. This should be a good year to test winter hardiness."

"No winter production of cut flowers besides twigs. I'll plant some anemones in February/March and I'm going to try some ranunculus and poppies for spring, so that'll be a fun experiment."

Are you accessing the Bulletin Board and/or Community Network?

"Bulletin Board almost daily as messages come in; not accessing the Community Network as often."

"I like the Bulletin Board because it is searchable." (editor's note: the Community Network is also searchable.)

"I've had some struggles getting the Bulletin Board from the new website. The new page does not fully show up on my computer, the top of the page does not display."

"The Bulletin Board and the Community Network are great."

"Yes to both. Here's a peek at one of many important

conversations you can join on the Bulletin Board (I copied this post from Jello Mold Farm): 'FOR THE FIRST TIME EVER - the White House featured American Grown Flowers at a state dinner last week! This is a really big deal and bodes well for the growing awareness for our industry. Details are on the USDA Blog here <http://blogs.usda.gov/2014/02/18/an-american-grown-state-dinner-featuring-americas-cut-flower-industry/>. Please go on there and leave a comment letting USDA know this matters. Let's flood 'em with comments!'".

"Looking at recent activity on the Community Network page, I see that several ASCFG members join the forum every day! Whenever I visit either the 'BB' or the 'network', I'm compelled to add something useful. The stronger each of us is as individual growers, the stronger our industry becomes as a whole. Definitely a win-win situation."

Hats off to the regular contributors on both of these pages who are doing the lion's share of info swapping.

In conclusion, the Northeast is approaching the end of this fabulously wintery winter, placing high in the record books regarding inches of snowfall, thickness of ice, number of flights cancelled, trees down, power outages, schools closed, and 'yak-trax' purchased (named after the sure-footed Tibetan yak, these are strap-on cleats for your boots that get a grip on the ice so you can actually go outside!). I hope you enjoyed the winter break as time well spent, as an opportunity to reflect on last year's operations, and a lull in field production when you can gather info and connect with other growers. Best wishes for a productive season 2014!

MID-ATLANTIC



Jennie Love

Love 'n Fresh Flowers

info@lovenfreshflowers.com

Nothing can compare to ranunculus and anemones for spring sales, especially if you are in the wedding business! These Mediterranean natives prefer a temperate climate, one that stays cool but doesn't get terribly hot or cold. Yeah, me too. But, alas, that's not our climate here in the Mid-Atlantic where the winters are bitter and the summers sweltering.

Anemones and ranunculus like a very long, cool establishment period to develop a robust root system and lots of foliage to support an explosion of blooms in the few months of cool spring weather around here. After several seasons of growing these beauties in zone 6b and 7, in my opinion, only those planted in the ground in the autumn and protected through the winter really produce enough high-quality blooms to make them a profitable crop.

A hoophouse is the ideal structure to have when growing anemones and ranunculus. But even if you don't have one, you can still produce a lovely crop of these flowers in our region with some carefully engineered low tunnels (or "caterpillars") out in the field. The low tunnel concept was originally popularized by Eliot Coleman for winter veggies, but low tunnels work just as



Low tunnels sheltering ranunculus and anemones.



Anemones in hoophouse.

well for flowers. It took a couple (frustrating) years to figure out how to build these to withstand fierce wind and heavy snow. We finally have the formula down and our low tunnels can take just about anything.

We build these inexpensive structures with half-inch metal electrical conduit from Lowe's, a hoop bender, greenhouse plastic, tomato twine, and Agribon fabric. Hopefully you can attend the ASCFG National Conference this October where we'll be demonstrating building a low tunnel and planting corms.

A great rule of thumb for any crop is to think about ordering for next year when the current season's crop is finishing up. Therefore, anemones and ranunculus corms should be ordered in early summer. My favorite supplier is Gloeckner (www.fredgloeckner.com).

For ranunculus, I'm especially fond of the La Belle series for our climate. We've also been trialing the Amandine series in smaller quantities over the past two seasons. This series has been bred to withstand a bit more heat before going into dormancy in May or June. However, it seems this breeding has made it harder for Amandine to grow as well through the cold of the winter months so the plants are weaker than the La Belles overall. Therefore there's been no increase in production as a whole by having a longer harvest window. Amandine does seem to be coming up with some unique colors, though, so we'll keep trying them.

For anemones, we've had great success with the Galilee series. This series has the ever-popular white face with the black eye, and is sometimes called the panda anemone. The plants are super productive, amazingly tough, and the stem length is outstanding at 18 inches plus. We've also grown the Jerusalem series in the past but have since switched to Galilee entirely as the plants are just so tough and productive.

Planting of both anemones and ranunculus ideally takes place in the Mid-Atlantic in the first half of October but can happen as late as November for abundant spring blooms. We soak and pre-sprout the corms per the directions sent by Gloeckner with the order.

As you all know, this year we had one of the coldest and snowiest winters on record. The temperatures routinely dipped to the single digits and the wind chills were often well below zero. There were many days too when the sky was cloudy, greatly limiting the available light and solar gain inside the structures. I was fearful that the ranunculus and anemones wouldn't survive these harsh frigid conditions (and that the low tunnels would collapse under the weight of the snow, but they didn't). I'm here to say, these babies are TOUGH! In fact, I'm expecting a bumper crop this spring.



Ranunculus in bouquet.

weeding the low tunnels is tricky since you have to kneel in the snow or mud. We'd struggled to keep up with the weeds until we started using a new product called FloraFlow (www.floraflow.com), which is black plastic with pre-punched small holes that are perfectly spaced and sized for growing ranunculus and anemones. This weed barrier has been superb at suppressing weeds and no doubt key to our best crop to date in the low tunnels. The black plastic also helps keep the soil warmer through the severe cold of winter. As the weather heats up in the spring, it's a good idea to cover the black plastic with straw to keep the soil cooler and the plants blooming longer.



Ranunculus in FloraFlow

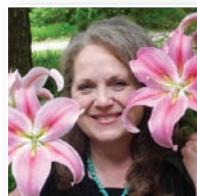
for keeping them happy in our Mid-Atlantic region. Once you've tried your hand at anemones and feel confident, add ranunculus.

Here's to a successful 2014 growing season, even if it had a late start!

These crops love to soak up water and nutrients. Anemones in particular love a deep drink. At our farm, watering and fertilizing with a cocktail of fish emulsion, kelp, and compost tea ideally happens once a week when the plants are actively growing. However, when the temperatures are running below 25 at night, it's better to wait for milder weather.

Weed management is a crucial key to a highly productive crop. If it's warm enough in the tunnels and hoop house for the ranunculus and anemones to grow, it's warm enough for the weeds. Weeding in the hoop house is not that hard, but

SOUTHEAST



Tanis Clifton

Happy Trails Flower Farm
cliftonchirol@gmail.com

A good plan today is better than a perfect plan tomorrow.

George S. Patton

Planning is key to harvesting all of the flowers you need, and having certain varieties during specific seasons. I've known from the moment I decided to become a flower farmer that it was a huge undertaking to organize. Flower lovers want to grow everything, right? Because of that we have to know tons of facts about an endless array of flowers, which can be quite overwhelming. Some flowers need to be planted in the fall while others need to be planted in spring. Some bloom only during short days while others require long days to bloom. Then there are all the specific requirements for seed to germinate. Some seed require a chilling period, or vernalization, while others need to be scarified. It's a whole new vocabulary!

Then there are specific light requirements for germination. While some seed requires darkness others may require light. Then again, some seed wants to germinate on the surface while others require soil coverage. It's A LOT to remember and even harder to organize.

By failing to prepare, you are preparing to fail.

Benjamin Franklin

Once you start learning about the vast possibilities for cuts you realize you also want to add bulbs, woodies, perennials, and plugs to the mix. Just like seed, there are specific times of year to order and plant these. It will benefit you greatly to know when to order bulbs so that you can get the selection you want. Farmers also can take advantage of early order discounts when ordering plugs of perennials and annuals so it important to know when to place orders.

I have developed a chart to help me organize all of these chores. This chart is specific for zone 7 Mississippi. However, if you are anywhere between zones 6-9 you can still use this chart as a guide by just tweaking the dates somewhat. Many more flowers could be added to this chart; however the goal here is just to give you a starting point.

MONTH	Day 1-10	Day 11-20	Day 21-31
January	Order seeds	Seed- snapdragons and delphinium and place in cooler	
February	Seed- Eucalyptus Receive- Lisianthus and Delphinium plugs, bump up to 72 trays and place in coldframe or hoophouse Plant- tulips Plant- lilies weekly in hoop house	Seed – scabiosa, dianthus, gomphrena, strawflower, calendula, statice, ageratum, achilea, quinoa Chilled Snaps and Delphinium to heat mat Plant- lilies weekly in hoop house	Plant- lilies weekly in hoop house
March	Seed- Zinnia, basil, broomcorn, marigold, millet, grasses, celosia, aster, dill Plant- lilies weekly in hoop house		Plant- lilies weekly in hoop house
April	Seed- sunflowers, peppers, zinnia, cosmos, basil, dill, amaranth, celosia, marigold Plant – Dahlia tubers, glads, crocosmia, eustoma Plant- lilies weekly in hoop house	Seed- sunflowers Order for next year – Tulips, allium, anemones, Dutch iris, ranunculus, tuberose Plant- lilies weekly in hoop house	Plant- lilies weekly in hoop house
May	Seed- sunflowers, celosia, marigold, grasses Direct seed – cosmos, amaranth, broom corn, sorghum Plant- lilies weekly in hoop house	Seed- sunflowers Plant- lilies weekly in hoop house	Plant- lilies weekly in hoop house
June	Seed- sunflower, zinnia, cosmos, basil, amaranth, gomphrena, celosia, grasses, broom corn, pumpkin on a stick, marigold Plant- lilies weekly in hoop house	Seed- sunflower Plant- lilies weekly in hoop house	Plant- lilies weekly in hoop house
July	Seed – sunflowers, zinnia, basil, millet, celosia, marigold, broomcorn, amaranth, grasses, ageratum, sorghum Plant- lilies weekly in hoop house	Seed- sunflowers Order for next year - lilies Order – peonies Plant- lilies weekly in hoop house	Plant- lilies weekly in hoop house
August	Seed- sunflowers, quinoa, Crane kale, calendula Plant- lilies weekly in hoop house	Seed – sunflowers Plant- lilies weekly in hoop house	Plant- lilies weekly in hoop house
September	Seed – sunflowers Order – Lisianthus and Delphinium plugs (all plugs needed for next spring)	Direct seed- nigella, larkspur, black-eyed-Susan, calendula, bishop flower, blanket flower, oxeye daisy, Shasta daisy, bachelor button, Queen Ann's lace Seed – dianthus, foxglove Sow cover crops	Plant- lilies weekly in hoop house
October	Plant – Dutch Iris, Allium Sow cover crops	Dig dahlias, tuberose	
November	Order – glads, dahlias		
December	Order - seeds Plant - anemones, ranunculus in hoop house or low tunnels		

Supplies for Small Growers

SEED STARTING - Pots Trays Inserts Plug Trays
 Labels - large variety size, color & shape of blank plant
 pot & row markers
 Weed control, fertilizer, tapes & ties, watering, and more.



AAAMercantile.com
<http://stores.ebay.com/AAAMercantile>
<http://www.amazon.com/shops/AAAMercantile>

Enter coupon code ASCFG for a 15% discount for a limited time at AAAMercantile.com

You will notice that some flowers are started nearly every month. The reason for this is that with flowers such as zinnias, for example, the quality and size of the flower diminishes over time. So while you could potentially cut zinnias all season from your spring planting, the quality will not be as good. Planting every month provides good quality flowers all season, so plan to succession plant.

Other crops such as sunflowers and lilies will provide only one cut per plant, so you must plan to plant on a weekly basis if you want to have these flowers available all season. One tip for succession planting sunflowers is to use daylength neutral varieties, and choose some that have a crop time of 50 days, and others that have 60-day crop times. This allows you to seed once every two weeks instead of every week, leading to harvest over a 10-day period from just one planting.

While the chart may help you to get organized, you will also need to have some resources for cultural requirements for all these flowers. There are a lot of great sources for information on the internet as well as some super books. My go-to sources are: *Specialty Cut Flowers* by Allan Armitage and Judy Laushman, *The Flower Farmer* by Lynn Byczynski, and information from Ivy Garth Seed (<http://www.tomclothier.hort.net/>) and Johnny's Selected Seeds.

To achieve great things two things are needed: a plan, and not quite enough time.

Leonard Bernstein

I wish I had a list like this my first few years. I look back and I was really floundering and learned some hard lessons. However with the help of the ASCFG, its super generous members, the awesome Bulletin Board, great articles in *The Cut Flower Quarterly*, the conferences, and an endless supply of learning experiences I began to see the light at the end of the tunnel. So good luck getting organized; let me know if this helps and if I can help further.

MIDWEST



Kent Miles

Illinois Willows
illinoiswillows@aol.com

As I write, it's the middle of winter (February) here in central Illinois, and what do I see as I look out the office window: SNOW. As you all know, this past winter was a tough season, especially for the upper half of the United States. January and February had record cold and snowfall amounts.

In February I traveled to our ASCFG board meeting in Oberlin, Ohio. From Illinois to Oberlin, door to door took me 19 hours. No, I didn't walk! If you follow me on Facebook, it's all there. It was good to meet a few new members of the board that I had not met before. This was my first time to see it all. Judy and Linda rearranged the office so we all could carry on the business at hand. The weather issues came back the second day of the meeting and we needed to cut out early so folks could catch their flights home. My return trip home was somewhat normal, just ice in Illinois to drive home from airport.

As I follow the ASCFG Bulletin Board, ASCFG Facebook page, and Facebook grower's page I'm noticing more and more growers are designing for weddings for as much as 30-50% of their income. The conversations on the designing aspect have risen so much over the years. When I joined the ASCFG the conversations between members were about varieties, plant care/harvesting techniques, who to sell to, and so forth. When I discovered the ASCFG years back my concentration was on learning the growing aspects. My background was from a designer. I wanted to learn how to grow flowers that as a designer I could use in my work.

When I started the farm in 1999 I wanted to grow everything I could find my hands on. Over the years I have learned what works in our area (flat and windy). For the first three years I sold to eight florists, three wholesalers, three farmers' markets, and did full service weddings. For me it was one headache after another trying to juggle everything. Too much on my plate with an off-farm job as well. As the seasons have gone on, people leave, staff changes, off-farm jobs and other hiccups you retune your operations. Finding that comfortable fit in growth has been challenging, to say the least.

For the last several years, I have dropped from doing full service weddings, some of the retail florists and doing just one large market. In place, I have added the internet world. We have shipped to 27 states and growing relationships with several new wholesale buyers. Social media has grown our

business greatly. If you are not into social media yourself, if you have a college age staff member let them give it a whirl for your farm. I feel if are not there, you at least need to look into this area for income. Growers are doing weddings, and posting pictures on their blogs and web sites; the work is quite impressive. There is a hunger for the new growers to jump on the designer bandwagon.

This area (weddings) I feel is helping our organization greatly, bringing new faces and talents to this segment of the industry. Our wedding segment is a small part of our sales. We have 6-10 during the market season. Through word of mouth brides will stop by on Saturday and pre-order mixed bouquets in their color scheme a week out or several weeks before their event. Basically a bucket bride. Had an appointment in January and two in February for April wedding using tulips and flowering branches. They have a designer who will work their magic. So depending on your operation with small staff to larger staffed designer grower farms are going to source that untapped bridal market.

Farmers' market time is soon, if not already started for some. We participate in a large market (peak season 150-180 vendors) on Saturdays. Thoughts on pricing are on my mind, whether to raise or stay the same. On our mixed sleeved bouquets we raised them up 15% last year, and solid bunches up 10%. That's the basic bread and butter type flowers. All our flowers are bunched prior to arriving at the market. I have thought of maybe selling stems on certain more higher end crops. Not sure about that, will maybe try on a few buckets each week to see how the interest is taken. For us it's a grab and go with the customers. Of vendors that sell flowers at our market we are the highest priced. We run specials on bunches when we are long on certain crops – sunflowers, hydrangea, lisianthus. We also use Twitter and Facebook for market specials.

The Illinois State Florist Association will have its spring conference the first full weekend in March (7-9). This will be our second year as a vendor. I've been a part of this organization for some twenty years, and have donated product for the last 8 years to the flower room. Last year being our first, we had lots of interests from florist in Illinois, Missouri, and Tennessee. Other wholesalers that we don't yet sell to found out we are in central Illinois. The wholesalers that we already sell to on a regular basis were a bit surprised to see us there. Last day of the conference we ended up selling half the booth product that I brought, which was great.

We have a "Petals and Paints" event that we are participating in April at the University of Illinois Art Museum. We will have flowering branches featured with some of the artwork on display. So finding and doing these extra events adds a lot to the farm in several ways. Get out and contact your state's floral associations and different conferences. Let the state organizations know you are out there, contacts, contacts!

We are back doing the ASCFG seed trials this year. I'm also doing an ornamental pepper trial later on. Have you participated in our trials before? If not put your name in. John and everybody does a great job, lots of work! The results are so very helpful to everyone. With trialers in different parts of the country the information helps you figure out new varieties by hands-on growers.

SOUTH-CENTRAL



Rita Anders

Cuts of Color

ritajanders@cvctx.com

Sunday, March 2nd started out pretty much like a normal day in Texas. I loaded up my Tahoe with buckets and buckets of beautiful flowers and started my trip to Fort Worth for the Growers' School at the Fort Worth Botanic Gardens. It was a nice 71 degrees; the day before we were wearing shorts and the grandkids were running around barefoot and playing in the sand. After being on the road for about an hour and a half, I noticed a wall of fog up ahead. Driving into I discovered it was the front that was supposed to come in later that evening. I'd driven less than a mile when the temperature went from 71 to 51, and dropped steadily after that. In another hour it was freezing and only got colder.

I pulled into Fort Worth with freezing rain on the windshield, cranking up the heat in the car to increase the visibility. Luckily the rain stopped, and I proceeded to one of the tallest overpasses in Fort Worth. It had ice on it and I drove really slow and made my way back down to the bottom only to sit there in standing traffic because of two wrecks on IH30 a mile up the road, right where I needed to exit. I slowly made it to the exit and to the venue.

I was waiting on Cynthia Alexander, who also was experiencing horrible road conditions, so I sat and viewed the lovely gardens that had daffodils blooming, now covered in the pretty white stuff. The staff drove up to the Texas Garden Club headquarters and I drove over there to unload. I had barely pulled up when it started raining ice; beautiful little crystals pouring down upon us. I had to stop and take a video because it was so unbelievable. The tulip trees were in full bloom and the next day they were all brown and frozen. That night the temperature dropped to 16 degrees. At home we were expecting barely freezing, and we had 23 degrees with layers of ice on everything making it look like a winter wonderland. One of the doors blew off a greenhouse and all the snaps froze in the front part of the greenhouse and all my African blue basil plants froze in another house. I hadn't prepared for this because we weren't expecting this cold of weather.

Despite sleet, ice, delayed or canceled flights, and expensive cab fees (who else would drive in that weather?) we managed to pull off the Texas Growers' School. Ironic thing is we planned it in Texas in March so we wouldn't have these hurdles but after this winter, it was pretty much normal.

With the ever-empowering American Grown flower movement a larger crowd than we expected attended the meeting. We apologize for the cramped room but the Fort Worth Botanic Garden was awesome for extending their hospitality and giving us the room for almost free for three days including the setup. Attendees were bombarded with continuous information from the slate of speakers. Market bouquets were made, bridal designs created by Gretel Adams and myself, and all the speakers shared a tremendous amount of information with the attendees. Evaluation sheets revealed that while most were overwhelmingly pleased with the Growers School, there is always room for improvement.

It was so much fun walking around the room watching all the attendees make their bouquets with their style.

A-Roo was on hand to provide various sleeve options to market your beautiful bouquets, and Floralife had their line of

postharvest products to improve the health of your flowers once they are harvested. Harris Seeds also sponsored the meeting and sent seed catalogs for all the attendees but due to the bad weather, they didn't arrive until the day after the meeting. When you order seed from Harris Seed, all the information for starting and growing the seed is on the packet.

Day two was led off by Paula Rice with her Step by Step Action

Plan for Success. Paula is the mother of nine children and it sure shows in her work as to why she is so organized. Paula uses QuickBooks and Excel sheets to run her business and her planting schedule and she has it down pretty much to a science.

Gretel and Steve Adams gave two presentations which both held everyone captive to their words. These two really have it going on and I think they will be the next Pam and Frank Arnosky. It was such a pleasure to have them in Texas and they are such a sweet couple and they just feed off each other and I wish them the very best. Gretel suggested watching blogs such as Saipua, Floret, Honey of a Thousand Flowers, and several more. You watch one and then there are several more suggestions

for other blogs. Gretel's tip was to grow more lisianthus.

Pam and Frank Arnosky also presented a couple of segments and were so full of information. I took so many notes myself and I've been growing flowers for many years now and always learn from them. Their stories are so interesting and they are so funny when they are both up front telling stories that you don't want to miss a thing. Frank shared his heated plug table setup. He uses a 6' x 12' sheet of insulated foam and buys a cable from Gloeckner and makes a continuous loop over this sheet. Then he puts empty trays upside down, and the seed plug trays go on top of that. It's just enough heat to keep your seedlings at the right temperature. Frank said this little setup has lasted him 18 or so years. The Arnoskys plant all their plugs in 128 trays and go straight to the field with this size. Frank showed how if you stack the trays zig-zag, they won't stick together when you try to pull them apart. He also explained that if you order primed seed, it should be used right away because this seed has the germination process started and it won't last long.

Lisa Ziegler shared her video on the Rain-Flo mulch layer. I have to have one of those. There is a video of this layer on the ASCFG event tab under the North Carolina 2013 meeting. It puts down drip tape and a biodegradable plastic mulch called Bio-TELO, which can be plowed in after the crop finishes, and the drip tape can just be pulled out from underneath it and used again. There are also several YouTube videos that show how to use this useful tool. Lisa has a webpage called The Gardener's Workshop, and she is currently finishing up her book which will be out in 2014, and is about the best hardy annuals to grow. Lisa used to grow the flowers she loves and now she grows the flowers that make her money.

And then there was Mimo Davis who missed her calling. She should have been a standup comic for agricultural development. Her humor and energy are awesome and she has a love for growing. Mimo is doing inner city work with youth and has a company called Urban Buds. She did her presentation on season extension. Mimo's visit to Texas started with getting to the airport really late on Sunday night when Fort Worth was



The Cut Flower Quarterly

iced over and she finally was able to get a cab after about an hour to take her to the hotel for a stiff fee. Welcome to Texas, Mimo, where you can experience all four seasons in one day.

We were blessed to have several members who came in early and offered to help us set up the room, lay out the food and wine and get all that complicated computer equipment working correctly. I thank you so much. There were so many awesome attendees at this Growers' School and I'm so happy that I got to meet so many of you and thankful for all the relationships started. The networking that goes on at these meetings is so important to become a successful grower/designer. Many segments were longer than time allowed and you should be able to view these slide presentations later on the ASCFG website.

Jennie Love, the ASCFG's Mid-Atlantic Regional Director, and grower/floral designer, along with her committee is busy planning the next Growers' School in conjunction with the National Conference, with a day of tours for October 19-22.

WEST AND NORTHWEST



Paula Rice

BeeHaven Farm

behavenflowers@gmail.com

I went to Fort Worth to be a part of the Growers' School. We had an incredible speaker lineup to educate new growers on the basics of growing flowers. I know they went home with visions of zinnias dancing in their heads and probably more information than they will know what to do with. I know I did.

I was on the agenda as the "in the office" speaker. In my experience, a lot of business planning can be rather dry and complicated and leave you wondering where to begin. Lots of times, you really don't get motivated enough to even start. Not good, because you can be the best darn flower grower in the area but if you don't push your paperwork you will have a hard time making it as a business.

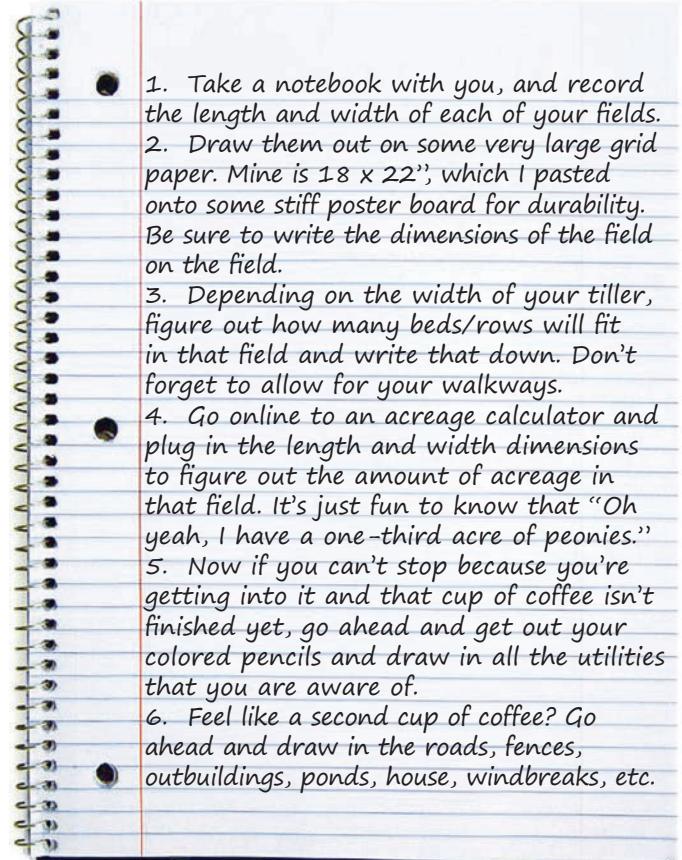
I titled my presentation "Office to Field Business Planning", and boy howdy, that's exactly what it is. To keep everyone on target and not lose their way, I created a step-by-step action plan to take home to implement all the ideas.

The ultimate goal in setting up an office is to capture and process information so that it begins to work for you. I talk about basic accounting practices to keep everything organized and then dive into planning tools to use in the office for a more successful and strategic growing season in the field. We'll talk about easy processes to plan fields, organize seeds and we even dive into building seeding schedules.

If you are a new grower or feel like you need some help in this area of your business, make arrangements now to come to the National Conference in Delaware this fall. But I will give

you this challenge to get you on the right track to your own "Office to Field Business Planning" right now.

At the very root of success you need to know what your resources and potential are. So here's the challenge: draw out your farm. Yes, I actually mean with a pencil on grid paper. If you're tech savvy, use Google Earth, or AutoCAD, or whatever—just do it. This is incredibly easy and fun. If you don't have a super long tape measure, just walk it off and you'll be close enough. Here are the steps:

- 
1. Take a notebook with you, and record the length and width of each of your fields.
 2. Draw them out on some very large grid paper. Mine is 18 x 22", which I pasted onto some stiff poster board for durability. Be sure to write the dimensions of the field on the field.
 3. Depending on the width of your tiller, figure out how many beds/rows will fit in that field and write that down. Don't forget to allow for your walkways.
 4. Go online to an acreage calculator and plug in the length and width dimensions to figure out the amount of acreage in that field. It's just fun to know that "Oh yeah, I have a one-third acre of peonies."
 5. Now if you can't stop because you're getting into it and that cup of coffee isn't finished yet, go ahead and get out your colored pencils and draw in all the utilities that you are aware of.
 6. Feel like a second cup of coffee? Go ahead and draw in the roads, fences, outbuildings, ponds, house, windbreaks, etc.

Okay, I'm getting away with myself. You can tell I really had a good time doing this. You could, by all practical means, stop at step 4. Find my sample farm grids under "Useful Links" in Members Only at www.ascfg.org.

This information becomes hugely valuable into the future and makes decision-making and enterprise budgeting a whole lot easier. Need to figure out how much drip tape to order? Or how much mainline you will need and how much that will cost? No problem, all you need is a cup of coffee, a calculator and this new field layout. Want to be able to see how much area you want to devote to succession planting sunflowers? Now you can easily estimate the amount of seed to buy or plugs to start so that you don't end up coming short or worse, planting too much and wasting time and money.

Planning is important to the success of your business and it absolutely doesn't matter how small you are; this applies to everyone. Resolve to get this done, start your coffee pot, get a pencil and notebook, walk out your back door and just do it. Then let the dreaming begin.

Thank You
Fort Worth
Growers' School
Committee
& Speakers

Gretel and Steve Adams
Cynthia Alexander
Rita Anders
Pamela and Frank Arnosky
Mimo Davis
Paula Rice
Lisa Ziegler

Thank You
Sponsors!



HARRIS® SEEDS
A Grower Friendly Company



Exciting New Perennial Varieties from Seed



ALCEA Rosea-Hybr. Spotlight-Series 'Radiant Rose'

Jelitto

STAUDENSAMEN · PERENNIAL SEEDS · GRAINES DE PLANTES VIVACES

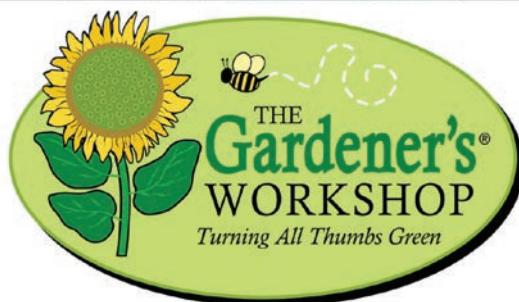
Production · Breeding · Seed Technology

USA Office: 125 Chenoweth Ln. · Louisville, KY 40207

Phone (502) 895-08 07 · Fax (502) 895-39 34 · <http://www.jelitto.com> · maryv@jelitto.com

German Headquarters: P. O. Box 1264 · D-29685 Schwarmstedt

Phone 01149-5071-9829-0 · Fax 01149-5071-9829-27 · www.jelitto.com · info@jelitto.com



Information and Inspiration! www.shoptgw.com

WHAT'S NEW with the ASCFG?



Karen Ackerman, Flowers Galore, Camden, MI

Josefina Alcala, Richmond, TX

Teresa Biagi, Hazelfield Farm, Worthville, KY

Lynne Blackman, Mount Laurel, NJ

Ann Bodling, Accokeek, MD

Tari Botto, Malone, NY

Jill Bower, Erie Way Tree Farm, Holley, NY

Carla Bruce, Willow Oak Wedding Flowers, Forest, VA

Susan Bruss, Olli's Farm, Hartwick, NY

Steve & Lori Bulla, Ozark Grown Flower Farms, Fayetteville, AR

Lisa Carle, Pyramid Farms, Chico, CA

Megan Chase, Chase Farm, Freedom, ME

Karen Clodfelter, Circle K Ranch, Randleman, NC

Amanda & Matthew Cook, Cook's Market, Lawrence, KS

Diana Cowdery, Mae Flowers, Beacon, NY

Cindy Creps, Meadow Ridge Perennial Farm, Hebron, ME

Diana Dodd, Good Earth Flower Farm, Buchanan, TN

John and Tish Erdmann, Erdmann Farm, Christiana, TN

Charlotte Everett, Happy Returns, Carthage, NY

Sophie Felts, Flowers Among the Trees, Gaithersburg, MD

Jethro Fisher, Fisher's Greenhouse, Gordonville, PA

Libby Francis, The Modest Florist, Baltimore, MD

Jacqueline Fulcomer, Willoway Farm, Fredonia, WI

Julie Gotwals, Detweiler Homestead Farm, Telford, PA

Jo Lynn and John Graham, Loggy Bayou Fern House, Loushotta, LA

Jennifer Guerin, Lincoln, RI

Joanne Halter, Mistik Acres, Alvena, SK, CANADA

Kimberly Hapgood-White, Pepperell, MA

Kathleen Hatfield, Wellington, CO

Mary Helfrich, Nashville, TN

Gill Hodgson, Field House Farm, York, Humberside, UK

The ASCFG Welcomes its Newest Members

Soni Holladay, Houston, TX

Connie Homerick, The Iris Patch, Lucas, OH

Jerry Horton, Down Home Ranch, Elgin, TX

Stephanie Hughes, San Francisco, CA

Bill Jarrell, Green Wagon Farm, Surry, NH

Kathryn Klotzbach, Lyndonville, NY

Darlene Koonce, Sugar Berry Hill Farm, Covington, TX

Carolyn Lacerra, Petaluma, CA

Lennie Larkin, Petaluma Bounty Comm. Farm, Sebastopol, CA

Jill LaVigne, Bower Bird Farm, Austin, TX

Jan Lorrey, Nature's Garden, Newbury, MA

Julie Lueck, Tuttle, OK

Kathy Madison, Sodus Point, NY

Jennifer Maloney, Dayspring Farm, Topping, VA

Robert Martin, Diamond Ridge Peonies, Homer, AK

Annette McGuffey, A Country Rose Florist, Tallahassee, FL

Marina Michahelles, Red Hook, NY

Emily Monahan, Cooperstown, NY

Ashley Morren, Holland, MI

Peggy Heath Ogilvy, Windsor, VT

Mary Perry, Winterberry Farm, Belgrade, ME

Keith Pierpont, Pierpont's Blossom Farm, Baiting Hollow, NY

Bud Power, Bud's Plants and Vegetables, Panola, TX

Martha Reed, Vinalhaven, ME

Ivelisse Rivera, Darthia Farm, Gouldsboro, ME

Gary Saathoff, Devine, TX

Jamie Sammons, Jayflora Designs, Fonda, NJ

Alethea Segal, Hauser Creek Farm, High Point, NC

Myra Shoemake and Chip Woodiel, Willow Wood Farms, Cookeville, TN

Diana Simon, Wellesley, MA

Katie Smaglinski, The Rustic Bunch, Leesport, PA

Dawn Smith, Bellaire Blooms, Bellaire, MI

Katy Thelen, Happy as a Coneflower Farm LLC, Cary, NC

Nadine Williams, Flower Ridge Farm, Harrisburg,

Joe Zappia, Clyde, Victoria, Australia



Thanks for the Good Word

*You connected some
of our new members
to the ASCFG!*

Gretel and Steve Adams

Pamela Arnosky

Erin Benzakein

Christof Bernau

Lynn Byczynski

Alicain Carlson

Linda Chapman

Leah Cook

John Dole

Dave Dowling

Butch and Elizabeth Eggers

John Erdmann

Ray Gray

Nancy Hanmer

Stephanie Hughes

Polly Hutchison

Grace Lam

Vicki Lander

Carol Larsen

Jennie Love

Mary Marston

Robert McNeil

Michael M. Mellano

Deena Miller

Roena Moore

Debra Prinzing

Kate Sparks

Diane Szukovathy

Emily Watson

Michael Wells

Dennis Westphall

Chris Wien

2014 Grower Grant Winners

The ASCFG has awarded grants to members who will perform on-farm research.

Even growers in Mississippi need to heat their hoop houses. Tanis and Rick Clifton of Happy Trails Flower Farm in Dennis, Mississippi, want to provide an economical and portable heat source for a target area inside an existing hoop house. This will increase the likelihood of expected target date for out-of-season flowers for holidays such as Valentine's Day, Mother's Day, and Christmas. They will install a hydronic radiant heat system for lily production.



Ron and Marjorie Illingworth of North Pole Peonies in North Pole, Alaska, will monitor stress levels of peony plants using infrared thermometers to determine best irrigation practices, including frequency of delivery and water quantity. Their goal is to improve the quality of peony plants, given the changing and unpredictable climate.

Are smaller sunflowers just as desirable as larger ones? Paula Rice of BeeHaven Farm in Bonners Ferry, Idaho, believes so. In her multi-year project, she will be manipulating growing conditions of several cultivars of branching sunflowers to find those with potential for producing smaller flower heads.



WHAT'S NEW with the ASCFG?

2014 Dave Dowling Scholarship Winners

Two students were named scholarship winners this year.

Josh Pecukonis is majoring in environmental horticultural science at Montana State University in Bozeman. When he was younger, he started his own business called All Smiles Plant Farm, where he grew annuals, perennials, herbs, vegetables, trees and shrubs, and specialized in drought-tolerant perennials and xeriscaping. He sold plants and flower arrangements at the local farmers' market. He plans to continue his horticulture experiences at a cut flower facility.



Also getting an early start in floriculture, Madelyn Wynn has designed flowers for sale at the Fayetteville Farmers' Market, and for events at the University of Arkansas. She manages the cut flower production on her parents' farm. Madelyn appreciates the joy that cut flowers bring to people and makes it her goal to smiles on others' faces.



Clarification:

On page 19 of the Winter 2014 issue, a photo was captioned 'Sweet Black Cherry'. It is a mix of dianthus cultivars, one of which is 'Sweet Black Cherry'.

Join the Board!

The summer you'll have the chance to elect - and run for - positions on the ASCFG Board of Directors. In 2014, we'll vote for Secretary and Treasurer (to serve two years), and Directors for the Midwest, and South & Central Regions (to serve three years). For more information, contact the ASCFG. If you're interested, throw your hat in the ring. We'd love to have you with us!



NOT the ASCFG Board

Save Your Space at the Fall Growers' School

If you've been a flower farmer for fewer than five years, and are interested in attending the Growers' School on October 19, apply for an ASCFG scholarship. Ten scholarships will be awarded this year. Each will provide \$100 toward the cost of the Growers' School registration (\$150); applicants should be prepared to pay the remaining \$50. The scholarship may not be applied to the cost of meals or lodging at the Conference. Open only to ASCFG members.

The deadline for applications is July 1; successful applicants will be notified August 1.

Find the application form at the ASCFG web site under the Events tab.



Keep an Eye on the Site



Watch the ASCFG web page for updates on the 2014 National Conference and Trade Show, suppliers to the cut flower industry, and activities from the American Grown task force.

American Flowers (and Flower Farmers) Go to Washington

by Debra Prinzing

Two weeks ago, I joined 17 of America's flower farmers in the fifth annual delegation to bring the story of our farmers and flowers to our elected officials in Washington, D.C. Last year, the delegation of California flower farmers who started this event reached out to their fellow farmers in other states to join them. That gesture was repeated this year – and it was my honor to be part of the delegation of flower farmers from California, Alaska, Washington, Oregon, Maryland and Virginia.

We took D.C. by storm, propelled by the monumental news that the White House featured American grown flowers at the Feb. 11th State Dinner with the President of France. That show of support from the Administration, which elevated American flowers to their rightful place alongside American food and American wine in an important public ceremony for our nation, was super encouraging.

One highlight was meeting and hearing from former USDA Deputy Secretary Kathleen Merrigan, who has been a huge champion for American grown flowers and flower farmers. She is moving on to do some other exciting things in the world of sustainable agriculture, but I hope to feature a Podcast interview with her in the future, so you can hear her story.

The good news just continued on February 27th, when California Congresswoman Lois Capps and California Congressman Duncan Hunter joined together to announce the formation of the bipartisan Congressional Cut Flower Caucus.

Along with Lane DeVries, a commissioner and immediate past chair of the CCFC, and a flower farmer based in Arcata, Calif., and Diane Szukovathy, president of the SWGMC and co-owner of Jello Mold Farm in Mt Vernon, Wash., I was asked to speak at the Press Conference. Our panel was moderated by Kasey

Cronquist, CEO/Ambassador of the CCFC and the instigator of the DC Fly-ins that allow American flower farmers to tell their stories to their elected representatives.

I was given permission to record the press conference, which you can hear at <http://www.debraprinzing.com/category/slow-flowers-podcast/> Below, I have transcribed some of the key "sound bites" from this event so you can get a flavor for what was said:

"What makes me really, really happy to do this is one major thing that I've pushed for along with a few of my Republican colleagues and actually more of my Democrat colleagues and that's simply 'Made in America.' It's like food, and clothes and the hammer you buy at Home Depot. If you buy American made, then you're not just helping out the economy, you're employing your neighbor, your family, friends (and the) people you go to church with."

"[The Caucus message:] Don't buy the South American flowers; buy the American flowers. I think once people see that then they will."

–Congressman Duncan Hunter

"It's very clear to me that (American flower farmers) don't want a handout. They just want a fair chance to compete. It's a very compelling story that has inspired me to create this Caucus because we want to make sure that American grown stays alive and well. We're going to organize educational briefings, publicity events, other activities for members of Congress and staff. And of course, we'll be surrounded by flowers wherever we do this so there will be a visual impact — olfactory, as well. The benefits of a vibrant American flower industry reach and touch every corner of our nation. It's the core message of the Cut Flower Caucus and we're excited to get to work."

–Congresswoman Lois Capps



Diane Szukovathy, Vivian Larson & Debra Prinzing. The Washington-grown flowers were delivered to the Congressional representatives who we met with.

"...increasing demand for local flowers has reinvigorated our industry and it provides hope and future for the sustainability of the family farms in our industry. Just two weeks ago, the White House actually featured domestically grown flowers for the first time during a State Dinner. And it is our hope, with the help of the Flower Caucus, that going forward we can make this a commonplace (practice)."

–Lane DeVries, The Sun Valley Group/California Cut Flower Commission

"I'm not interested in being a farmer if I can't do it ethically and sustainably, so I was very inspired early on by an essay that Wendell Berry had written on agronomy and ecology suggesting that you cannot have humans taking care of the land unless they can make a living off of the land. We grow without chemical fertilizers and pesticides. We're extremely aware of the fact that we share our land with many critters, so everything that we do is influenced by that. It's not just a marketing gimmick for us. It's the core of what we do. And I know that I speak for many growers all across this country who feel the same way. It's a heart-driven industry."

–Diane Szukovathy, Jello Mold Farm/Seattle Wholesale Growers Market Cooperative

American Flowers (and Flower Farmers) Go to Washington

continued

I am still floating on air because of this transformative occasion – one that underscores for me the power of story, the strength in shared voices and the significance of taking a stand for what I believe in. Visiting Washington, D.C., celebrating American flowers and the farmers who grow them, and lending my voice to the conversation — it all adds up to a life-changing experience. I predict that someday soon, when every room of the White House is filled with American Grown Flowers and every single event staged by the Administration in power is decorated and signified by flowers grown here at home, we'll look back on Feb. 27, 2014 as the single “tipping point” – the event that shifted our nation's attitude and understanding about the flowers in our lives. Soon these actions — to choose seasonal and domestic flowers — will be a natural practice. If you are interested in being part of this movement — and especially if you are interested in reaching out to your own Congressional representative to urge her or him to join the Congressional Cut Flower Caucus, please contact me at debra@debraprizing.com or on twitter @myslowflowers. I will get you the simple details you need to extend the invitation to your Representative.

Reprinted with permission from
slowflowers.com



The 2014 Flower Farmer Delegation
to Washington, D.C.

From the DIRECTOR

Judy M. Laushman



It's been only about six weeks since the ASCFG Board of Directors held its “spring” meeting in Oberlin. It was curtailed by the arrival of one of this past winter's weekly massive snowstorms, consolidating agenda items and shortening discussions as members scrambled for alternative transportation back home a day earlier than planned.

Even so, the day-and-a-half gathering generated productive dialogue on topics ranging from the membership renewal rate and updating the online price guide to selecting nominees for the next Cut Flowers of the Year and promoting the American Grown program. The wide scope of the conversations matched the broad scale of the Board members: one growing in chilly Vermont and another in broiling Texas; some who are also floral designers and some who are strictly growers; one has a PhD in horticulture and another has a PhD in economics. Each brings his or her own experience, wisdom, and opinions to the board, and each is valuable to its progress.



Some of the projects were completed quickly after the meeting, mainly inter-Board communications and quick-decision projects. Some are longer term, including updates to the organization's bylaws, and staff and board written responsibilities. Not exactly lively information, but necessary to the forward movement of the Association.

Members will be interested to know that the board did vote to continue the recent pattern of holding one large national conference and trade show in alternating years with four smaller, shorter meetings, probably two in the spring and two in the fall. This system will allow even more growers to attend events without having to travel long distances, or spend too many days away from the farm.

We'll need your help for these meetings, as we look for farms to host tours, growers to serve as speakers, and volunteers to help with everything else. Many of you have been involved with ASCFG meetings in the past, and know that this kind of service is not only crucial to the success of the event, but is also rewarding, and usually even fun. If you're on the receiving end of a request for help, please consider stepping up. The ASCFG staff and board can get a lot done on their own, but we can do much more with all of you behind us.

ASCFG National Conference and Trade Show

October 19-22, 2014

Hilton Wilmington Christiana
Newark, Delaware

We're returning to the national conference format—bigger and better than ever!



GET READY FOR

- A full-day, back to basics Growers' School
- Specialized topics for both new and established growers such as simple and advanced greenhouse setup and management, marketing and sales of wholesale flowers, and crew management
- New Varieties introductions from John Dole—audience participation welcome
- In-depth design-based sessions for farmer/florists, floral designers, and growers who sell to floral designers
- Local cut flower farms tour
- "Speed Date a Pro"! Ask experienced growers your most pressing questions, face to face!



Association of Specialty
Cut Flower Growers
M.P.O. Box 268
Oberlin, Ohio 44074

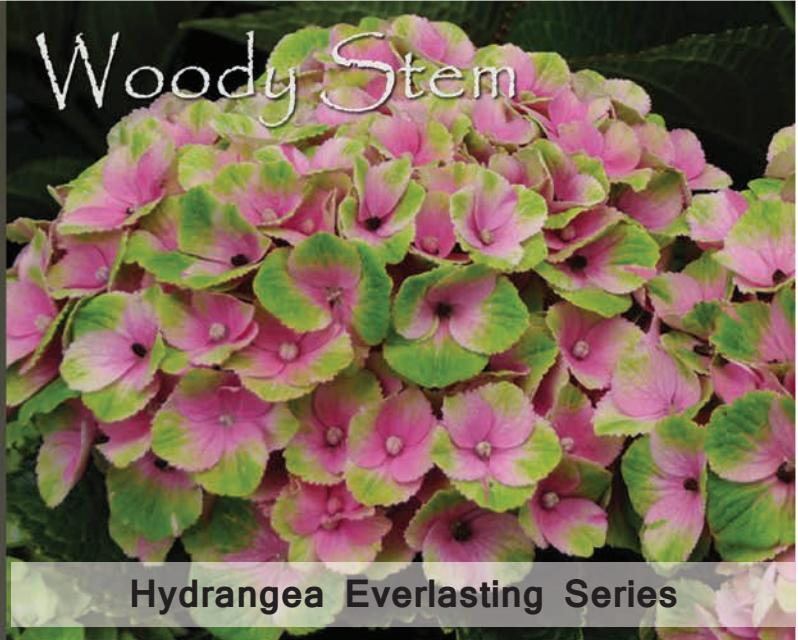
2014 ASCFG Cut Flowers of the Year

Fresh



Snapdragon Chantilly Series

Woody Stem



Hydrangea Everlasting Series

Bulb



Anemone 'Galilee Blue'