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The Cut Flower

Q U A R T E R L Y

Association of Specialty Cut Flower Growers Inc.

for growers of field and specialty greenhouse cuts

Inside this Issue

Letter from the President _____ 3

Sustainable Cut
Flower Lilies _____ 4

How Northern Ireland growers are making the most efficient use of peat.

Janet's Gems _____ 8

Check out Janet Foss' favorite small bulbs - Brodiaea, Dichelostemma and Tritileia.

Back to Basics _____ 10

What Do Buyers Really Think of Floral Preservatives?

Small Things Considered _____ 12

Gay Smith discusses "hyperlocal" trends and why flowers are good for you.

Cornell-copia _____ 14

An overview of cut flower production in China from Chris Wien and Bill Miller.

IPM Update _____ 16

Stanton Gill has introduced us to another pest - the bagrada bug.

Research Update _____ 18

Postharvest treatments for snapdragon and viburnum; improving lily color.

Grower Profile _____ 20

Paula Rice of Beehaven Farm has a ready-made farm crew: her eight kids.

Regional Reports _____ 24

ASCFG News _____ 34

Letter from Oberlin _____ 37

2011 Conference Preview _____ 38

Cover photo
Brodiaea 'Starlight'
courtesy of Janet Foss



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From the **PRESIDENT**

Vicki Stamback

I know that when this *Quarterly* comes out, winter will be completely over for just about everyone reading this, but what a crazy winter we had here in Oklahoma. Besides two major blizzards which hit two weeks apart, we had one very incredible weather event happen. After the second blizzard we had a foot of snowpack on the ground, no wind and totally clear skies and it went down to an all-time record of -22 degrees. Exactly seven days later we had a record high of 82 degrees, for a 104-degree temperature change in seven days. No wonder everyone was sick this winter!

Last year we tried two different experiments at the farm, one was the cut mums and the other was growing the anemones in bulb crates. The mums were a success and now we feel like we know exactly what we need to do and will grow more this year. My customers absolutely loved the mums and all told me how they cannot get those cultivars anymore, so they were very happy to see I was growing them. Even though we let many of them bloom out so people would have something to see at the conference, we still made money on what was left, so that is very encouraging.

At conference time, the anemones were just peeking up out of the soil in the bulb crates. Those have been a huge surprise and we are already planning to triple our numbers next year. The anemones actually began blooming for us the middle of December, so we had anemones for Christmas.



They will finish blooming by April 1st. In that time we picked and sold an amazing 6,180 stems! I'm expecting to sell at least 100 more stems before they give it up to the heat. Yesterday it was 100 degrees in the greenhouses, so it won't be much longer for the anemones. We planted 1,400 bulbs so that is 4.48 stems per plant, which I would say is very good.

What was amazing about these flowers is that in the bulb crates they averaged 24" tall, the stem was the size of a pencil and the flowers were huge. My customers were snatching them up as fast as they could. I saw some anemones one of my customers had received in a mixed box from a local wholesaler; "pathetic" was all that came to mind. The best part was that I had plenty of anemones for Valentine's Day, I sold everything I could cut that even looked like an anemone and all colors sold. The thing I was most happy about was the fact we had no disease problems at all with them. We concluded just after Valentine's Day that we would have to increase our numbers next year.

So, all in all, we were very happy with our experiments we did last year. What will we be experimenting on this year? We have several things up our sleeves to try and you'll just have to find out later what they were and how they went! I hope everyone has a great season this year!

Sustainable Cut Flower Lilies in Crates

The Case for Reducing the Use of Sphagnum Moss Peat

Teresa Maguire, Horticulture Technologist and David Davidson, Horticulture Development Adviser
College of Agriculture, Food and Rural Enterprise (CAFRE), Greenmount Campus, Northern Ireland

The commercial growing of lilies as cut flowers is a relatively new venture in Northern Ireland. It started about six years ago as a result of trials carried out at the College of Agriculture and Rural Enterprise (CAFRE), Greenmount Campus. There are now around ten growers producing cut flower lilies for markets in Northern Ireland, the Republic of Ireland, and England. The lily types grown are mainly Oriental hybrids and Oriental / Trumpet (OT) hybrids, but also include smaller quantities of Longiflorum / Asiatic (LA) Hybrids, Asiatic and Longiflorum varieties.

It is estimated that in 2010 there were approximately 800,000 stems of cut flower lilies grown, with a farm gate value of in excess of USD 800,000 (£500,000). Nearly 50% of these stems are grown in crates (Figure 1) using an Irish sphagnum moss peat growing medium.

Over the past five years, the United Kingdom government has set targets to reduce the use of moss peat as a growing medium because of environmental concerns, and to eventually cease its usage in the professional horticulture sector by the year 2030. The time frame may seem far away, but at present Northern Ireland has no reliable moss peat alternative growing medium for crate lily production.

In Northern Ireland most of the moss peat growing medium is used for only one cropping cycle, leading to waste of potentially re-usable resources and causing additional on-farm costs for its disposal. Under the

current financial climate, with the rising cost of moss peat and lily bulbs, and little or no increase in final farm gate cut stem price, it is becoming less commercially sustainable for growers to continue to use their peat moss growing medium for only one cropping cycle.

In light of these issues this article reports on trials carried out at CAFRE, Greenmount Campus over 2009 and 2010 to reduce peat usage both by reusing peat

which has already been used in lily crate production, and by using peat-reduced alternatives that are also being currently investigated for pot plant production in Northern Ireland.

The trials were carried out on two Oriental lily varieties: 'Tiber', a pink variety, in 2009 and white 'Rialto' in 2010.

Before planting, the nutrient contents of all growing media were tested and base fertiliser added or diluted to match the target levels for the standard new unused growing medium for lilies. Bulbs were planted in different growing media in crates and each of the treatments were randomised in three replicates and then grown under a standard polytunnel (hoophouse) structure with automatic ventilation of 59F (15C). The lilies were given liquid fertiliser (22:4:22) at 220 ppm N and calcium nitrate solution at 155 ppm N applied on alternative weeks over the growing period for all treatments. In 2010 a liquid fertiliser (16:5:32) was applied at 160 ppm N from bud formation to harvest stage.

Once the trial lilies reached the harvestable swollen bud stage, stems from each of the treatments were harvested and stem length, weight and bud number recorded, treated as per standard postharvest practice (Pokon and Chrysal), and vase life determined at 68F (20C) day and night, and 12 hours light for the number of days until petal drop. In 2010 the stems were also assessed for marketability during an organised event for cut flower lily growers (Figure 2).



Figure 1: Oriental lily production using crates at CAFRE, Greenmount Campus.



Figure 2: Northern Ireland cut flower lily growers assessing marketability of Oriental lily 'Rialto'.

Results from 2009 (Table 1) show that there were no statistically significant differences on the stem quality and shelf life of the flowers produced in either used lily growing medium or that diluted with 25% composted spent mushroom compost (Figures 3 – 6).

In 2010 the trial included the use of peat diluted with 25% food waste. A similar result was also found (Table 2) with no statistically significant differences

between stem length, stem weight, bud number and shelf life of flowers produced in different growing media.

However, the growers in their marketability scoring of the flowers found that flowers grown in the standard peat moss growing medium were of better quality than those grown in other media. In spite of this, flowers from the other growing media were still graded as 3 and above, i.e. marketable quality.

Flower stems from the twice-used moss peat were of the lowest marketable quality. Visually some leaves of the treatment 100% twice-used showed signs of leaf edge twisting on the upper parts of the plants, an indication of iron deficiency due to problems with pH. ‘Rialto’ is known to be susceptible to both low nitrogen and changes in the pH level (G.A Verdegael Export).

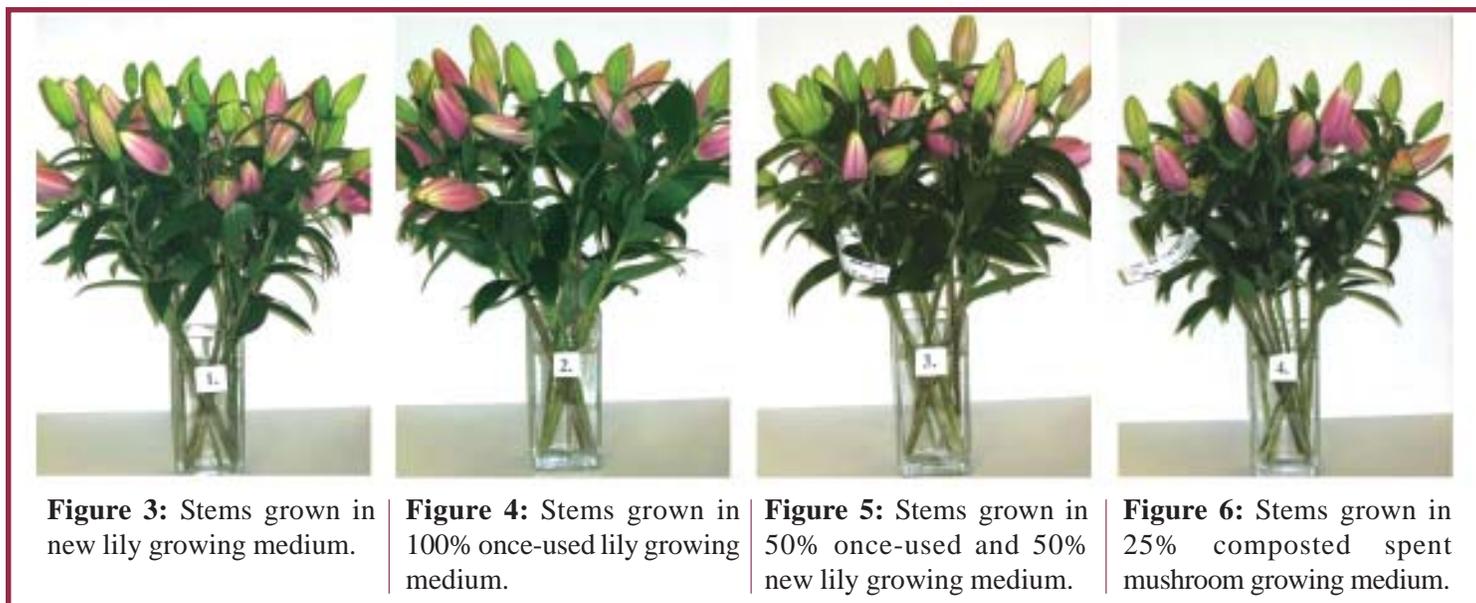


Table 1: Assessment of Oriental lily ‘Tiber’ (2009) in different growing media

Treatment/Assessment	Average stem length (cm)	Average stem weight (g)	Average bud no.	Average no. of days until petal drop (vase life)
New lily growing medium	0.83	104	3.7	15
100% once-used lily growing medium	0.83	99	3.5	16
50% new lily and 50% once-used lily growing medium	0.85	100	3.5	15
25% composted spent mushroom mix & 75% moss peat growing medium	0.81	92	3.5	15
n.s. is not statistically significant difference P<0.05	n.s.	n.s.	n.s.	n.s.

Table 2: Assessment of Oriental lily ‘Rialto’ (2010) in different growing media

Treatment/Assessment	Average stem length (cm)	Average stem weight (g)	Average bud no.	Average no. of days until petal drop (vase life)	Grower marketability assessment
New lily growing medium	104.3	139.6	4.4	14	4.1
100% once-used lily growing medium	100.4	128.0	4.3	15	3.4
100% twice-used lily growing medium	101.8	132.7	4.4	13	3.0
50% new lily and 50% used lily growing medium	100.5	126.7	4.0	14	3.1
25% food waste mix & 75% moss peat growing medium	98.1	137.3	4.3	14	3.6
n.s. is not statistically significant difference P<0.05	n.s.	n.s.	n.s.	n.s.	-

(Grower marketability assessment, 1= poor, 3=acceptable 5=excellent)

Leaf colour of 'Tiber' grown in the medium containing 25% composted mushroom substrate was found to be of a lighter shade of green compared with the lily flower stems that had been grown in fresh peat-based lily growing medium. This is an indication of reduced nitrogen levels, unsuitable pH levels or high salinity; the latter is normally the case with growing media containing composted spent mushroom substrate. Higher salinity inhibits rooting and induces chlorosis (Tompsett, 1984).

The financial and environmental benefits of reusing growing medium

In Northern Ireland crate lily production, a standard plastic crate for lilies holds 36 litres of moss peat growing medium which costs around USD 1.60 (£1.00) per crate containing 13 lily stems (16/18 cm bulb). Hence, the cost of the substrate is around USD 0.12 (£0.077) per stem.

Diluting the fresh growing medium with 50% used growing medium reduces the cost of the substrate by 25%. By reusing the growing medium once or twice, there is a potential saving of 50% to 66% in the cost of the growing medium. This would equate to respective savings of up to USD 30 (£19), USD 60 (£39) and USD 79 (£51) per 1,000 Oriental lily stems produced.

However, if a grower is going to either re-use his lily growing medium, or use a mix containing a moss peat alternative such as composted spent mushroom substrate or food waste mix, a number of factors need to be considered.

- New moss peat growing medium is lighter in weight than used moss peat growing medium and moss peat alternatives, making crates heavier to handle if reusing peat or using peat alternatives.

- Used moss peat growing medium can harbour weed seeds, and pests such as vine weevils and slugs. Because the medium is not sterilised, there is a risk of infection by viruses carried over from infected lily bulbs, and fungal soil-borne diseases such as *Pythium*.

- The structure of re-used peat is less open and has a lower air-filled-porosity (AFP) which may affect drainage capacity and therefore require closer monitoring of watering operations.

Because of these factors the crop management should be revised to ensure successful results.

Nutrient analysis of each batch of growing medium (either of used or peat reduced growing medium) is also essential to confirm the base nutrient levels, and corrections made accordingly. All the media described required either extra nutrients to meet the target levels of standard new lily growing medium or dilution with moss peat to reduce the risk of nutrient toxicity.

We conclude that by reusing lily growing media and embracing the use of moss peat alternatives, growers will reduce their production costs. In addition, they will also be able to demonstrate that they are using sustainable production techniques and have an environmental awareness in the management of their natural peat resources to meet future UK

government targets. However, growers will need to be aware of the potential risks and factors that may require a different approach to crop management to ensure success.

Future Work

For this year (2011) we are continuing our work with Northern Ireland lily growers on trialling other peat alternatives e.g. composted food waste on cut flower Oriental lilies, and on reusing peat with a focus on layering new and used peat within the crates.

Acknowledgements

The authors would like to thank Dr Raja Harun (Senior Horticulture Technologist), colleagues at the Horticulture Development Centre, the staff of the technology laboratory at Greenmount Campus and the Northern Ireland lily growers for their contribution to the project trials and this article and to Ko Klaver of Zabo Plant USA for his support in its submission.

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Footnote – Explanations of peat alternatives used in the trials

Compost Spent Mushroom Substrate is the waste compost by-product from the intensive growing of mushrooms. This consists of approximately 90% barley straw and animal manure, 5% sphagnum moss peat and 5% casing which is made from peat and lime. This is then composted in an in-vessel composting process conforming to the Northern Ireland Animal by-product regulations.

Food Waste Mix is catering waste from commercial restaurants, public body and government body restaurant facilities, mixed with horticultural waste such as grass clippings and hedge prunings, mixed at an appropriate ratio in order to meet the standard suitable carbon / nitrogen ratio. This is composted using an in-vessel composting process conforming to the Northern Ireland Animal by-product regulations.

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Brodiaea, Dichelostemma and Triteleia

I love *Brodiaea* for cutting and look forward to them blooming each year. What I don't like about it is trying to spell the names correctly on invoices, and not knowing for sure what the correct botanical name for each one is. Whether it's *Brodiaea*, *Dichelostemma* or *Triteleia* they are all hard to spell. Botanically they have gone in and out of families and changed names back and forth so much that each one has a couple of synonyms.

All are native to higher altitudes of the Northwest, so the growing conditions here are pretty ideal for them: plenty of water in winter, dry in summer, good garden soil, and they don't seem to mind clay. As a matter of fact I heard they love to grow in adobe clay! They love being dried out for the summer and should not be watered when dormant, which is right after they flower. You can plant them near *Eremurus* (foxtail lilies) because they don't like summer water either. These corms have always been hardy for me in zone 6, but in 2009 we had an exceptionally cold winter, and that was the first year I lost any corms to cold.



'Queen Fabiola'

Brodiaea (Dichelostemma) 'Pink Diamond' is a beautiful hybrid; it looks almost like bleeding hearts, but has more substantial stems. I first saw flowers in Jan Roozen's (Choice Bulb Farm) cooler and it was love at first sight. They were so majestic and tall I knew I had to have this beauty at my farm. This hybrid of *Dichelostemma idamaia* and most likely *Brodiaea congesta* is easy to grow in good garden soil without additional water; it is hardy to zone 6 although in 2009 we lost about half of our corms. I treat them as a perennial, and have always fall planted them. They can be grown in high tunnels or mulched in colder climates. One cool thing about these corms is they start coming out of the ground in February, and bloom in late spring, then are dormant the rest of the year. We can usually harvest over a two-week period, the first being the nicest.

The best known *Brodiaea* for cutting is most likely *Brodiaea laxa* 'Queen Fabiola'. Its dark blue to purple flowers open here in west-central Washington State in mid-June. Blooms cut tight can store quite well, easily reaching past 4th of July when blue flowers are a premium. The biggest problem I've encountered with 'Queen Fabiola' is that there is too much on the market, at least here on the West Coast. It also looks a lot like agapanthus but is smaller in stature, which is more often detrimental. I love it in mixed bouquets and for bridal work, and it sells well in my roadside flower stand. It is native



'Starlight'

to northwest California, Oregon, and Washington State. It has been hardy for us and able to take seasonal flooding, though we grow it in well-drained garden soil. It shouldn't have any summer water especially after it goes dormant which is right after it flowers. Some sources say it is hardy only to 23F though it has survived much lower than this for us. I have seen it grown in high tunnels, but that should be done cautiously, because it can become like a weed in the right conditions.

Brodiaea ixiioides 'Starlight' has soft yellow flowers; the buds are yellow with a brown stripe before they open, which is a nice contrast, and a really unusual flower. Brides love it for its springlike romantic impression. It starts blooming in late May and continues to have flowering stems until mid-June. It has all the other requirements as other *Brodiaea*: good, well-drained soil and no additional water in the summer. The stems are a bit on the short side - about 12 inches for us - so it is difficult to use in mixed bunches, but it can make a spring mixed bouquet if you get some taller stems which sometimes happens. Even so I don't think even a single bunch has ever ended up on the compost pile.

Dichelostemma ida-maia (*Brodiaea coccinea*), firecracker flower, has really cool red tubular flowers with green tips. It really does look like a cluster of firecrackers on a two-foot stem. As with all the above it needs good garden soil and no additional water after it blooms. The tall stems work well by themselves or in mixed bouquets, but stems can tangle and flowers get caught together so handle carefully. In the wild these seem small but cultivated they are bold and substantial flowers.

The last of my favorites of this group in *Brodiaea californica*. It blooms later than the others - into July - and has larger, agapanthus-like flowers. It is native to California, but still has pretty much the same requirements as the others. It finishes up the *Brodiaea* season with big lavender flowers on 18-24 inch stems.

All these drought-tolerant plants are easy to grow and make great cut flowers. The flowers can be stored in the cooler for at least a week and still be of good quality. I have had very few pest problems with them, but if the bloom time is wet they can be bothered by fungus, and water during the summer can cause them to rot or decline in production.

The biggest problem is knowing what to call them: *Brodiaea*, *Dichelostemma*, or *Triteleia*. Don't let that stop you as these Northwest natives and their cousins make really cool cut flowers sure to charm your buyers.



Janet Foss, J. Foss Garden Flowers, is a specialty cut flower grower in Chehalis, Washington, and a long-time contributor to The Cut Flower Quarterly.



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Back to BASICS

Morgan Jenkins, Kimberly A. Williams,
and Laura Brannon

Do Consumers Value the Use of Floral Preservatives?

Before answering the question posed in this article's title, ask yourself if you routinely use floral preservatives in your floral shop. Despite overwhelming evidence that using floral preservatives prolongs the vase life of fresh flowers, a surprising number of florists do not use preservatives as a matter of standard practice. So we wondered: do consumers value floral preservative use? Do they even know what floral preservatives are?

Methods

We designed a survey to evaluate four "levels of presentation" of the same floral arrangement relating the use of floral preservatives to consumers' perception of quality, purchase intention, and price (Figure 1). The first level showed a photo of a floral arrangement without preservative; the second level showed the same photo with a small, unlabeled packet of preservative; the third level showed the same photo with a large, clearly labeled packet of preservative; and the fourth level showed the same photos as level three but was presented after a short description about how a floral preservative works. Though many questions were asked, each level of floral arrangement presentation contained the same three questions: to rate the quality of the floral arrangement in the picture; whether they would purchase the floral arrangement; and what price is the floral arrangement worth. The survey was administered to 222 respondents recruited from the downtown retail district of Manhattan, Kansas, and outside an eating establishment on the Kansas State University campus. An incentive of an orange-pink standard carnation was provided to each respondent upon completion of the survey.

Results

In response to being asked to rate the quality of the floral arrangement on each presentation level (Table 1), the more that a respondent knew about the use of a floral preservative and how a preservative worked, the higher the quality rating they marked. Respondents' perceptions of product value increased from 4.9/7.0 to 5.3/7.0 as more information was presented about the presence and function of floral preservatives. Similarly, the percentage of respondents who replied that they would purchase the floral arrangement increased from 63 percent to 71 percent as more information was presented about floral preservatives being used and how they worked. Finally, the most striking result is that respondents increased what they were willing to pay for the same floral arrangement from \$25.50 to \$29.15 based on their increasing awareness of floral preservative use and understanding of how they work.

At the beginning of the survey, when participants were asked to rate how much they knew about the function and effectiveness of floral preservatives, they did not believe that they knew much (2.1/7.0 where 1 = I know nothing and 7 = I know a lot), and they did not appreciate the value that their use added to a floral arrangement (3.5/7.0 where 1 = no increase in value and 7 = large increase in value). Participants who thought that using floral preservatives increases the value of a floral arrangement said they would be willing to pay more for a floral arrangement with floral preservative. In addition, the younger the respondent, the more willing they were to pay more for use of a floral preservative.

Providing the simple message that explains how floral preservatives work (Figure 1) was effective in increasing respondents' positive response. For example, participants believed more strongly that preservatives make floral arrangements last longer after reading the message (mean of 5.7/7.0 where 1 = zero days longer vase life to 7 = several days longer) compared to before (mean of 4.8/7.0). Regarding questions pertaining to the ambiguous *value* of the fresh floral arrangement, participants believed that use of preservatives increased the value of the arrangement more (mean of 4.0/7.0 where 1 = no increase in value and 7 = large increase in value) compared to before reading the message (mean = 3.5/7.0).

Discussion

The results of this research are exciting because they are so surprisingly positive regarding how consumers view the use of floral preservatives. However, it is important to discuss the limitations of the study's design. The survey structure, with four levels of presentation along with repetition of questions at each level, requires a warning of measurement called "self-generated validity" which can induce respondents to increasingly approve of the subject matter as they move through a survey. Self-generated validity is almost certainly an issue with this study, so while results are positive, the magnitude of their change may have been influenced by this phenomenon. Having explained this caveat, the results of this study support a simple idea: explicitly stating that floral preservatives are used and providing a short message about their function and effectiveness does appear to increase consumers' perception of the quality, purchase intention frequency, and

price they are willing to pay for a floral arrangement. These results are supported by research by Behe et al. (1992) in which knowledge of postharvest care for cut flowers added value to a floral arrangement. Behe and Barton (2000) have also shown that developing strategies to educate consumers is a component of offering high quality customer service and products for horticultural businesses. Our study supports these ideas, suggesting that a retail florist could target increased price per transaction and distinguish themselves in the marketplace by indicating directly to their customers their use of floral preservatives, especially after focusing continued effort on educating their customers about proper care and handling of fresh floral purchases.

In summary, as consumers become more knowledgeable about floral preservatives, they attribute higher quality to floral arrangements with preservatives, are willing to pay more for arrangements with preservatives, and their purchase intention frequency increases. Our research supports the ideas that florists should consider providing a message about the function and effectiveness of floral preservatives to their customers, and then market their use of these materials.

A brief explanation about floral preservatives

Did you know that the small plastic packet that you receive with fresh flower purchases is a floral preservative? If you follow the instructions on the back of the packet, its use can increase the length of time that your flowers stay fresh from five to ten days compared to just putting them in plain water!

The Science: Floral preservatives are designed to accomplish three functions to result in extended fresh flower vase life:

1. They help minimize bacteria buildup in the water that can reduce water uptake by the flower stems and result in smelly water after a few days.
2. They provide the flowers with food (in the form of sugar). This is helpful because the flower stem has a very limited capacity to continue producing its own food via photosynthesis after it has been cut. Sugar also helps flowers to open fully.
3. They improve flowers' ability to absorb more water through the stem, which helps keep them from wilting.

Using floral preservatives extends the vase life of your fresh flower purchases so that you can enjoy them longer. Now you know!

Levels 3 and 4 used the same photo but to level 4 was added the following information highlighting the value of floral preservatives.

Figure 1. Presentation levels of the same floral arrangement used in a survey instrument to access whether consumers valued the use of floral preservatives.

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Table 1. Change in quality rating, percent of respondents who would purchase, and price the floral arrangement is worth over four levels of presentation of the same floral arrangement.

	Level 1 ^z	Level 2 ^y	Level 3 ^x	Level 4 ^w
"Please rate the quality of this floral arrangement." Answers were indicated on a scale of 1 (low quality) to 7 (high quality).				
Total Respondents Mean separation ^v	4.90 c	4.94 c	5.10 b	5.33 a
% of people who responded 'Yes' to the question: "Would you purchase this floral arrangement?"				
Total Respondents Mean separation ^v	63% c	65% cb	69% ba	71% a
"What price would you say this floral arrangement is worth?" Answers were open ended indicating a dollar amount.				
Total Respondents Mean separation ^v	\$25.49 d	\$26.93 c	\$27.80 b	\$29.17 a

^zPhoto of floral arrangement with no indication of floral preservative.^yPhoto of floral arrangement with small packet of floral preservative leaning against vase.^xPhoto of floral arrangement with large packet of floral preservative with description "with floral preservative mixed in water."^wPhoto of floral arrangement with large packet of floral preservative with description "with floral preservative mixed in water," after brief (191 word count) explanation about floral preservatives.^vMean separation based on Bonferroni test, alpha = 0.05; different letters indicate that the means are statistically different.

SMALL Things Considered

Gay Smith

Spring Fever Stupid

Are you feeling it? A general malaise, wobbly focus, can't find your words, an inability to complete projects, nothing checked off the "to do" list? Watching robins hopping around the garden this afternoon, I suddenly realized my problem—I'm spring fever stupid! As soon as hail stops banging against the windows, I'm going outside to poke around for signs of a daffodil or crocus pushing up. Nothing breaks the monotony of grey skies like sun spots at ground level.

"Hyperlocal"—this word is popping up everywhere. Apparently, it entered the scene as early as 1991 as a reference to local television news. A quick Wiki check gives this definition: "Hyperlocal connotes having the character of being oriented around a well-defined community with primary focus...directed towards the concerns of its residents".

It blinked on my radar during a discussion with a corporate floral manager on ways to improve sales in one of his regions with well-established ethnic neighborhoods. He is struggling to make one-size-fits-all programs competitive in a market area that is, well—hyperlocal. So what's my point about hyperlocal? The "buy local" trend shows no sign of weakening so why not take it one step farther and push local flowers for hyperlocal holidays?

Here are a few non-Hallmark celebrations to note on your planning calendar. Mexicans celebrate December 12th to honor the Virgin of Guadalupe. New Year celebrations for Russians and Vietnamese are huge occasions for gift giving, consumer spending and decorations, bigger than the importance of Christmas in America. The celebration is described as Thanksgiving, Christmas

and your birthday celebrated at once. March 1st is Spring Festival for Romanians. Brits recognize mothers on April 3rd. Mothering Sunday. Dutch expats celebrate Dec 5th as the evening before arrival of Santa Klaus. Canadian Thanksgiving is the 2nd Monday in October, and don't forget International Women's Day, March 8, a great occasion to celebrate women everywhere. Driving sales on special days requires an awareness of flower and color preferences coupled with holiday specific signage to remind customers that flowers intensify any celebration.

Shifting Gears, Sans a Segue

Was it good for you too? Valentine's Day 2011 was positive across the country. Quality problems were non-existent and sales up over last year by double digits. The economy is slowly, slowly turning, and continued emphasis on eco-chic, home entertainment and bringing the outside in puts a positive spin on flower consumption. What are the trends for this year? *Canadian Floral* highlighted these four in its August-September 2010 issue. **Authentic:** styles combining traditional with modern concepts: think garden flowers and grasses. **Optimistic:** features bold styling and colors as orchid, aquamarine, canary yellow and coral pink; emphasis on the unconventional, especially the use of re-purposed materials. **Eccentric:** described as exotic, highlighting jewels, gems and glossy finishes. Colors include amber, crimson, dark ruby and olive green. This one confirms that bling has morphed from celebrity to mainstream. **Graphic:** defines the fourth trend—modern and minimalist elements with a palette of

silver, pearl, gold, ultra white and black. Brides follow trends and from my vantage point, specialty cuts fit well in all categories!

Sales 101- Why Flowers?

Looking for information to boost flower sales? Need details to help shift consumer perception from "flowers as luxury" to "flowers as necessity"? Check out the results of university studies for proof that flowers affect moods. We need them in our lives as daily mood transformers (think coffee and Prozac). Tap into research conducted at Rutgers, Harvard and Texas A&M for the details.

The results showed that productivity in the workplace improves when the environment includes cut flowers and plants. Flowers have a direct impact on happiness and reduce feelings of depression, anxiety and agitation. Studies also proved that the presence of flowers led to increased contact with family and friends. Details and results about the research projects are available through SAF (Society of American Florists.) <http://www.aboutflowers.com/health-benefits-a-research.html>

One study involving Harvard Medical School and Massachusetts General Hospital, explored the effects of flowers in the home environment on well-being. The main findings offer great talking points and signage ideas on ways to tell consumers why they need our products: "...flowers feed compassion, chase away anxieties, worries and the blues at home. Living with flowers can provide a boost of energy, happiness and enthusiasm at work."

A second study at Rutgers was designed to determine how people perceive others based on the types of gifts they give. Results showed that flower givers made the top of the list! Quoting from the SAF website, "...research reveals that people who give flowers make the best impression compared to other gifts studied. They are considered more likable, friendly and emotionally intelligent. The floral gift-giver is regarded as highly caring, trustworthy, loving, successful, and as valuing achievement and beauty in life."

What motivates consumers to buy flowers was part of another SAF study. Just examining one facet of the findings provides a wealth of ideas for signage, advertising and sales efforts. Quoting from the site again, "...Buying flowers give consumers a positive emotional boost!"

88% of survey respondents say a gift of flowers changes their mood for the better.

83% say they like to receive flowers unexpectedly.

86% say receiving flowers makes them feel special.

⇒99% say that a person who gives flowers is thoughtful⇐

89% believe the giver is sophisticated.

The same study examined what elements motivate consumer purchases, and two points really struck me as attributes common to ASCFG members: **Dedication:** a demonstrated commitment to superior product quality, excellent value and outstanding service. **Expertise:** scope and depth of professional experience, perceived competence and good taste. Everyone who has ever sold anything knows the importance of providing features and benefits as part of the spiel. Use this scientific research to communicate what you've known all along—flowers rock!

Gay Smith is the Technical Consulting Manager
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Flower Growing, Chinese Style

China is the major supplier to the United States of most manufactured goods, and has recently become its dominant provider of apple juice. Will cut flower bouquets sold here soon sport “Made in China” labels? Based on a short trip we took to China with our Cornell colleague Dr. Susheng Gan in early December, 2010, we feel that Chinese production of cut flowers is unlikely to directly affect our industry.

Cut flower production in China is massive, and impressive. According to government statistics for 2009, cut flowers are grown on 110,000 acres, with a harvested crop valued at \$1.28 billion. The major species grown are listed in Table 1, and are similar to the most important commercial flower species in this country. Currently, only 17% of cut flowers grown are exported, and these go primarily to neighboring countries such as Japan and South Korea.

Flower production in China takes place primarily in protective structures. Official statistics state that flowers are grown in 228,000 acres of greenhouses and high tunnels, but that includes potted plants as well as cut flowers. On our trip,

we viewed lilies being grown in heated, glass-covered greenhouses as well as in solar-heated houses developed in China. The latter face south, have a high north wall of bricks or mud, and a curved greenhouse roof (covered with polyethylene) that is covered with straw mats at night (Picture 1). Although there may be a little supplementary heating, the sun is the major heat source, and production is practiced in these year-round, even in northern areas. Chinese growers also make extensive use of plastic-covered high tunnels, of a much simpler and cheaper design than found in the U.S. These consist of curved bamboo ribs covered with a single layer of polyethylene, ventilated manually by raising sides and opening ends (Pictures 2, 3). The high tunnels are particularly prevalent in southwestern China, in Yunan Province around the city of Kunming. We saw snapdragons, stock and alstroemeria in these houses, as well as a few roses.

Specific horticultural practices were interesting, and although we probably don't have a full picture of “what really goes on”, here are a few you might enjoy. We saw a farmer irrigating (and

fertilizing) his lettuce plants with a cup lashed onto the end of an eight-foot pole. He was scooping up water from a ditch outside his hoophouse, and carefully pouring it on his plants. In Kunming, the Dutch have built a mini-Aalsmeer, complete with a reverse auction clock, carts, buyers' tables, etc. But just down the road in the “traditional market”, we saw wholesale cut flowers being handled on long tables where customers could walk by and select the bunches they needed for the day's work (Picture 4). We also saw people huddled around small fires, alive with black smoke from the plastics residue and wood scraps that were being used for a bit of heat. (We wonder about the postharvest effects of the smoke!) And what appeared to be 5 or 6 “clones” of boxes of Oasis Foam, quite possibly from local counterfeiting.

The Chinese people love flowers and fresh produce. The meals were loaded with many kinds of vegetables - we surely ate at least one or two new vegetables each day. Meals are diverse, heavy on vegetables and fish, and lesser amounts of beef, chicken and pork. Given that many of these vegetables were grown in hoophouses, it's no wonder there are so many thousands of acres of them!

The supporting services for cut flower producers appear to be good. We visited two universities (China Agriculture University in Beijing, Shanghai Jiao Tong University) and the Flower Research Institute at the Yunan Academy of Agricultural Sciences in Kunming, and were impressed with the active research programs in postharvest handling and breeding of new varieties. The Chinese federal and provincial governments are providing considerable funding to support

Table 1. China's cut flower production statistics for 2009.

Species	Acreage, thousands	Value, \$millions
Rose	22.3	236
Lily	14.4	412
Gerbera	11.3	157
Chrysanthemum	10.2	74
Gladiolus	6.0	29
Carnation	5.9	91
TOTAL	70.1	1,000



Picture 1. Inside view of a solar tunnel in Changping District northwest of Beijing, growing lilies in ground beds. At night, straw mats on the roof are rolled down to reduce heat loss. Tunnel faces south, so the north wall radiates heat after dark



Picture 4. Wholesale cut flowers being handled on long tables where customers could walk by and select the bunches they needed for the day's work.



Picture 2. Inside view of a plastic-covered high tunnel, consisting of bamboo ribs and center supports. Farm near Kunming, Yunan Province.



Picture 5. Workers in a glass greenhouse in Yuxi, Yunan Province, weeding lilies.



Picture 3. Outside view of bamboo high tunnel, and of Bill Miller, about to fall into the ditch.

these efforts. They are also subsidizing construction of conventional and solar greenhouses, according to an article in the February 2011 issue of *FloraCultureInternational.com* (p. 28).

So will we see Chinese flowers in U.S. markets? Not unless they can overcome the cost of a 12-hour airplane flight, and the lack of a production area where flowers can be grown and marketed year-round. Our main suppliers of roses, carnations, mums and alstroemeria are only 3 hours away by plane, and grow flowers on the equator, where there is no winter, and that will be hard to beat.

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IPM Update

Stanton Gill

Another Invasive Pest - *Bagrada* Bug

Most growers in Maryland and Delaware have had experiences with the brown marmorated stink bug since they have been spending the winter visiting many homes in the region. The stink bugs, not the growers. Just when you got cozy with this intruder, we now have another true bug invasion of the United States. The brown marmorated stink bug spread from Pennsylvania to the west, north, and south. This new bug showed up in the west and is spreading east. It's called bagrada bug, *Bagrada hilaris* (Hemiptera: Pentatomidae).

Fortunately it does not feed on the wide range of plants that brown marmorated stink bugs does. Bagrada bugs feed mainly on plants in the Cruciferae, but even that is changing as they spread in the United States. An email from Baldo Villega reported "I am with the California Department of Food and Agriculture. At this time the bagrada bug is restricted to southern California. I am in Sacramento which is considered northern California and I have not seen any bugs yet. All the homeowner emails I received last year were from San Diego County. These homeowners are finding them mainly on their ornamental annuals such as sweet alyssum and in their vegetable gardens."

Bagrada hilaris showed up in California in June 2008. Since then, they have become more widespread in southern California and have expanded their range into Arizona, where they are reported to be significant pests. The bug has been intercepted in Florida but was destroyed before it was established. It is probably just a matter of time until we see it on the East Coast. Vegetable growers and cut flower growers (those



who grow ornamental cabbage for cut stems) need to stay alert and watch for this bug.

Bagrada bugs look very similar to the common harlequin bug, *Murgantia histrionica* (Hahn) but are considerably smaller. The two species have similar biology. Look for small, dark insects about 3/16 of an inch long, with a characteristic pattern of longitudinal lines. Nymphs are mainly dark with pale to dark red markings. Harlequin bugs, which are widespread in the U.S., have a different pattern with perpendicular orange stripes. Both species can be found in large numbers on cruciferous plants.

Several generations can be completed per year, depending on temperature. Eggs are laid on seed pods, foliage, or soil surrounding young plants. The egg stage lasts 3 to 6 days. There are five nymphal

instars. First to fourth instar immatures are orange after molting, but darken with age. The fifth instar resembles the adult. The entire life cycle in the laboratory was completed in 38-65 days. The average fecundity per female is 95 (range 36-173) eggs.

This species is a major pest of cruciferous crops in the Old World and is reported to be a major pest in California and Arizona. In Arizona, they attacked both direct-seeded and transplanted broccoflower, broccoli, cabbage, cauliflower, Chinese cabbage, kale, collards (all *Brassica oleracea* L.), radish, rutabaga (*Brassica napus* L. var. *napobrassica* (L.) Rchb.), arugula (*Eruca vesicaria* (L.)), turnip (*Brassica napus* L.) and mustard (*Brassica juncea* (L.) Czern.) (Palumbo and Natwick 2010). Bagrada bugs are particularly damaging.

You can find photos of the bagrada bug on the web. If you find an unusual bug feeding on your ornamental plants this year get a sample to an extension office or your local Department of Agriculture.

Stanton Gill is Extension Specialist for the University of Maryland Extension and Professor of Landscape Technology at Montgomery College. Contact him at sgill@umd.edu

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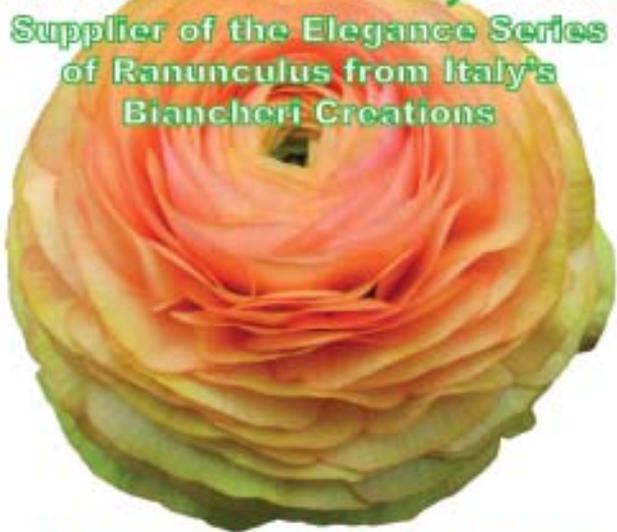
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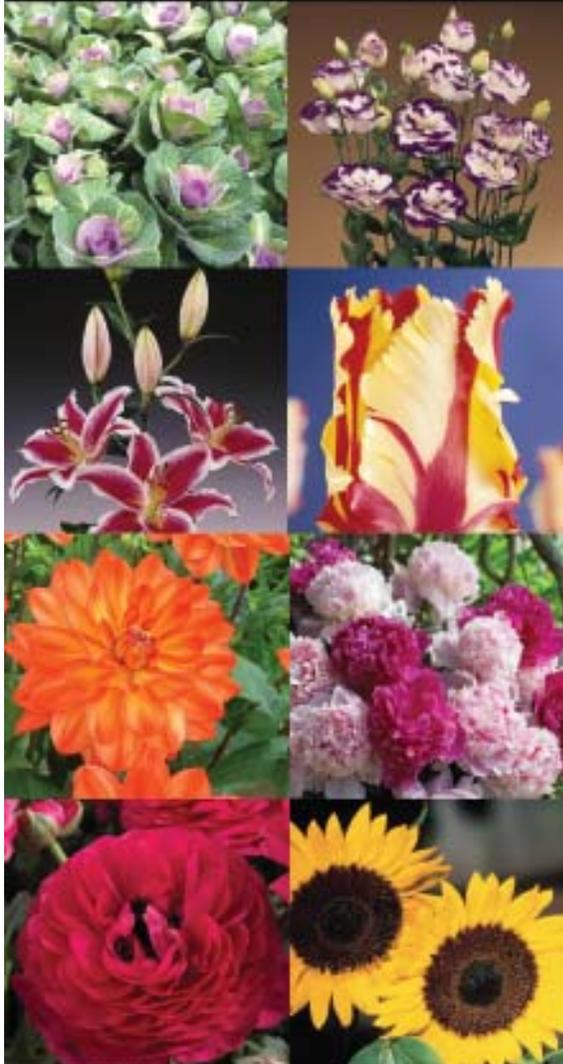
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RESEARCH Update

Megan Bame

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New Postharvest Information for Snapdragons

This research, conducted at the University of California, Davis, examined the optimal storage temperature for snapdragon vase life and the effect of ethylene inhibitors and storage temperature on gravitropism (stem bending when flowers are handled, stored or shipped horizontally).

The cultivars tested were 'Rocket' and 'Potomac Pink'. Eight different temperatures, ranging from 0C to 20C, were studied. Wet and dry storage conditions were evaluated. After five days, stems were recut and vase life was recorded as the time to abscission or wilting of half of the open florets. Time-lapse photography was used to capture the gravitropic activity.

As storage temperature increased, vase life decreased. Vase life after a five-day storage period at 0C was nine days. A storage temperature of 7.5C yielded a six-day vase life and 12.5C storage resulted in a vase life of less than one day.

Though flowers held in wet storage had a longer vase life than those held at the same temperature in dry storage; flowers stored at a lower temperature (wet or dry) had a longer vase life than the wet stored flowers held at a higher temperature.

Dry storage at 0C resulted in no gravitropic bending; however, flowers stored at 2.5C and 5C, though initially bent, straightened after 24 hours. The gravitropic response was observed

immediately after the flowers were placed horizontally at 20C. After 6 hours, the tip of the spike was bent at an angle of 80 degrees from horizontal.

Treatment with ethylene inhibitors prevented floret abscission, but had no effect on the negative gravitropic response. The best prevention of gravitropic bending is storage near 0C. At these temperatures, dry storage is just as effective as storage in a solution.

Celikel, F.G., J.C. Cevallos, M.S. Reid, 2010. Temperature, ethylene and the postharvest performance of cut snapdragons (Antirrhinum majus), Scientia Horticulturae. 125, pp. 429-433.

Treatment for Optimal Postharvest Performance of Viburnum

Researchers in Greece aimed to determine the optimal harvest stage of *Viburnum* inflorescences, evaluate the vase life when using anti-microbial compounds and anti-ethylene compounds, and assess flower opening when using a sucrose vase solution.

Viburnum flowers were harvested at three stages of opening: 10-30% open flowers, 30-50% open flowers and more than 50% open flowers. All but 4 leaves were removed from each inflorescence. Sucrose solutions of 1% and 2% were evaluated on all three stages of development, while the anti-microbial treatments (AgNO₃, methanol and DICA) and anti-ethylene treatments (1-MCP) were only tested using Stage 1 flowers (10-30% open). Vase life was terminated when more than 50% of the flowers were dropped down or abscised.

Stage of development at harvest did not significantly affect vase life (7.5 to 7.9 days). However, stage of development did affect flower opening and flower abscission. Flowers harvested with more than 50% open have increased ornamental value, but at this stage, the open flowers quickly abscise leaving empty peduncles. This study suggests that Stage 1 would be optimal resulting in a gradual opening



and better flower display for the period of the vase life.

Different sucrose concentrations in vase solutions neither extended vase life nor promoted flower opening. Of the anti-microbial treatments tested, AgNO₃ was the only one to significantly extend vase life (8.5 days compared to a control of 6.6 days) and also reduce flower abscission. None of the anti-microbial treatments increased flower opening. A rate of 10 ml/ l 1-MCP improved vase life (10 days compared to a control of 6 days) and resulted in a lower flower abscission rate.

Darras, A.I., A. Akoumianaki-Ioannidor, N.E. Pompodakis, 2010. Evaluation and improvement of post-harvest performance of cut Viburnum tinus inflorescence. Scientia Horticulturae. 124, pp. 376-380.

Practical Leaf Treatment to Improve Lily Flower Color

Lily flower quality can be negatively affected by environmental conditions such as low light and high temperatures. Maintaining optimal environmental conditions throughout the year (for forcing lilies) is expensive and energy inefficient. While some treatments have been previously suggested, they are either expensive or specific to soil type. This study, conducted in Italy, evaluated simple, inexpensive methods of improving flower quality of Asiatic lily in winter and summer.

Four cultivars were evaluated: 'Fangio', 'Tresor', 'Brindisi' and 'Menorca'. Bulbs were planted in October and May. Three aqueous solutions were sprayed on the leaves until run-off. Applications were made 30 and 20 days before harvest in winter and 20 and 10 days before harvest in summer. The solutions were:

1) 2 g/l potassium sulphate (51% K₂O)

2) 2 g/l sucrose

3) 1 g/l potassium sulphate + 1 g/l sucrose

Agral (0.3 ml/l) was added to each solution as a surface surfactant. Water was a fourth control treatment.

This study found improved lily flower color after a leaf treatment of potassium sulphate and/or sucrose 30 days before harvest in winter and 10 days before harvest in summer in all four cultivars tested (each cultivar responded slightly differently

to the treatments but all produced positive results). Furthermore, the leaf treatment did not cause any flower or leaf damage, nor were any increased pathogen attacks observed.

In the control group, small flower buds formed at the distal end of the inflorescence failed to develop normally and failed to open in all the cultivars tested. However the K₂O and sucrose leaf treatments significantly reduced flower abortion in all cultivars, especially during winter when reduced energy supply (from lower photosynthetic activity) is believed to contribute to the bud abortion.

Additionally, flower size and flower longevity were also observed to be significantly increased by the leaf treatments. The tepal length of the untreated flowers in summer was longer than the tepal length of flowers in winter; however leaf treatment resulted in winter tepal length comparable to summer tepal length.

While this treatment is effective, inexpensive and easy to apply, further research is needed to determine how treating the leaf controls flower pigment biosynthesis, flower development, ripening and senescence.

Burchi, G., D. Prisa, A. Ballarin, P. Menesatti, 2010. Improvement of flower color by means of leaf treatments in lily, Scientia Horticulturae. 125, pp. 456-460.

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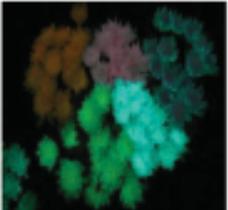
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GROWER Profile

Megan Bame

Paula Rice, BeeHaven Farm, Bonners Ferry, Idaho

Although she started her company only four years ago, Paula Rice has created impressively diverse, thriving cut flower business. Perhaps more importantly, she's doing it with a perspective that though it *is* a business (not a hobby), she doesn't want it to become too stressful and always wants to carve out time for fun, even if that means turning up the music and pouring a glass of wine on a Friday night while her family helps assemble bouquets for market. Beehaven Farm, in Bonners Ferry, Idaho, is after all, a family affair.

Paula and husband Bill (an electrician by day), have eight children. The oldest, Eden, is 18, while the youngest, Shane is less than a year old, with Charlie, Laken, Genoah, Wade, Seth and Ivy in between. Paula says, "People always ask me how I do it with so many children and I always as them how they do it without so many children!" With the baby's arrival last summer, Paula hired her 19-year-old niece, Alisa, to help. Eden and Alisa, Paula soon observed, "Knew how to handle brides, work with the florists, enchant the market customers and work their tails off in the field." They not only ran the business, but actually grew the business by picking up additional florists. Part of their enthusiasm was no doubt due to that "fun" factor. The kids learn age-appropriate tasks for every facet of the business – not just weeding and harvesting. They set goals, establish deadlines and have mini-competitions. Paula has the peace of mind that they could step in and "run the show" if the need arises.

While Beehaven is relatively young, it was nearly 20 years ago when the first seeds of inspiration were planted. As a newlywed, Bill commented, "Paula, are you going to plant any vegetables in the vegetable garden or are we going to start eating flowers?" Sometime later, while visiting her sister, Paula picked up a book her sister had borrowed from the library, *The Flower Farmer* by Lynn Byczynski. She recalls, "As I read it, I realized, 'Oh my gosh! This is what I am supposed to be.' I had no idea that there was even such a career as a flower farm—it never came up in all those high school tests you take that help you decide what career path you should follow." The final push came at a flower arranging class. The instructor, a retired florist from Manhattan, New York, praised the quality of the lisianthus she brought to the class as "better than florist-grade." The seeds of inspiration were in full bloom with ideas and plans that came to fruition when they moved to a 10-acre farm 10 years ago. The farm is located in the upper panhandle of Idaho, about 30 miles south of the Canadian border. The season is short with a



frost-free date at the end of May and an anticipated first frost any time in September. With the help of a hoop house, they are able to start selling at the beginning of May. Paula admits, "I consider myself a safe Zone 3, but pretend I'm zone 4."

The current growing area is around one and a half acres, including a small greenhouse that is heated from mid-March through mid-May. Her favorite growing venue is the 30-ft. x 70-ft. single poly hoop house with roll-up sides. "If I could have ten, I would," says Paula. "Everything that comes out of them is beautiful." The hoop houses are used for early flowers that can stand some cold temperatures including: lilies (in crates), tulips, peonies, godetia, stock, sunflowers, calendula and this year, she aims to get another turn by following the first crop with a quick turn of celosia. Most of Beehaven's flowers are field cuts—over 120 different varieties.

Despite losing all her Oriental lilies to a late frost last year, weather doesn't top the list of this grower's challenges. "Hands down: weeds and building soil fertility," she says. But she may have found a solution for both using annual rye grass. Everything is planted in four-foot beds with three-foot aisles. Annual rye grass is sown everywhere except the growing beds, then the rye grass is simply mowed all summer, and clippings are blown into the planted beds as mulch. The rye grass keeps the weeds suppressed and at the end of the season it is killed by frost, to be tilled in in the spring, or in the fall as green manure. The only caveat is that this system requires a dedicated mower. Paula pays the kids a quarter per row, but has found that if someone wants a little extra money, the rows may get clipped before it's

necessary. On the other hand, it's nice to have an eager workforce.

To tackle weeds and soil fertility in the hoophouse, Paula is turning to the animal kingdom with 200 baby pullets set free in December. Paula reports, "These ladies have knocked down the weeds, cleaned up all the debris and broke it into chunks, worked it into the soil and are busy 'fertilizing' everything. They are basically turning my soil into the most fluffy, beautiful friable dirt you have ever seen with no work from me all winter long. How great is that?" The best part is, come April, she will be able to sell hens, ready-to-lay, for \$12.00 each—more than enough to cover their cost.

Beehaven caters to no fewer than six markets outlets:

1) Farmers' markets – The family attends two small-town farmers' markets. Despite the size of the markets, Paula says, "We sell the heck out of flowers when no one before us has ever been able to. I continue to push the limits and take all I can—it's only going to rot in the field otherwise." They take buckets of flowers to make bouquets onsite. It allows them to take more, ensures they're not wasting time, and makes it fun.

2) Florists – A florist route is covered weekly. Though she's tried sending out a "what's blooming list," she found that florists shopped from the van rather than the list. As she notes the sales, one of the kids hauls armfuls of flowers into the shop. In preparation for the next week, she always asks her florists what they have coming up and what colors or flowers they will be needing. She doesn't guarantee product, considering that "another layer of stress I don't want." She considers her flowers "frosting on the cake," that will set the florist apart from the others. She recalls it took three years of building relationships with florists before it finally started to be worth the route. She says, "You have to prove that you are real, you are dedicated and you have a quality product."

3) Brides – Though not offering full service wedding work, Beehaven is growing its market for DIY brides. Brides are encouraged to visit the web



site where the three packages are described in detail. This saves Paula time on the phone when she has other things to do. She says, "My web site is my public relations person. I am always tweaking it to really play that role in my business. Hopefully after being on my site you don't have too many questions and you feel like you really want to come and get my flowers."

4) Wholesalers – Paula intentionally plants certain flowers in quantity for the wholesaler. Unlike the farmers' market and the florists route, she likes selling to wholesalers because it doesn't require time away from the farm (and her family). "I do not pine the loss of price; I count myself lucky to be home with the kids. And being a local grower is great because they are not used to seeing that quality of FRESH cut flowers, and if you have the quantity they are happy to talk with you," she's found.

5) Weekly bouquet subscriptions – This is a market that she's still growing with hopes to reach 50 customers. Businesses get a bouquet in a vase while individuals get a wrapped bouquet. At this point, she's increasing her market options but may eventually narrow it down to what she really enjoys, and what keeps her home, or near home, and brings the least stress.

6) Farm Stand – This new addition will service locals who stop by the farm. In past years, they have sold \$70.00 worth of flowers to walk-ins without advertising, and in a less-than-convenient location for most folks. They have built a small air-conditioned room with a big refrigerator and plan to make sure the flowers are in prime condition and the stand is always full and beautiful. Ultimately she hopes the stand will bring in an additional \$600 per week. Revenue generated without leaving the farm!

To manage it all, Paula has developed a weekly schedule, gleaned tips on efficiency from other growers. Ideally, with all hands on deck, she feels like it can all happen within a 6 a.m. to noon workday. Of course, Friday's evening market prep is the exception. With the addition of the farm stand, each day will also include stocking and freshening the on-farm offerings.

This schedule keeps the farm and the family running smoothly. Monday: Make and deliver business subscription bouquets. Weed or work the farm. Ideally, go swimming.

Tuesday: Pick all flowers. Bunch flowers for Wednesday florist route and Thursday subscriptions. Meet any brides who are planning to check out availability for their weekend wedding.





The Year of the Web Site

The site www.beehavenfarm.com is Paula's latest big endeavor. Last year she traded a flower subscription for a professional photo shoot – photos that really enhance the website. After she gave it lots of TLC this winter, she's already booked four weddings from web-based contacts. She created a brochure that basically says, "Go to the web site to learn about all the options we have." She plans to run a newspaper ad about the farm, featuring the web address. She's going to attempt a viral marketing strategy, emailing everyone she knows and asking them to e-mail everyone they know. Paula established a Facebook presence where she hopes her posts will drive folks to the web site. Special offers for site visitors are planned for the farmers' market, and the kids will distribute fliers advertising the farm stand and of course, the web site. Paula used smallfarmcentral.com and feels, "The price was very cheap to pay for a 24-hour, 7-days-a-week sales representative."

Wednesday: Florist deliveries and end at farmers' market to sell leftovers.
 Thursday: Put together personal subscriptions and deliver.
 Friday: Pick all flowers. Pack any bride orders. Spend the evening making at least 30 bouquets in preparation for Saturday markets. (This usually involves loud dancing music and a glass of wine. The whole family really looks forward to it.)
 Saturday: Sell at farmers' markets.
 Sunday: Rest.
 Paula admits it's not always easy. "But," she says, "Having a flower farm is very fulfilling and it creates a lot of meaningful work and play for all of us."

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REGIONAL Reports



NORTHEAST

Missy Bahret

Old Friends Farm

oldfriendsfarm@vegemail.com

Early on in farming, I limited myself and my business by not hiring extra help. At first, while up to my ears in weeds, my take-home message was: “Know when to hire”. Then for a few years hiring helped out, but the take-home message became: “Know whom to hire.”

Then something random happened and we learned a lot from it: We hired a bunch of clowns. Yup, clowns. Of course we didn’t know they were clowns when we hired each of them, but that’s what they were. Farmers-By-Day, Clowns-By-Other-Days. This group of workers proceeded to turn our whole idea of employee credentials upside down. How could a clown, no less a bunch of clowns over multiple years, raise our understanding of what a farm needs from its employees?

There are the typical attributes every grower looks for in a worker: prior farming skills, attention to detail within working efficiently, reliability in rain or shine, and enthusiasm. But then there are the subtle credentials too, which don’t fit on a resume, and are all too often overlooked. It just so happens that this crew showed us what our farm does when it has people involved who have capabilities beyond the typical skills.

Here’s a bit about what we learned from these workers. I’ve underlined the subtle traits that we now look for when hiring. How did these workers get these extraneous skills? Well, successful clowns have to be good at what they do and clowning

is no easy task in a world of so much stimulus. Good clowns inherently have a great work ethic and effortless adaptability. They have the agility that is needed for the wide array of tasks from seeding to planting to cultivating to harvest to bouquet making. Not only do they have character and creativity, they know beauty, and they work hard to make all of these things happen at once.

Clowns also have an innate sense of limitlessness: Everything is possible with creativity. Stilts on a farm to reach the tallest crops? Why not!?! There is nothing that is out of reach of a clown and nothing is outrageous. And then there’s the obvious clown characteristic: silliness! Any occupation that experiences daily exposure to uncontrollable circumstances (a.k.a. weather) needs people who have stamina and endless humor.

These subtle things added so much to our farm and crew dynamics that we no longer look for an employee with just the typical attributes. We look for people who also have these subtle characteristics, who want to make something great happen, and want their job to embrace all of their off-the-wall skills. It is the difference between having a crew that works versus having a crew that *thrives*, which directly and positively affects the business results.

We have had many employees since, and certainly not all are clowns, but all made the cut at the hiring table by having the extra qualities that we now feel are as essential as farming experience.

So, if someone drives by and shouts “You’ve hired a bunch of clowns!” we can proudly take it as a compliment, knowing that clowns are some of the most talented workers a farm could have. But be warned if you do happen to hire a clown: Clowning is contagious. Be around it enough and it is likely that you’ll wake up one day with a red orb on your nose and some extra spunk in your step. Your flowers will be brighter, your farm’s systems will be smoother, your focus will be clearer and your laughter will be heartier. No joke.

Happy growing and blooming and selling and clowning.





MID-ATLANTIC

Becky Devlin

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Spring has sprung! By the time this issue comes out, we will all be basking in the excitement of the new season. This winter has been one of extreme cold and heavy storms in many areas, so I know I am especially ready for green sprouts, warm days, sunshine and of course, FLOWERS! With the new season come new markets, new customers, new varieties and new opportunities in every direction for selling all those blooms. So where to begin getting the promotional ball rolling? For those of you who sell retail - whether at a farmers' market, through your local specialty store, direct from your farm, for weddings and events or even subscriptions - promoting your farm and your flowers is crucial to your sales. Here are a few ideas for flower farm promotion.

Before undertaking any promotional project, your first step would be to make a list of your goals and where you want to go. That's a whole other article, but having a clear plan with both qualitative and quantitative goals that are measurable in some way is a key guiding point for creating your promotional plan. It's tough to create a plan to accomplish something if you don't know what it is you want to accomplish.



Regardless of who you sell to (or want to sell to), if you aren't already on Facebook, there's no better time to jump on board. Setting up a page for your small business is so easy and recent upgrades now allow you to interact with individuals on Facebook as your business (i.e. "Roost Flowers commented on your picture") rather than only as an individual person. Facebook is one of the only places that allows you to give frequent, brief

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Spring is on the horizon, though stubborn winter is hanging on as I write. Despite low nighttime temps, the warm daytime breezes and that one 80 degree day we had makes us sure that Mother Nature has goodness in store in the coming days. With the promises of a new growing season on everyone's minds, I will share the wisdom of some fellow growers in the Southeast Region who answered these questions:

- 1.) What are your top 3 best-selling flower crops?
- 2.) What is your personal favorite crop out of everything you grow and why?
- 3.) What was the best new crop you grew last year and why? Include growing suggestions and any specific advice.

Donna & Tim Mills of Floral & Hardy Farm in Lexington, South Carolina (zone 7b) say their three best sellers are sunflowers, Christmas wreaths, and Benary zinnias. And in Donna's words: "My favorite is hybrid delphinium, because I never thought I could grow it here, and when we did it was drop dead gorgeous! It always gets a lot of attention at the market – I love the "Did you really grow this HERE?" question. My favorite new crop was 'Frosted Explosion' panicum, but it wasn't at the time, because it was so short. But I dried all I had and used it in wreaths to sell at the market, and people absolutely loved it! I want to try it again, hopefully we'll get better stem length this time around."

Steve Bender of Homestead Flower Farm in Warrenton, North Carolina (zone 7) said his best sellers are zinnias, celosias, and peonies. Steve's favorite to grow is larkspur "Because of its length, beauty, longevity, and the option it gives us to use it as a dried flower." He liked growing some new varieties of lisianthus last year, like 'Cinderella', and reported "We get 2-3 flushes of blooms through the summer and fall when grown in a well-vented hoophouse."

Marian F. Maloney of Memory Orchard in Tupelo, Mississippi (zone 7b) grows a variety of plants, and listed her best sellers in categories: bulbs - iris, tulips and lilies; perennials - monarda, penstemon, phlox; annuals - laceflower, zinnia, sunflower; shrubs - hydrangea, kerria, spirea. Marian's personal favorite is 'White Honeybee' agastache. Her best new crop was gomphrena 'Fireworks'.

Ella King of King's Country Gardens in Owensboro, Kentucky (zone 6a) said her three top sellers are sunflowers, lilies, and lisianthus. Ella says she just can't help loving peonies because "They are so beautiful and now that my crop is beginning to bloom on a regular basis I fall in love again every spring! One of these days I hope they will be my biggest seller." Her best new crop was *Panicum elegans* 'Frosted Explosion'.

updates and share photos with customers and potential customers in a community type of forum. Once you begin, don't be afraid to suggest to the fans of your page to share your posts/photos with all their Facebook friends to get the word out. Build your Facebook fan base by adding a link from your website, by encouraging market customers to "like" your Facebook page for discounts and specials and by reminding your personal friends on FB to check out your business page and share it with others.

E-mail marketing is still uncharted territory for many small business owners. But with services like MailChimp or A. Weber, it's never been easier. Build a mailing list by having a sign-up sheet at your farm stand or farmers' market. Offer a \$5 discount or other incentive for customers who sign up. Then go to MailChimp.com and sign up for free. Enter your mailing list, pick a template and send out regular email updates to your mailing list. No need to be wordy or fancy — even a weekly email during the season telling what's in bloom that week reminds your customer that you're there and that you want their business. Let them know about the other services or products you provide and about what's happening at your farm to build that connection with them.

If you provide floral design services for weddings and events or arrangements of any kind, get serious about your promotions. Spend the time and money to have good quality photos done if you don't already have them. Build your online portfolio and promote your services through Facebook and through your own website and/or blog. Give yourself a bit of formal education in design, if you haven't done so. Get connected with a designer or take a class or workshop to be sure your designs are professional, and then use only the highest quality blooms. Connect with other local wedding professionals to build referrals and most of all, always over-deliver on service and quality of your product. One of my biggest qualitative goals for 2011 is to be a service business that happens to provide flowers and let everything else fall in place from there. Happy Spring and here's to a new and prosperous season!

She explained why: "I love it because it looks light and airy in a bouquet, is great for wedding work and for use as a filler. I sold all that I grew last year, so I am planting more this year. I started my plants from seed in my unheated hoophouse and then moved the plants out to the field. My best advice is to put them where you can find them if weeds tend to take over. I mulched mine last season and it helped to keep the weeds down and I was able to find all plants. They did great in full sun."

Susie Whaley of Knot Hill Flower Farm in Durham, North Carolina (zone 7a) grew these bestsellers: rudbeckia, ammi, and dianthus. Her favorite crop is zinnias because they are so easy to grow from seed and are mostly trouble free (except the powdery mildew). Here are Susie's favorite new crops: "I grew dill on a larger scale last year and really liked it. It has a nice delicate texture and fragrance. I spaced them tight (6"x6") and they branched beautifully. I grew both 'Vierling' and 'Bouquet' and couldn't tell any difference between them. They took 15 weeks from seed to first cut.

"I grew godetia 'Grace Mix' for the first time last year and loved it. I started them the third week of September, transplanted at the end of October and took the first cuts the second week of May. I had crop netting in place when I transplanted on a 6"x12" spacing and unfortunately did not pull the netting up around the plants as they grew. After pulling the winter row cover off, any attempt to pull the netting up around the multi-branched stems did nothing but break them. I was able to take quite a few cuttings but after a heavy rain storm they were lying down. This year the netting is in place slightly above the plants."

Janet C. Nutt of Janbil Farm Country Cuttings in Cedartown, Georgia (zone 7) is located in northwest Georgia, outside Atlanta. Her bestsellers are zinnias, larkspur, and sunflowers. She has recently begun to grow *Orlaya grandiflora* (a fuller Queen Anne's lace) because it "Reseeds well and is great by itself or as a filler in bouquets. I like anything that grows and reseeds well and works in bouquets."

Cathy Jones of Perry-winkle Farm in Chapel Hill, North Carolina (zone 7a) grew these bestsellers: zinnias, Dutch irises, and basil. Her favorites to grow are basil because they make such a great filler in bouquets.

I will end with my own three bestsellers here in zone 8a : zinnias, sunflowers, and celosia. My favorite flowers to grow would be Karma dahlias because they're so gorgeous.

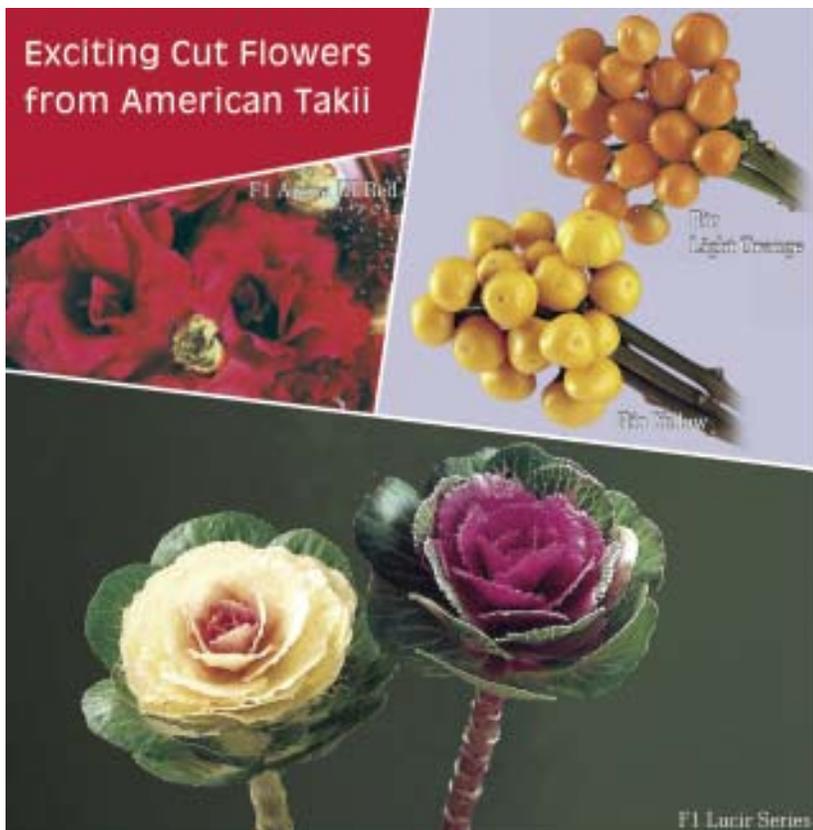
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MIDWEST

Quinton Tschetter

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The Midwest Regional Meeting in Wooster, Ohio on August 8 is going to be a great learning opportunity for anyone able to attend. The tentative list of topics is very interesting. We always attend meetings, both regional and national, with anticipations of getting questions answered and refilling our 'idea box'. I thought that I would help get you started by putting some things into your 'idea box'. With that in mind, I have come up with some 'lists' to help us make some of those decisions.

Money-making crops:

1. Celosia
2. Delphinium 'Blue Guardian'
3. Dahlias from Swan Island
4. Peonies (especially early ones raised in the hoophouse)
5. Lisianthus ('Mariachi', 'ABC 3-4 Purple')
6. Stock
7. Sunflower
8. Tuberose
9. Hydrangea
10. Woodies and grasses, once they are established.

Our favorites to use in bouquets:

1. Lily
2. Hydrangea
3. Peony
4. Delphinium
5. Celosia
6. Lisianthus
7. Sunflower
8. Tuberose
9. Eucalyptus saligna
10. The Unique (grasses, flax, pussy and curly willows, pods, bupleurum, looseneck goosetrife, cosmos for foliage, amaranthus, green wheat, and hairy balls.)

Easiest crops to raise:

1. Sunflower (direct sown)
2. Zinnia (direct sown)
3. Peony
4. Celosia grown in the hoophouse.
5. Dianthus ('Amazon Neon' and Sweet series)
6. Amaranthus (direct sown)
7. Grains (direct sown)
8. Tuberose
9. Dahlias from Swan Island (with the exception of digging and dividing in the fall)
10. The Unique (grasses, flax, pussy and curly willows, pods, looseneck, goosetrife, cosmos for foliage, amaranthus, green wheat, and hairy balls.)

Favorite flowers of the customers at the Des Moines Farmer's Market:

1. Lily
2. Peony
3. Celosia
4. Dahlia
5. Hydrangea
6. Lisianthus
7. Sunflower
8. Campanula
9. Star of Bethlehem & tuberose
10. The Unique (grasses, willows, bells, bupleurum, amaranthus, eucalyptus and hairy balls.)

Florist favorites:

1. Delphinium 'Blue Guardian'
2. Tissue culture sinuata statice
3. Lily
4. Lisianthus
5. Celosia
6. Eucalyptus
7. Allium
8. Campanula
9. Sunflower
10. The Unique (grasses, grains, pods, looseneck goosetrife, and hairy balls.)

Tips:

1. Figure out 'props' to compensate for bending. (e.g. Pottiputki).
2. Try to enlist God's help in controlling the weather.
3. Be smarter than your problems, or blame the employees or your spouse.
4. In a small community, a real bouquet will trump any written advertisement.
5. Don't be afraid to spend money to make money, but use common sense.
6. Get email addresses of your customers and contact them with new or special items or services.
7. Go the extra mile to resolve customer problems. The customer is always right!
8. Keep accurate records.
9. Take time to attend ASCFG events! You will be richly rewarded.
10. Take time to 'smell the roses'.

And the most important tip – have a great year. You are raising happiness and goodwill. Appreciate the good things in life.



SOUTH-CENTRAL

Josie Crowson

Josie's Fresh Flowers
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Taking a cue from a thread Missy Bahret started on the Bulletin Board, I asked some of our South & Central Region growers to describe their most successful new venture in the past year. They gave some fascinating answers, many of which related to season extension.

This was certainly true for Rita Anders (Cuts of Color, Weimar, Texas). By far, Rita says, her greatest success was growing dahlias under lights. Following Vicki Stamback's example, Rita started dahlia plugs in her greenhouse in August. She strung 75-watt bulbs 4 feet apart above her dahlia beds, which are 100 x 3 feet. Rita's dahlias began producing in the early fall and were still blooming when I spoke with her in late February. Blooming prolifically, in fact - she had just cut 10 buckets of dahlias!

Rita is an experienced farmer who started growing greenhouse tomatoes in 1979 and shifted to flower production in 2004. Not one to shy away from new challenges, Rita made that shift with gusto, quickly taking on a wide variety of flowers and growing methods. Rita has 10 greenhouses, several of which are gutter-connected, and 3 garden areas covering about 1.5 acres. You will get to see all of this at our 2011 Regional Meeting because Rita has graciously agreed to host the meeting at her farm. Mark your calendars now for Monday, August 1 More details will be coming soon.

Nancy Bartlett (Blue Stem Farm, Folsom, Louisiana) says her two new hoopouses have revolutionized her business, putting her about 6 weeks ahead of last year, despite the record cold winter. In late February, she was already prepared for the Covington Farmers' Market with the first of her spring flowers. Nancy also extended her market into December 2010 by producing red lilies for Christmas. She put up a small tunnel covered in greenhouse film and used a portable heater as needed. The lilies did well and were blooming in early December. This was great for Christmas sales and also led to Nancy's **film debut!** It happened that a film crew was in town filming

The Lucky One (based on Nicholas Sparks' novel). They needed a farmers' market scene and chose Nancy and her son John to be in it. They also bought all of her lilies and John's produce. In the booth next to Nancy was actress Blythe Danner, selling roses. Watch for the release of *The Lucky One* starring Zac Efron (and Nancy Bartlett) in late 2011.

Beth Eggers (Wye Mountain Flowers & Berries, Roland, Arkansas) has been trying low tunnels made with a hoopbender to extend her season. Beth has dealt with a lot in the past year. In 2010, she had installed low hoops and her crops were doing well—until a freak hailstorm destroyed almost everything. Undaunted, Beth is trying the low hoops again and is hoping that they help her get to the Little Rock River Market much earlier than would be possible without the hoops. She says making the hoops is not difficult, but installing them requires two people.

Although not a new venture, Joy Boudreaux (Boudreaux's Garden, Baton Rouge, Louisiana) says cut mums have been great season extenders for her. For the past five years, she has been growing several hundred mums from which she sells blooms at the Baton Rouge Farmers' Market in October and November. Joy plants her mums 6 inches apart and uses three layers of netting plus rebar every 4 feet. She uses row cover over the top to protect the plants from strong storms. Joy also grows potted

poisnettias for December sales. She sometimes forces bulbs for early spring sales too, but this year her spring market may be delayed a bit. That is partly because record freezes have slowed her annual flowers. But more importantly, Joy will be busy preparing all the flowers for her son's April wedding—bouquets for the bride and

*It happened that a film crew was in town filming
The Lucky One (based on Nicholas Sparks' novel).
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Nancy Bartlett and her son John to be in it. They also
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seven bridesmaids, boutonnières, cor-sages, and 3 large arrangements. She is even making her own ribbons using remnants of the bridesmaids' dress fabric. Although Joy has not done much floral design work, she does have training, as required by the state of Louisiana. Until a lawsuit last year convinced the legislature to change the law, Louisiana required anyone selling floral arrangements (even at farmers' markets) to pass both a written exam and an extensive practical exam which included making four types of arrangements. It was the only state with such requirements.

Janet McKinney (Flower Hill Farm, Laneville, Texas) found several ways to extend her season. With her new wreath-making machine from Terra Tech she created Christmas wreaths, using gathered materials from her farm (cedar, Leyland cypress, holly).

Janet is thrilled with her machine—so much easier and faster than handwiring. Janet also forced paperwhites and amaryllis to fill out her holiday offerings. For fall, she put her 9-year old son to work making “natural bird feeders.” He bundled leftover sunflower stalks and seed heads, sorghum, broom corn, millet and other grasses into a bouquet-like form, tied it with florist wire and then covered the wire with twine. Market customers couldn’t get enough of these.

Janet Bachman’s (Riverbend Gardens, Fayetteville, Arkansas) new venture is not season extension but a shift in focus toward more perennials, such as peonies. Janet’s peonies were glorious last year. She had her best day ever at the Fayetteville Farmers’ Market just before Mother’s Day, with peonies selling like hotcakes. (I’m trying to control my jealousy.) Janet participated in the ASCFG Perennials Trial last year, and like many of us, discovered a favorite in ‘Henry Eilers’ *Rudbeckia*. She says the plants seem to have survived the winter too. If you haven’t tried this one, it is a real winner. Another of Janet’s new favorites is *Narcissus* ‘Apricot Whirl’ (see picture). One of her florists selected this flower from a bulb catalog that Janet had received from a supplier. When it bloomed, the florist bought most of them and liked the flower so much that she even put it on her Facebook page. In her downtime this winter, Janet has been busy revising ATTRA’s cut flower publications: *Specialty Cut Flower Production and Marketing* and *Woody Ornamentals for Cut Flower Growers*. Both should be available by mid-summer 2011 and they are free. Call ATTRA at 800-346-9140 or visit www.ATTRA.ncat.org.



With the National Conference in our Region last year, we skipped the Regional Meeting as is the ASCFG custom. But we won’t be skipping it year. Keep that Monday, August 1 date open for our meeting at Rita Anders’ farm in Weimar, Texas. It’s going to be a good one.



Christof Bernau

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As I write, it is bulb season and the time of tulips, ranunculus, anemone and daffodils. It is also the season of flowering quince, peach, plum, apricot, pluot and aprium blossoms at market. In the realm of half-hardy overwintering annuals, we are also just a short time away from waves of sweet peas, larkspur, calendula, agrostemma and bachelors’ buttons. Their stunning, if at times commonplace, floral wonder is presently being held back by yet another cold Pacific storm coming out of the Gulf of Alaska. In fact, for most growers in central and northern California, our greenhouses are swelling, if not bursting with the potential bounty of spring. Lush cotyledons, vibrant new true leaves, stocky, stout and lengthening stems, twinning tendrils and the ever expanding, but hidden root world are all on display among the thousands of seedlings waiting to make it outside and into the soil.

Oh, but the soil: cold, wet, waterlogged, saturated, sodden and way too vulnerable to be worked by hand or with tractors. Our friend La Nina has worked her magic and we are seeing storm upon storm late into our typical rain season. We have already had 46" of rain and there may 5-10" more in the current ten-day forecast. Usually by mid March, the rains begin to taper and windows of opportunity open to allow the mowing and incorporation of cover crops, primary tillage and the planting of all of the hope and potential contained in the greenhouse. This season, however, it is looking like our first sowings will peak as seedlings languish and wither before we are able to work the soil and get them planted.

Depending on the crop, we might have a little wiggle room and can tide our seedlings over with a little liquid fertility in the form of compost tea or fish plus kelp. Crops like stock, statice, calendula, mignonette and sweet Williams all are reasonably willing to linger in plug trays or flats for a short period of time with little effect on yield and crop quality. However, staples like larkspur, snapdragons and sweet peas, which we often grow as transplants in the spring, have little patience for delays caused by wet soils and our desire to balance production imperatives with the maintenance of long-term soil health. Transplanting these crops, once they are stressed, rarely leads to high quality stems and abundant harvests. Instead, we are likely to see stunted plants, premature flowering, short stems and low yield. Hardly worth the effort or the sacrifice of our precious soil resources.

In an ideal world, perhaps like that found in a hoop house, high tunnel or greenhouse, we have the ability to manage soil moisture to meet our busy planting, growing, harvesting and

crop turnover schedules. However, in the wild world of field-grown cuts, we have to work with what nature and seasonal rain patterns present. Slightly pushing the margins of optimal soil moisture for primary tillage, whether too wet or too dry, may be something you can rationalize every once in a while for a particularly valuable crop. However, repeating this type of choice or pushing the margins too far, can and will undue years of hard work in building the desirable tilth and structure that promotes deep root extension, soil aeration and the rapid infiltration of rainfall and irrigation. Destroying soil aggregates by cultivating dry soil, or creating compaction, hard pans and massive structure by tilling wet soil can be avoided, but requires that we take a longer view than the immediate season, the crops crying out to us from the greenhouse and our need to generate income for the farm. Short-term cash flow is clearly critical to our farms, but again and again we have to balance the here and now with the long term health and productivity of our soils. For growers across the West, this is a cyclical quandary, often with no easy answers, but a quandary that must be faced each year as we transition from the wet to the dry seasons

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A Market is Born

On March 12, 2011, history was marked in Seattle with the first official meeting of the members of the Seattle Wholesale Growers Market Cooperative. With a lease secured for 4,000 square feet of space in the historic Original Rainier Brewery Building, twelve members from three states, a firm opening date scheduled for May 4, and plans to be open three days a week through December, we exist!

And exactly how did this happen in nine short months since the idea was sparked at an ASCFG Regional Meeting in Eugene? For a short answer, let's say 1% magic and 99% collaborative hard work, and it'd be nothing without both ingredients. Nine of our twelve original members just happened to be present at the roundtable discussion where the question was raised, "Why do Portland and San Francisco have successful producer-owned flower markets but not Seattle? What if..."

During last summer's growing season, snatching furtive opportunities for phone calls and e-mails with those who had expressed interest, I learned that yes, indeed, if I would spearhead this project, plenty of folks would be on board. We already knew and trusted each other through our affiliations in the ASCFG. We knew we'd have a ton of obstacles to overcome like funding, forming into a legal entity, finding a space, logistics of how? when? and would the customers come? Countering all of these unknowns, we had vision and enthusiasm for what might be possible, an exciting project.

We also had a generous offer for funding through a USDA Specialty Crop Block Research Grant that WSU entomologists Beverly Gerdeman and Lynell Tanigoshi had received to help Washington State's floral producers. They had contacted me earlier in the year, eager to see their money make a difference in the industry. Technically, their grant needed to fund research and education, so, although enthusiastically supportive of our market project, they could not fund us directly. Lynell suggested the option of collaboratively presenting a Cut Flower Growers School, funded by their grant with tuition income going to SWGM. And a flower school was born.



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A Brief Chronology of The Seattle Wholesale Growers Market

October 28, 2010 First Steering Committee Meeting at Janet Foss' farm in Chehalis, Washington. Sixteen people are present. We brainstorm our name, potential ways to open for business in spring of 2011, and how our endeavor might take shape with help from various organizations. The group unanimously elects interim officers—Diane Szukovathy, President; Vivian Larson, Vice-president; and Catherine Mix, Secretary.

December 3, 2010 Second Steering Committee Meeting at the Portland Flower Market, hosted by the Oregon Flower Growers Association. Twenty-one people are present plus Tom Cox and Renee Carlson of OFGA who generously show us around, answering questions about how their market works and feeding us pizza! Lively discussion occurs about where we might locate our market, whether we should do a one-day-a-week outdoor market or lease indoor space in 2011 and if so, how we would carry the financial risk; and (not so lively) what type of business entity we should form ourselves into. Ann Leason of the Northwest Agricultural Business Center and Puget Sound Food Network presents collaborative possibilities for their nonprofit group to help us with internet marketing.

January 3, 2011 SWGM conducts an online survey of 250 florists and floral buyers in the Seattle area with encouraging results.

January 7, 2011 Third Steering Committee Meeting at the Original Rainier Brewery Building, Seattle. Patrick Zweifel presents a business plan in which his farm, Oregon Coastal Flowers, would

lease space in the historic building and then sublet to SWGM. The 4,000 square foot space is to be divided into approximately 22 10 X10 stall spaces to be leased by members at a rate of \$200/month. The group votes unanimously to adopt Patrick's plan and authorizes him to negotiate a lease. Diane raises the problem that we need to become a legal business entity so we can open a bank account to deposit tuition checks from the Growers School. The group authorizes her to proceed with steps to form into an LLC, believing that this will be simpler than forming into a cooperative at this stage. Discussion begins about creating basic rules and guidelines which will define the character of the market. Patrick Zweifel is elected Treasurer.

January 29, 2011 Fourth Steering Committee Meeting at Janet Foss' Farm in Chehalis. Once again Janet cheerfully feeds us. Catherine Mix has determined that, although an exciting project, SWGM does not fit into her farm's business model and Gail Parlatore is elected to replace her as Secretary. Diane reports our lawyer's recommendation that it would be preferable to form into a cooperative rather than an LLC and the group unanimously approves this course of action. Details for Articles and Bylaws are discussed and resolved.

January 31 and February 11, 2011 Specialty Crop Block Grant pre-proposals are submitted to the Washington State Department of Agriculture and Oregon Department of Agriculture with a total ask of \$321K, requesting funding for a "buy local flowers" marketing campaign, "Salmon-Safe" sustainability certification

assessments for members and help with various start-up costs for 2012-2014.

February 9, 2011 Articles are filed with the Secretary of State in Olympia, and The Seattle Wholesale Growers Market Cooperative becomes an official legal entity. Shortly thereafter, licenses are obtained and a bank account is opened.

February 19 & 20, 2011 Cut Flower Growers School is held in Mount Vernon. The class is full, successful, and \$5,800 is raised in start-up funds for SWGM.

March 6, 2011 Legal Organizational Meeting is held at Jello Mold Farm, Mount Vernon, with Vivian Larson, Gail Parlatore and Diane Szukovathy present. With approval from the Steering Committee at large, Bylaws are officially adopted.

March 12, 2011 First Annual Membership Meeting followed by a meeting of the Board of Directors take place in Seattle. Agreements are signed and \$500 buy-in payments are made. A Board of Directors is elected by the Membership. Interim Officers become official by unanimous vote. A start date as well as days and hours of operation are decided. Insurance and accounting needs are discussed and our business plan is refined. Committees are assigned. A logo design is approved and the Marketing Committee is authorized to continue work on signage, web presence and publicity. We are on our way.

Now the work really begins. With our doors scheduled to open in mid April and an official grand opening date of May 18 — get ready Seattle, here we come.

The ASCFG Welcomes its Newest Members

Renel Anderson, Peony Fields Forever, Everson, WA
Emily Dietzman Asmus, Welcome Table Farm, Walla Walla, WA
Darlanna Besecker, Chambersburg, PA
Sherry Billingsley, Flower Works, Loma Rica, CA
Terri Bitting, Plentygood Farm, Springdale, AR
Lawrence Bruns, Hanson Field Flower Farm, Scarborough, ME
Paul Busse, Lynden, WA
Sarah Ann Cutler, Seeded Earth Growers, Muscatine, IA
Rita & Mark Gjefle, Hidden Haven, Hamilton, MT
Katharine Hannigan, Florabella Gardens, Earlysville, VA
Thomas Heaton, NuFlowers, Woodland, CA
Emily Henry, Chickadee Hill Flowers, Bar Harbor, ME
Prudence Heston, Salt Air Farm, Cutchogue, NY
Elizabeth Hoff, Five Points Greenhouse & Farm Stand, York Springs, PA
Andrea Holman, Williams Family Farm, Ranch and Orchard, Guthrie, OK
Marjorie Illingworth, North Pole Peonies, North Pole, AK
Barbara Liedl, West Virginia State University, Institute, WV
Elisabeth Marshall, Full Bloom Farm, Lummi Island, WA
Tallahassee May, Turnbull Creek Farm, Bon Aqua, TN
Lucia Mazzotti, Aquateknolgies USA, Inc., Bentonville, AR
Gretchen McDaniel, The Pillars, Trumansburg, NY
Janet McKinney, Flower Hill Farm, Laneville, TX
Susan Myers, West Virginia University, Morgantown, WV
Bob Nagelhout, Pesce Verde, Dripping Springs, TX
Peggy Newfield, Rivertree Botanicals, Stamford, CT
Emily Reiney, Gurley, AL
Suzanne Royer, Earths Phocas, Laurys Station, PA
Holly Schemmer, Fredericksburg, VA
Blossom Schmitt, Plenty of Posies, Ithaca, NY
Rosslyn St. Clair, Flor Hermosa Nursery, Boerne, TX
Christa Stosiek, Markristo Farm, Hillsdale, NY
Robert Wallace, Ramona's Flower Farm, Caldwell, ID
Jonathan Weber, greenSinner, Pittsburgh, PA
James Wright, Peony Fields Forever, Everson, WA

Thanks for the Good Word!

New members named you as the reason they joined the ASCFG

Allan Armitage
Jeannine Bogard
Lynn Byczynski
Sybil Calder
Linda Chapman
Ralph Cramer
Josie Crowson
Becky Devlin
John Dole
Dave Dowling
Thomas Dudek
Andrea Gagnon
Chas Gill
Polly Hutchison
Red Kennicott
Marc Kessler
Ko Klaver
Joe Schmitt
Eileen Stephens
Diane Szukovathy
Joan Thorndike

2011 Regional Meetings

South & Central

August 1
Weimar, Texas

Midwest

August 8
Wooster, Ohio

Dave Dowling Scholarship Awarded to Repeat Winner



After careful review by the ASCFG Research Committee's of this year's applicants, Amy Hinkle of Penn State University was again chosen for her strong academic achievement and her ongoing commitment to a future in cut flowers. The Committee was impressed with Amy's focus on assembling every piece of knowledge she can get her hands on. She continues to seek outstanding learning opportunities as an intern, as in 2010 with Vicki Stamback at Bear Creek Farm, and she takes on every chance she can get to pick the brains of the best leaders in the flower industry. The Committee was truly impressed by Amy's sustained enthusiasm, her public service ethic, and her proactive and deliberate trajectory of growth and learning.

Amy has already committed to her next intern opportunity, this time working with Dorien van den Berg at Lilytopia 2011. In addition to a solid academic schedule while continuing at Penn State, Amy is simultaneously working towards a Spanish language intensive in Mexico upon graduation to be better able to communicate effectively with Spanish-speaking agriculture workers in the States. We see a great future for Amy in our industry as she is a go-getter, and we want to support her in her endeavors and definitely see her among our next generation of specialty cut flower growers.

Did you miss the 2010 National Conference in Tulsa?

Here are 2 easy ways to see what you missed and find out why you should plan to attend the 2011 Conference November 7-10.

1. Go to www.ascfg.org and download notes and slides from speaker presentations - FREE
2. Contact the ASCFG office to request the password to view 12 video presentations - \$50.

Go to

<http://www.youtube.com/watch?v=r57aEoY6-as>
to view clips.



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Electronic Communications



The ASCFG uses an online message program called Constant Contact to email announcements to the entire membership (Conference notifications, Board elections, surveys) or to specific groups (Seed Trialers' updates, Regional Meetings registration, renewal notices). They usually have a colorful header that says "Short Cuts". This system allows us to reduce printing and postage costs, and communicate efficiently with members. It's important that you receive them. Some email servers will block these messages, mistaking them for unsolicited email. If this happens frequently enough, more servers will block more messages, and more of our members will be excluded from this service. If you think you are not receiving Short Cuts from the ASCFG, please let us know. We'll help you work with your server so that it will allow you to receive them.

Most ASCFG members have their own web pages, and many write blogs. The ASCFG web site includes a section called "Meet Our Members" which lists addresses for both of these communication methods. Check this page to be sure your web address is correct. If you have a blog, send us the address for it. Click on ASCFG in the News to see articles about cut flower growers. When your farm is highlighted in a newspaper or magazine, be sure to let us know so we can post it here. If you're mentioned in an online article, send us the link.



What's New in Members Only?

Type a keyword into the search box, and find read discussions going back more than ten years.

Who's doing cut flower research in your state? What's the latest information on pest control? What cut flower trials can you visit? Find answers at this link.

Bulletin Board	Useful Links
Quarterly - Current	Quarterly - Back Issues
Phone Book	ASCFG Documents
Floriculture Research	Pricing Cut Flowers

The Cut Flower Quarterly is the only national periodical dedicated to the commercial production of cut flowers. Pull up a chair for some intensive reading.

Find out some average prices for farmers' market and retail florist sales here.

FROM *the Director*

Judy M. Laushman

At the risk of being labeled an old fogey, I'll confess I'm astonished at how fast and how far information travels. But I'm pleased that this phenomenon has so many benefits for a growers' association with relatively limited means.

We're lucky to have an amazing team on our side in this process. You may have met Debra Prinzing and David Perry at ASCFG meetings, where they've provided valuable input. More importantly, they've photographed, videotaped and written descriptions of the events, and posted it at their site afreshbouquet.com which is read by thousands of visitors, all hungry for the newest currents in floral and garden design.

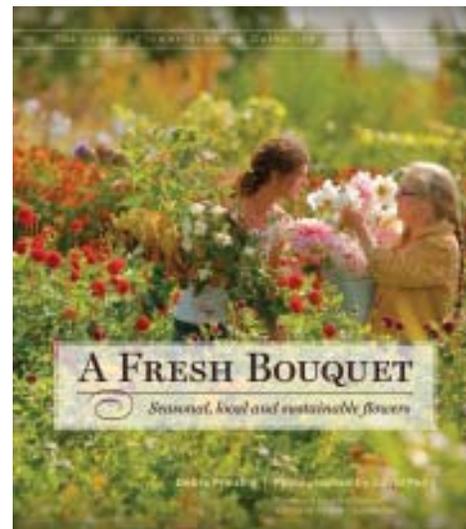
Debra and David are publishing a beautiful book called *A Fresh Bouquet*, highlighting growers, florists and gardeners who produce and use locally-grown specialty flowers in their businesses. It sounds simple, but they have made it magical.

Debra also gave the ASCFG a shout-out in the April issue of *Better Homes and Gardens*. Her "Trend-spotting" tips include a suggestion that buyers looking for local flowers go to the ASCFG web site to find growers in their area. Google Analytics tells us that hits to our site doubled in the weeks since that magazine hit newsstands and subscribers' mailboxes.

A recent article in the blog *eco RI news* featuring Polly and Mike Hutchison of Robin Hollow Farm details their efforts to produce cut flowers sustainably. It provides only a thumbnail sketch of their farm and products, but gets the point across: there are growers out there providing unusual, high-quality flowers to florists, event planners and farmers' markets – and here are just two of them.

How does all this affect you? No matter your place in the ASCFG, your business is impacted by activities like this. Every time an ASCFG member is in the news – whether it's his hometown newspaper or a national periodical – it draws attention to your organization. It takes just seconds for a reader to make the connection to our web site or Facebook page. A buyer looking for peonies can pick up the phone to ask us who in his state is growing them. A bride who wants a green wedding can connect with any number of ASCFG members who can provide the perfect flowers. Even if you're satisfied with your current market, an unexpected call from a buyer looking for just what you have is always welcome.

But if your file in our member database hasn't been updated since the month you joined, or if you still haven't filled in the Description of Business on a renewal form, we won't know what to tell potential buyers about you. It's easy to



tell us what crops you're growing, if you provide wedding or event flowers, if you sell only wholesale or invite cut-your-own customers to your farm.

Think about it: if you can't remember updating your information, it's probably out of date. Call or email us to find out, and we can quickly revise your records.

The speed of today's communications isn't just for other people or other industries. Tap the power of the information revolution – and your ASCFG membership – to help your cut flower business flourish.

ERRATUM

Correction: In the 2010 ASCFG Cut Flower Seed Trials report, I erroneously attributed comments made by Laurie Hodges, University of Nebraska, to Chris Wien, Cornell. On pages 32 (column 1) and 35 (column 2), the "Cornell comments on tunnel production" should actually read "Nebraska comments on tunnel production". Sorry to Chris for the misattribution and to Laurie for leaving out her contributions. John Dole



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Your first look at some highlights of this year's conference.
Mark your calendars for November 7-10!

Alternative Energy Options for Commercial Cut Flower Growers November 7



This one-day workshop will introduce field and greenhouse growers to products and processes to help reduce inputs and increase efficiency. Co-sponsored by the University of Maryland.

Check out these topics:

- Sustainability and Saving Energy at MacBride and Gill Falcon Ridge Farm
- Solar Panels and How They Work
- Effective On-farm Use of Small Wind Turbines
- Solar Panels, Wind Turbines and High Efficiency Wood Stoves: What Do They Cost and What Will You Save?
- Run an Efficient Greenhouse Off the Grid Sustainably and Profitably
- Using Solar Panels in Irrigation Systems
- Make Your Farm Equipment More Energy Efficient

Don't miss this unique offering for cut flower growers, presented by experienced practitioners of alternative energy.



ASCFG Growers' School November 7

Come to Lynnvale Studios for a hands-on day of learning and doing.



Conference Sessions November 8-9

Two days jam-packed with talks, social events, and the trade show.

- Woody Cuts from the National Arboretum
- Eucomis Production for Cut Flowers
- Marketing Eco-events to Customers
- A Report from FRESHFARM Markets
- Photographing Floral Designs
- Using LED Lights
- The Northern Ireland Cut Flower Industry



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- Wollam Gardens
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