

## FIELD PRODUCTION OF CUT FLOWERS: A PRIMER

Holly Scoggins Department of Horticultural Science, NC State University

(The following article is the first part of a two-part series discussing field production of cut flowers. The second portion of the article covering production, harvest and postharvest requirements of field grown cuts will appear in a later issue of the NCCFG Bulletin. Holly is a Ph.D. candidate in the department working with Dr. Nelson and Dr. Bailey at NC State.)

onsider the following scenarios: you have under- (non-)utilized land around your nursery or greenhouse facility. There are four acres of lawn behind/in front of your house. Business is slow or nonexistent in the summer; you have to let your workers go; there is little cash flow. Martha Stewart's on the TV, demonstrating flower arranging techniques...hmmm...are you thinking what I'm thinking? A field-grown cut flower business is a viable option to fill in the summer production and cash flow gap. The term "cut flowers" includes plant material both fresh and dried or preserved. Buds, flowers, stems, branches, seed heads, stalks--any plant parts used for floral and decorative purposes are considered cut flowers. The number and diversity of available crops is virtually limitless. This publication is not meant to be an all-inclusive manual but as an overview and to simply answer some common

questions to help decide if the field-grown cut flower business is for you.

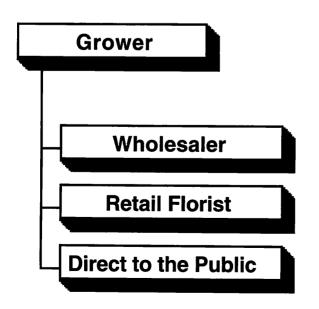
#### Why Grow Cut Flowers?

The cut flower market in the U.S. has changed dramatically over the years. The Dutch dominated the flower growing market in the '80s with new Competition from Third World varieties. countries increased as they took a lion's share of the "traditional" domestic cuts market. Rising freight costs put a damper on shipping from one coast to the other. In the U.S., the once-profitable production of standard crops like mums, carnations and roses have been supplanted by nontraditional and specialty cuts. The U.S. flower consumption market, though not nearly as sophisticated and well-developed as the European and Japanese markets, has incredible potential for expansion. Growing market segments exist, such as supermarket floral departments. Large quantities of cuts are imported into the U.S. from Holland, Central and South America, and the Caribbean. However, there still is room (and profit) in the cut flower business for the savvy grower Some relatively high-dollar crops do not ship well and are best produced locally. Local production usually equals longer vase life. Understand that the cut flower market is based on supply and demand, but you can often create your own demand by offering high quality and unusual product with reliable service to back it up. Crops produced in the cooler "shoulder" seasons can demand a higher price while the market is not flooded with product. Especially in reference to the small or starting grower, the following phrase is repeated over and over in the both the research and industry literature: Quality sells. Grow for quality, and don't be afraid to charge for it. Price will follow quality.

#### Who or Where is My Market?

Don't wait until you have harvest-ready flowers to decide their fate! Your target market influences what you will grow, how it will be handled and packaged, and most important, your capital investment. Have a clear market plan established ahead of time.

Your marketing options include selling to wholesalers, florists or other retail outlets, and



direct to the public. The obvious route when first starting out is to target local markets. As volume increases, you may want to deal with wholesalers and distributors.

"Direct to the public" sales include farmer's markets, roadside stands, or cut-it-yourself arrangements. How much you wish to truly interact with the public can help determine if a cut-your-own business is right for you. On-site sales, whether in the field or from a stand, requires a good location in a populated area, and a desire to deal with (not a mere tolerancē of) the public. Production considerations may be altered a bit for the "cut your own" concept (*the production section will appear in Part II of this article*). If you are integrating a field cut flower business with a preexisting greenhouse or nursery that retails to the public, additional marketing requirements can be minimal.

There are many direct-sales opportunities away from the farm as well, though transportation now becomes a cost factor. Farmer's markets offer a low-overhead market for novice growers. You can experiment with displays, mixed bouquets, dried materials, etc. and enjoy relatively autonomous pricing. There are many other retail opportunities available, such as a restaurants, banks, etc. Craft shows are great sales venues for preserved and dried plant material.

Sales to retailers such as florists, garden centers, grocers, upscale or "gourmet" specialty stores are another option. Dr. Alan Stevens suggest that for businesses other than florists, start with a few sizes of mixed bouquets, then move to quantities of single species. Offer premade bouquets as a labor-saving option to florists. Florists are constantly searching for new and unusual material. For more information and a membership directory, contact the North Carolina State Florists Association at 1100 Broad Street, Durham, NC 27705.

Selling to wholesalers entails meeting their grading, sorting and packaging requirements, and consistency is greatly appreciated. Though price will be lower, wholesalers will often accept large quantities. If you are selling both to retail florists and to wholesalers, offer a quantity-based price break. Be aware that when dealing with wholesalers, payment is usually made 30 to 45 days out. Don't expect COD terms. Also, consignment sales are not recommended. If you're offering your product at wholesale prices, let someone else do the marketing and make the retail contacts. If you form a relationship with a wholesaler, don't undercut them by selling directly to his/her retailers. For a directory of wholesale florists and florist suppliers contact the Wholesale Florists & Floral Suppliers of America, P.O. Box 7308, Arlington, VA 22207, 703.241.1100.

Last but not least, the Internet offers a new marketing niche. You can provide product information in a website to potential customers and create interactive order forms for use with browsers such as Netscape and internet connection services such as America on Line.

The Web is also useful for following price trends: the USDA publishes wholesale cut flower prices from major city markets such as Miami, New York, and San Francisco. Penn State University offers access to this information at their web site http://psupen.psu.edu:70/ 1%24m%201019956. Market information is also available at http://www.flora-source.com. Wholesales pricing to retailers for over 100 specialty cut flowers is also available from this site - go to the Dos Osos Multifloro homepage (a progressive and quality wholesaler out of central California) in the Marketplace section. Try to establish one consistent factor in your pricing. Some examples include: the same number of stems per bunch regardless of species; the same price per bunch but vary the number of stems (good if offering a large assortment of unusual material).

Regardless of your market, consistency of quality and service should be your business goals. In order to compete with the offshore market (lower price), local growers must offer comparable quality, grading, packaging, and promptness. Educate your buyer! Provide price lists, quantities available, descriptions if the material is unusual or not well known, postharvest recommendations--anything to improve quality and service.

## **Product Variety: Find Your Niche**

Flowers can be grown either specifically for fresh use, dried use, for parts other than flowers such as seed pods, or any combination of the preceding. Start with species or varieties proven to grow in your area (climate!). North Carolina's climates are as varied as its geography. Introduce other species on a trial basis before committing to large-scale plantings. An interesting industry trend is smaller acreage for cut flower production --1 to 2 acres. Overproduction is often a problem --most local markets can't accommodate the volume produced on 20 acres of cut flowers, no matter how beautiful they are!

What should I grow? There are annuals, perennials, grasses, woody shrubs, trees and vines all suitable for use as cut flowers or plant material.

Annuals will produce in the year planted and most are easily started from seed. Annual seed is readily available and lower cost compared to perennials and bulbs. Tender or half-hardy perennials can be grown as annuals.

The choices for perennials are endless. Some traditional perennial crops that bring a good price include peonies (both fresh and dried), lily of the valley, and calla lilies. Garden roses with fragrance are a possibility for the specialty florist market--also the "antique" cabbage and bourbon-type roses would fetch top dollar during the wedding season.

Woody species extend production time to include early spring flowers (either naturally or on forced branches), summer flowers (*Buddleia* spp.) late season berries, or ornamental stems such as the corkscrew willow (*Salix matsudana* cultivars) harvested in the fall and winter. Relatively low maintenance and long-term production are benefits of including "woodies" in your field-grown cuts program. Do keep in Consider these rules of thumb from Dr. Alan Stevens, cut flower specialist from Kansas State University, when deciding on potential crops:

- ⇒ high production (number of stems) per square foot of bed area
- $\Rightarrow$  long, productive life plus extended production season
- $\Rightarrow$  long stems (18" or longer)
- $\Rightarrow$  minimal pollen shed
- ⇒ postharvest vase life of no less than 7 days
- ⇒ resistant to heat, drought, pests, and pathogens
- ⇒ ability to sell surplus as a dried or preserved product
- $\Rightarrow$  ease of harvest and handling
- and last but certainly not least:
- $\Rightarrow$  aesthetically pleasing!

mind that it may take a few years for some species to reach marketable harvest size.

Both wholesalers and florists want to be the first with unusual or improved varieties. If you have the space, consider a larger product mix. A wide variety of cuts allows you to service a greater percentage of the needs of your customers. Consistently test new crops. The ability to provide the floral wholesaler or retailer with unusual material will make you invaluable! Most wholesalers or retailers will pay for samples of a new variety. In the same vein, be aware of changes in consumer style and color preferences. Comb the pages of greenhouse, floral, and horticultural science publications to get the skinny on what's hot. Look for the best cultivars of a particular species you want to grow. New varieties may offer higher yields and better pathogen

resistance. Be cautious when "copycatting." If a species is particularly popular/profitable this season, chances are good that it will be available in mass quantity the following year.

For invaluable information on everything from new cultivars to production techniques, join the premier cut flower organization - the Association of Specialty Cut Flower Growers (ASCFG), M.P.O. Box 268, Oberlin, OH 44074-0268. This group offers bountiful information in the form of a great newsletter - *The Cut Flower Quarterly*, plus access to back issues, cut flowerrelated publications, and Association conference proceedings.

## What are the Costs of Cut Flower Production?

Comparatively little work has been done on the economics of field production of cuts (many sources have developed budgets for outdoor production of vegetables - these can be valuable references). The categories of overhead and variable costs are roughly similar to those incurred in greenhouse production, but there are some important differences.

Robin Brumfield, Agricultural Economics Extension Specialist at Rutgers University, recommends tracking costs with the following system: Variable costs are allocated to each unit of production. These costs of production will change as the units of production change. Overhead or fixed costs are incurred without regard for the number of units produced. As more units are produced, the fixed cost per unit decreases.

Variable costs include materials such as fertilizer, lime, plants, chemicals, etc. Production labor is also allocated to each unit. If you are already in the nursery or greenhouse business, you are probably aware of the factors comprising total labor costs per hour - not just the hourly rate, but social security, workmen's comp., unemployment and disability insurance, and paid holidays. Be sure to include these, if applicable, when calculating total labor costs per hour. Overhead costs are not allocated to a specific crop. Costs must be allocated by some other method, such as cost per acre. Overhead costs include irrigation equipment (don't even CONSIDER not having irrigation) and related fertilizer proportioners, storage tanks or farm ponds. Machinery, equipment and buildings make up a substantial percentage of fixed costs. Tractors, fertilizer spreaders, sprayers, carts, wagons, delivery trucks/trailers, coolers, sheds, office buildings, etc. are all considered initial investments. Depreciation on these items should be calculated in terms of "useful life".

Keep good records, be cognizant of all costs involved on a daily basis to be sure you are receiving fair value for your product. Develop a business plan and stick with it! Experts advise against increasing the size of your business until you know it is profitable.

Don't be timid concerning investing in new technology. The labor (read: cost) savings can be substantial. Also understand local environmental regulations, both current and impending. Invest in facilities and techniques that lessen dependence on chemicals.

#### **References and Recommended Readings**

Armitage, Allan M. 1993. Specialty Cut Flowers. The production of annuals, perennials, bulbs and woody plants for fresh and dried cut flowers. Varsity Press/Timber Press, Portland, OR (800) 327-5680. (Contains A to Z production information from the leader in discovery and development of specialty cut flower crops. Coverage by genus and species includes propagation, environmental requirements, field and greenhouse performance, harvest and postharvest, and pests and diseases.)

- McAvoy, Richard J. 1997. Annuals for Fieldgrown Cut Flowers. Connecticut Greenhouse Newsletter 197:1–8.
- Reid, Michael and Linda Dodge. 1996. Cut Flowers: Postharvest Handling Review. In: The Cut Flower Quarterly. 8(1):23–24.
- Stevens, Alan. 1996. Field Grown Cut Flowers: A Practical Guide & Source book. Avatar's World 800.884.4730. (*This reference book covers management, marketing, production, specific crop information, mistakes to avoid, and reams of sources and directories. Dr. Stevens is a noted cut flower specialist and consultant.*)

### **Cut Flower Organizations**

The Association of Specialty Cut Flower Growers. ASCFG, Inc. MPO Box 268, Oberlin, OH 44074. Ph. 216.774.2887. (*The quarterly newsletter that accompanies membership is an excellent resource for new crop information, marketing tips, industry news and research updates.*)

(The author wishes to thank the countless grower contributions to the Cut Flower Quarterly that helped comprise this article.)



# Don't Miss The NC State University Bedding Plant Field Day

Wednesday, 30 July 1997 Horticulture Field Laboratory and McKimmon Center Raleigh, NC

Call the NCCFGA office at 919.779.4618 for registration information.