Specialty cut flower production
Growing cut flowers for market

- From Seed to Bouquet: Culture of Cut Flower Crops
- Plants Suited for Production of Cuts — Not Just Flowers!
- Harvest and Handling, Arranging, Drying
- Integrating Cut Flowers into Your Direct Market Business: Costs, Profits, and Pricing
why grow cut flowers?

Because they’re *romantic* …
why grow cut flowers?

- Because they’re romantic ...
- Can gross $10-16K on ½ acre
- Can help attract beneficials
  - Apiaceae, Asteraceae, Lamiaceae
- Wide variety of crops = broader customer base.
- Displaying flowers at a farmers market = naturally attract customers to your stand
- BUT
  - Labor-intensive
  - Time-sensitive
www.ascfg.org

Association of Specialty Cut Flower Growers

Find high quality, locally-grown flowers, foliage, branches, and much more! Discover florists and designers using specialty cut flowers

Find Us on the Map!

What's New?

Cut Flower Growers' School
March 3-4, 2014 - Fort Worth, Texas

ASCFG Members Invited to Wedding Design Event

Seattle Wholesale Growers Market 2014 Season Extension Workshop

Wisconsin Cut Flower Growers' School

MPO Box 268 | Oberlin, Ohio 44074 | (440) 774-2887 | For more information | mail@ascfg.org | Find us on Facebook!
where to grow cut flowers

- Greenhouse
- Cold frame
- Field
+ Low overhead
+ No utilities $
+ Can start on $\frac{1}{2}$ acre

- Least manageable environment
- Warm season growing (mostly)
- Lots of watering
coldframe or high tunnel

+ Extends the field season
+ Many cool-season crops available
+ Low overhead
+ Only emergency heat needed

- Limited environmental controls
- Summer?
Greenhouse

- You manage environment
- Year ‘round flowers
- Protection from rain

- Relatively expensive to build
- Expensive to heat
- Profitability vs. other crops?
greenhouse beds

- Beds
  - Can be in-ground, raised, rows of pots, or bulb crates
  - Never wider than 4’
  - Raised = best drainage
- **Drip or trickle tape irrigation**
  - One or two strips per bed
  - Pressure-compensating tubing
- **Fertilizer**
  - Different crops = different needs
  - Slow-release (resin coated)
  - Water soluble with injector
  - Compost (test!)
- **Mulch**
  - Plastic or bark/other
- **Netting for support**
  - “Tenax”
  - Most herbaceous crops require it
  - One or two layers

- **Posts to hold netting**
  - Metal posts
  - PVC pipe
seed starting versus liners/plugs

- Ordering in plugs/liners
  - Many sources, esp. for perennials, woodies, and grasses
    - North Creek Nursery, Spring Meadow Nursery, Hoffman’s
  - Look for larger tray sizes (50s, 38s, 18s)
  - Low minimums – usually one box (3 trays)
  - Vernalized?

- Smaller plugs for annuals
  - 120s to 288s
  - Raker’s, Gro n’ Sell, Speedling
Starting seeded plugs yourself

- Use cell trays
- Mist or humidity domes
- Warm bottoms = faster germination
  - Heating mats
- Consider germination rate in planning
- Harden-off before transplanting to field
harvest

- Cut at proper stage of development
  - Different for each crop
  - Depends on market
  - Rules of thumb
    - 1/3 of florets open
    - Color showing in bud
harvest and postharvest

- Early in the morning!!!
- Start collecting 5 gallon buckets NOW
- Knife or pruners
- Fresh water source
“chain of life”

- Treating cut flowers from harvest to consumer to maximize life
  - Clean knives & buckets
  - Sterilize buckets after each use
  - Immediate hydration
  - Floral preservative
  - Keep cool
  - Re-cut stems at any bucket change

- www.chainoflifenetwork.org
to cool or not to cool...

- Coolers are necessary if:
  - Holding cuts more than 6 hours

- Options:
  - Walk-in cooler
  - Used food/beverage refrigerated cases
  - Refrigerated truck
cooling

- **Temperature**
  - 34°-40°F

- **Relative humidity**
  - 75% or greater

- **Lowering plant tissue temperature ASAP decreases:**
  - respiration rate
  - ethylene production
  - transpiration
  - rate of flower development / senescence
postharvest

- Floral preservative
  - Sugar source
  - Acidifier
  - Biocide (bactericide)
sugar source (food)

- Simple sugars to maintain flower development
  - 0.5-1.0% sugar
- Concentrated solutions
  - Up to 20% sugar
  - Pulse only
- Solution pH of 3.0 – 3.5 best
  - Enhances uptake of hydrating solution
  - Deters growth of microorganisms
- Can use citric acid
- Most preservatives contain acidifier
- Essential for continuous water uptake & freshness
- In most preservatives
- Or: household bleach
  - 20-60 ppm
  - 1 tbsp / 4 gallons water
  - Must be replenished regularly
postharvest

- **Ethylene**
  - Affects many species
  - Drastically shortens vase life
  - **Sources:**
    - Fruit, vegetables, other plants
    - Exhaust

- **Ethylene inhibitors**
  - **STS (silver thiosulfate)**
    - Being phased out
  - **Ethyl Bloc**
    - Add powder to water
    - Forms gas
    - Seal room for 4 hours
drying and preservation

- For craft market
- May harvest at different stage of development
- Air drying
  - Warm temperatures
  - Good air circulation
  - Screen out insects
- Glycol (glycerin)
  - Systemic absorption
  - Immersion
- Dessicants
  - Silica gel
transportation
Cuts – and not just flowers!
What NOT to grow…The “BIG THREE”

- Roses
- Carnations
- Chrysanthemums

Why?

- Central and South American growers
- High light levels, cheap labor, few restrictions
- Difficult to compete
what to grow

- Herbaceous annuals, perennials, biennials
  - Bulbs
  - Grasses and grains
- Woody plants
  - Flowers, berries, foliage, branch form ("sticks")
- Fresh and/or dried
the perfect cut flower...

- Easy to grow
- Few pests or diseases
- Long stems (18” minimum)
  - Note trend for “compact” arrangements
- Long postharvest life
- Fragrance?
products

- Grower bunches
- Consumer bunches
- Mixed bouquets
ties/sleeves?

- Depends on market
  - Pre-made plastic film
  - Paper (wrap on-site)
- Other options…
Most widely (easily) grown
- Sunflower
  - Note if multiflower, pollenless
- Zinnia
- Cosmos
- Rudbeckia
- Gomphrena
- Basil
- Celosia

Direct seed vs. plugs
Try succession planting
cool-season annuals

- Excellent for coldframe production
- PanAmerican Seed has terrific products + grower info (www.panamseed.com)
  - Larkspur, Delphinium
  - Anemone
  - Stock
  - Snapdragons (note “Group”)
  - Iceland poppies
  - Sweet William
  - Trachelium
  - Ranunculus
perennials

- Mostly “field grown” but some do well in greenhouse production
  - Achillea
  - Campanula
  - Lavendar
  - Peony
  - Phlox
  - Veronica
  - Hundreds more…
bulbs & tubers

- Treat some as annuals
  - Gladiolus
  - Dahlia
  - Tulip

- Perennials
  - Calla
  - Tuberose
  - Daffodil
  - Crocosmia
  - Lilies (oriental & asiatic)
Costs, profits, and pricing
pricing

- Price by bunch, stem, or bouquet
- Be consistent
  - Bunch size (5 or 10 stems)
  - Bouquet size (small, med., large)
- Fewer price points the better for wholesales
  - USDA website
  - Other wholesalers (www.potomacfloral.com – look under “local flowers”)
- Retail
  - Don’t be afraid to charge for quality!
  - Under-pricing hurts you AND other growers

Black millet, $6.50/bunch wholesale
cost accounting

- **Variable costs (easy)**
  - Seeds, plugs, other growing supplies
  - Hourly labor to plant, grow, harvest, deliver

- **Fixed costs/overhead (harder)**
  - Depreciation of structures, vehicles, equip.
  - Insurance, utilities, your salary

- Can calculate cost per square foot or linear row
One 200 ft. row of sunflowers

Seed $5.00
Irrigation supplies $5.25
Fertilizer $1.60
Delivery (miles) $6.72
Packaging $4.80
Preservative $9.00
Labor to plant $40.00
Labor to pick $17.50

Total cost: $89.87

Sold: 65 bunches of 5 @ $2.00 $130
370 stems @ $0.50 $185

Total sale: $315

Net profit $225.13

(Charge $0.50 more/bunch and $0.25 more/stem = $512.63 Profit)
marketing

- **Who/where is your market?**
  - Determines product form/mix
  - Determines pricing
  - Determines level of service

  “Don’t even THINK of cranking up the tiller until you KNOW who you are going to sell these flowers to…”

  - Frank Arnosky
markets

- Direct to consumer
  - Farmer’s markets
    - A great place to start!
    - Professional, uniform display (not mayonnaise jars!)
    - Clear pricing
  - Pick-your-own
    - Consider minimum purchase
  - Subscription deliveries
    - Office complexes
  - Space in other businesses
markets

- Wholesale
  - Florists
    - Highest $
  - Floral wholesalers
  - Garden centers
  - Grocery stores
    - Often must maintain displays
Avoid...

- Weddings?? (actually a good market)
- On-farm markets if privacy is important

frazzled bride
examples:

**Urscale urban florist**

- Wants new and/or interesting stuff
- Appreciates timeliness, dependability
- Wants long stems
- Price not usually a factor

**How to make them happy:**

- Follow color trends!
- Be the first to grow/offer them a product
examples:

Farmer’s market shopper

- Customers want both mixed bouquets and single stems
- Price may/may not be an issue

How to make them happy:
- Presentation is everything
- Personality, salesmanship a plus!
- Rustic is “in” – galvanized buckets, kraft/butcher paper, twine
examples:

- **Floral wholesaler**
  - Pays lower price but buys larger quantities
  - Can’t sell to their customers
  - Needs a wide variety
resources

- **Industry mags**
  - Greenhouse Grower, GrowerTalks, GMPro
- **Books (see list)**
- **Vegetable literature (esp. organic)**
- **Extension publications**
  - Getting Started in the Production of Field-grown Specialty Cut Flowers - VCE Publication 426-618 Revised 2/2014
- **Best source of information is OTHER GROWERS**
  - Association of Specialty Cut Flower Growers (ASCFG)