Herbaceous Perennial Container Production
--considerations, resources
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Questions
• What is the market? Who are the buyers?
  --wholesale: pot size varies with buyer
  --landscapers: larger plants usually
  --consumers: smaller plants usually (varies with market), service, information, price? (price conscious
    best left to mass markets)
  --collectors: unusual, specific groups/genera
• What type of business do you want? Have?
  --retail: people oriented, less production, more finished material
  --wholesale: more plant oriented, propagation/production/both
  --diverse with other aspects (landscaping): production for own use, or if retail, or not depending on focus
• When will the plants be grown and sold?
  This will depend on: type of business (available time), labor
  This will determine: type of production, if any
• Location constraints?
  Space for production, in greenhouse or nursery?
  Climate, such as overwintering needs in north
  Relation to market, wholesale or retail

Types of Production—Field
• More used in past, specialty markets such as dig-your-own or custom dug, small
• Good for larger materials such as landscaping
• Preferred by many growers for crops such as daylilies, peonies
• Bare root production

Types of Production—Containers
• Most common
• Easier to handle than field, less labor, more adaptable to mechanization
• More control over culture, pests/disease, weeds
• Available all during season
• Greenhouse or nursery

Greenhouse or Nursery?
• Greenhouse
  --if exists already, production system focus for potted crops and bedding
  --propagation, more demanding crops
Nursery
--if no greenhouse, less structural costs
--if greenhouse space for higher value crops
--less demanding crops

Production begins with:
- Plugs: small plants generally from seeds, 30-300 or more per tray
  - better adapted to greenhouse production (seeding, transplanting)
  - may be easier to buy in difficult species (germination, veranalization)
  - often less choice, not possible with many cultivars
- Liners: generally vegetative, often larger cells (30-70 per tray)
  - need specialized facilities to produce (eg stock beds)
  - often better suited to nurseries
  - more choices, may be more “true” to type
  - often less time to bloom
- Divisions: generally bought in, or smaller specialty nurseries, some genera as Iris, Hemerocallis
  (more details in propagation leaflets, resources)

Propagation options:
- buy in all, or propagate all
- buy in easier, propagate harder
- buy in harder to propagate (vernalize), start easier on site

Buying in liners—considerations
- cost: saves time, labor and facilities but more costly if these available
- culture indexing: make sure material is indexed or free of disease
- timing: depends on operation, schedules with other crops
  - late summer—pot, overwinter (vernalize) 28-41F (-2 to 5C) or outdoors
  - fall—overwinter covered
  - early spring—pot and finish for spring, force into bloom?
  - spring—pot and finish for summer sales, conflicts if also selling spring annuals
- size of plant/rooted cutting: depends on type of operation, schedules, space, other crops, cost, finishing size
  - same choices as for propagation, 16-128 cells per tray, often 30/50/70/90 or similar
- unrooted cuttings: source (domestic or offshore): offshore may take several days longer, possibly decreasing quality

Resources
- Herbaceous Perennial Production, Perry, NRAES publ.
- Perennial Solutions, a Grower’s Guide to Perennial Production, Ball Publ.
- Ball Perennial Manual, Nau, Ball. Publ.
- Ball Redbook, and other publications, Ball publ.
- Seed catalogs, web sites
- Perry’s Perennial Pages (http://www.uvm.edu/~pass/perry/)