

Life-Cycle Terminology

Annual - A plant that completes its life cycle, from germination to setting seed, in one growing season.

Biennial – A plant that completes its life cycle in two years. The first year it grows leaves, stems and roots. In the second year it produces flowers, fruits, and seeds.

Perennial – A plant that comes back year after year. Includes most bulbs.



Annuals, Perennials, or Both? What are your garden goals?

- Color all season
- Structure
- Pollinator support
- Wildlife food and habitat
- Low-maintenance
- Incorporate edible varieties
- Incorporate cutting varieties
- Shade/privacy
- Budget friendly

Perennials - Advantages

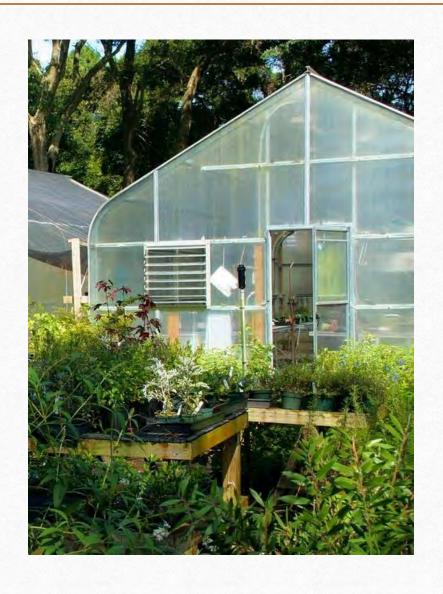
- Come back year after year
- May bloom in very early season, very late season, or both
- Provide structure/color even when not blooming
- Can spread to fill large areas
- Low-maintenance
- Outcompete weeds
- Divisions can be obtained from friends
- Many native options



Perennials - Disadvantages

- Can be expensive
- May be killed in harsh winters
- Short bloom time relative to annuals
- Can spread to fill large areas
- May need dividing and/or deadheading
- Usually harder to grow from seed
- Can spread aggressively even if not an invasive species
- Difficult to find unusual/native varieties locally





Sourcing Perennials

Friends, plant swaps — avoid diseased or invasive plants, best to wash roots

Independent nurseries

Big box stores — check hardiness

Catalogs/Internet — bare root and potted

MGV plant sales

Start your own from seed

Planting Perennials

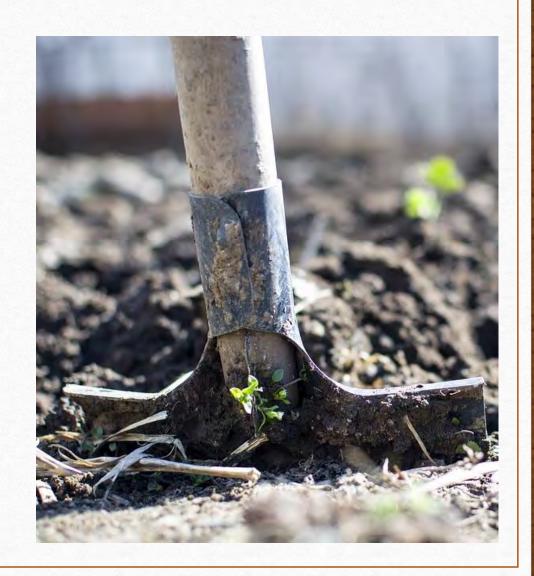
Most can be planted even before last frost, especially if already outside

Larger plants fill in space faster but require a bigger hole and cost more

Dig hole that is twice as wide as root base and slightly deeper

Root wash or at least tease roots apart, backfill with soil after planting

Water well until established



Dividing Perennials



Source: UGA Extension

Some easy to divide – runners, small clumping varieties

Taproots do not like be divided – Baptisia, Columbine, Lupine, etc.

Best time is spring or fall, avoid transplanting while in flower

Use knife or pruning saw for dense, fibrous root systems

Growing Perennials from Seed

Best started in late winter for spring transplant or mid-summer for fall transplant

May require stratification or scarification – freeze/thaw, abrasion (winter sowing in milk jugs good option)

Can be slow to germinate but fast to grow or can sprout quickly and stay tiny

Direct sowing effective for self-seeders like foxglove and Columbine



Source: University of Maine Cooperative Extension

Caring for Perennials

Remember - many thrive on neglect!

Once established little watering is needed unless conditions are unusually dry

Deadheading spent flowers extends bloom time

Some varieties can be cut back after flowering and rebloom

Fertilizing in spring and fall will increase size and vigor, phosphorus boosts blooms, nitrogen boosts vegetation



Shade Perennials



Coral Bells



Hosta



Astilbe



Bleeding Heart



Bugloss



Lungwort



Fern



Hellebore

Sun-Loving Perennials



Peony



Daylily



Tall Phlox



Russian Sage



Veronica



Sedum



Coreopsis



Coneflower

Source: Audubon Society

Native Perennials



Boneset



Goldenrod



Swamp Milkweed



Yarrow



Mountain Mint



Bee Balm



Aster



Lobelia

Source: Eden Brothers

Biennials

Spend first year as low-growing rosette, bolt and set seed in year two

Usually prolific self-seeders

Plant two years in a row to have blooms every year

Some varieties bred or treated to flower first year (FYF)



Foxglove



Canterbury Bells



Sweet William



Money Plant

Annuals - Advantages

- Easy to find in spring/early summer
- Dwarf and tall varieties available for most species
- Long-blooming compared to most perennials
- Grow quickly
- Easy to plant and remove
- Many are good for generalist pollinators
- Most varieties easy to start from seeds
- Available in multi-packs and full plants



Annuals - Disadvantages

- Can be expensive
- Must be replanted annually
- Do not support native pollinators
- Takes many plants to fill large areas
- Some are high maintenance
- May need deadheading and lots of weeding
- Most bedding plants slow to grow from seed and take time to fill in
- May re-seed aggressively in unwanted places





Sourcing Annuals

Independent nurseries – usually best selection and more unique varieties

Big box store

Catalogs/Internet – expensive

MGV plant sales

Farmstands

Start your own from seed

Planting Annuals

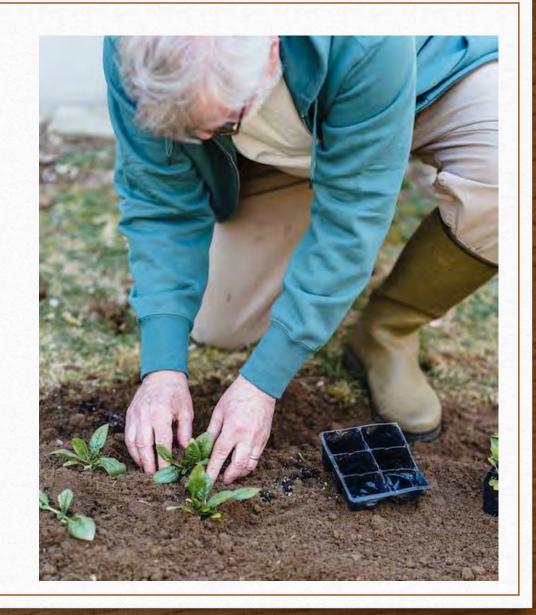
Cool season annuals can go out a month or more before last frost date

Warm season annuals should wait until after threat of frost

Plants should be hardened off for several days before planting & flowers removed

Spacing should be based on desired look and mature size

Consider shade and sun requirements



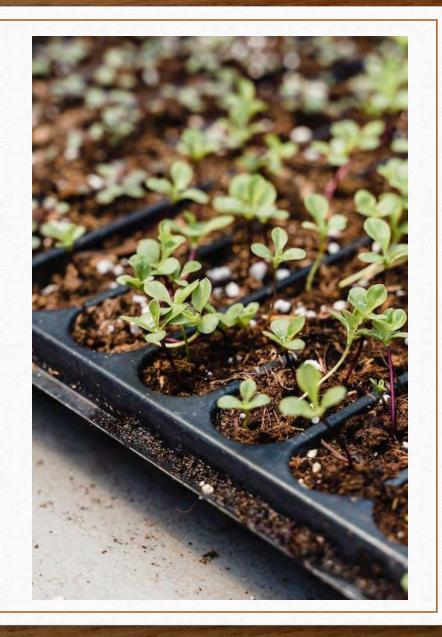
Growing Annuals from Seed

Research days from seeding to transplant and count backward from planting date

Cool season annuals may require stratification or scarification – freeze/thaw, abrasion (winter sowing in milk jugs good option)

Can be succession planted for multiple flushes of blooms

Direct sowing effective for larger-seeded varieties like sunflower and Nasturtium



Caring for Annuals

Water well until established, but do not overwater during growing season

Deadhead to stimulate more blooms, and to prevent seed setting

Fertilize lightly throughout season with weak organic fertilizer

Weed as needed

Regularly scout for pests and diseases



Shade Annuals



Begonia



Coleus



Impatients



Polkadot Plant



Bacopa



Torenia



Alyssum



Lobelia

Sun-Loving Annuals



Marigold



Vinca



Snapdragon



Petunia



Zinnia



Cleome



Ageratum



Geranium

Grasses

Annual and perennial, small and large
Add structure, color and interest
Avoid invasive/weedy species

Native varieties include:

- Panicum virgatum (Switchgrass)
- Eragrostis spectabilis (Purple Lovegrass)
- Schizachyrium scoparium (Little Bluestem)
- Bouteloua gracilis (Blue Grama)
- Chasmanthium latifolium (Inland Sea Oats)
- Carex pensylvanica (Pennsylvania Sedge)
- Andropogon gerardii (Big Bluestem)



Source: Piedmont Master Gardeners

Cutting Gardens

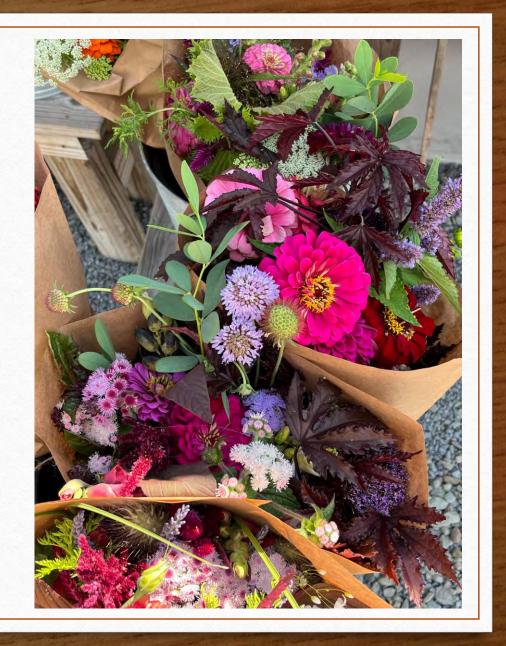
Varieties chosen based on stem length, flower size/shape, and vase life

Flowers cut frequently and to the ground to maximize production

Most varieties need full sun

Mix focal, filler, and foliage varieties for bouquet making

Succession plant for continuous blooms



Source: Johnny's Seeds

Popular Cutting Varieties



Ageratum



Snapdragon



Sunflower



Amaranth



Zinnia



Basil



Celosia



Lisianthus

Harvesting Cut Flowers

Use very clean container and disinfected snips

Add a few drops of bleach to water (be sure to use pure sodium hypochlorite)

Cut during cool times of day

Cut very close to base, strip unwanted foliage in field

Give flowers a chance to hydrate (several hours to overnight) in cool spot



Drying Flowers

All varieties "can" be dried, not all varieties should be dried

Considerations:

- Moisture content of flower
- Color
- Petal retention
- Stem thickness

Hang upside down in a dry, warm, dark, well-ventilated spot



Source: Johnny's Seeds

Drying Varieties



Gomphrena



Ammobium



Strawflower



Amaranth



Nigella



Larkspur



Celosia



Lavender

Edible Flowers



Nasturtium



Marigold



Pansy



Calendula



Viola



Lavender



Snapdragon



Dill