



BALTIMORE IN BLOOM

How to Grow and Sell Cut Flowers on Vacant Land

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In partnership



ABELL
FOUNDATION



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Introduction

Baltimore City's Growing Green Initiative created the Flower Farming project to explore the viability of growing flowers as a way to return more vacant lots to productive use. The resulting Flower Farming Report explored the current state of flower farming in Baltimore and made recommendations on how community organizations and the City can support flower farming. Report available at: www.baltimoresustainability.org/wp-content/uploads/2016/01/Flower-Farm-Report.pdf

This booklet, developed in partnership with the Growing Green Initiative, is a brief introduction to growing and selling cut flowers in Baltimore City's community gardens and green spaces. Flowers add beauty to neighborhoods and support pollinators such as honeybees. In this guide, you will find:

Planting Basics

to get you started

Harvesting Tips

keep your blooms looking good

Flower Profiles

six easy cut flower varieties

Sales & Pricing

where to sell and what to charge

Expansion Ideas

diversify with bulbs, herbs, perennials, and more

More Resources

learn more, find supplies, and get connected



Planting Basics

Know before you grow

Choose cut flower varieties that grow at least 18" tall and stay fresh in a vase. Find out whether to seed directly into the garden or transplant, and learn the proper harvest stage. For transplants, buy plugs from a greenhouse or grow your own by sowing into pots or trays.

Attention to details

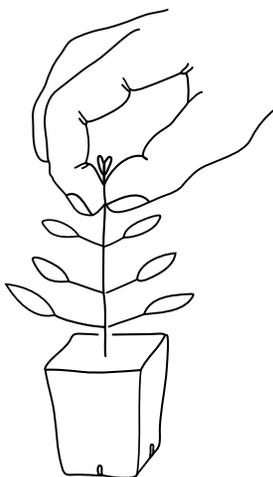
As with any garden, soil preparation, weed management, and watering are crucial. Most plants prefer well-drained, nutrient-rich soil and full sun. Manage weeds through hand-pulling or mulch with straw or leaves. Give the garden a deep watering at least twice a week in dry periods – flower production drops with too little water.

Keep it tight

By planting very close together, the flowers will outcompete the weeds, plants will reach up rather than out to encourage long stems, and you can maximize production in a small space.

To pinch or not to pinch

Many flowers benefit from pinching off the center (see illustration) to encourage deeper branching and longer stems. Once the plant has 3-4 sets of leaves, use fingers or clippers to remove the set of leaves on top.



Keep 'em coming

To have a continuous harvest, many flowers need to be sown several times throughout the season, a technique known as succession planting. While the flowers in this guide have been chosen for having a long season, the number of stems will gradually dwindle and you'll be glad to have another crop on the way.

Out with the old

Deadheading (removing old blooms) is essential to keep plants flowering and maximize production. If you harvest often, you'll have to deadhead less!

Harvesting Tips

Harvest aggressively

Once flowers start blooming, cut deep into the plants and harvest often. Many plants will produce best if you harvest at least twice a week. Don't be afraid to hack off a big piece of the plant!

How to harvest

While cutting, use your thumb and forefinger to strip the foliage off the part of the stem that will be under water. This keeps the water clean and decreases bacteria. Harvest during the cool part of the day to avoid wilting and increase vase life.

Keep it clean

For healthy and long-lasting flowers, clean your buckets, vases, and harvest tools thoroughly with soapy water.

Storing blooms

Harvest flowers into clean water. As soon after harvesting as possible, store them in a cool, dark place such as a fridge, basement, or air-conditioned room. Let them sit in water for at least 4 hours before selling or arranging so they can rehydrate.

Vase life

Many locally-grown cut flowers will easily last one week or more with proper care. Instruct customers to change the water every couple days and give stems a fresh cut. Always test the vase life at home before selling flowers.



AGERATUM

A plant that will flower until frost, has nice flowers and foliage, and acts as a great filler in a bouquet.

How to Sow: Start plants 6-8 weeks before last frost or buy plants. Transplant into garden after frost.

Cover Seed: No

Days to Germinate: 7-10

Days to Bloom: 80-100

Pinch out center leaves:
Yes, see p. 2

Height: 18-30"

Spacing: 6-9"

Harvest: When flower spikes are $\frac{3}{4}$ open

Suggested Varieties: *Ageratum* - Blue Horizon, Red Flint, Timeless Rose

Notes: *Ageratum* can also be dried – harvest when flowers are fully open and hang to dry.



BLACK-EYED SUSAN

These lovely focal flowers come in beautiful color mixes and are the Maryland State Flower!

How to Sow: Start plants 8-10 weeks before last frost or buy plants. Transplant into garden after frost.

Cover Seed: Lightly

Days to Germinate: 8-14

Days to Bloom: 100-120

Height: 20-30"

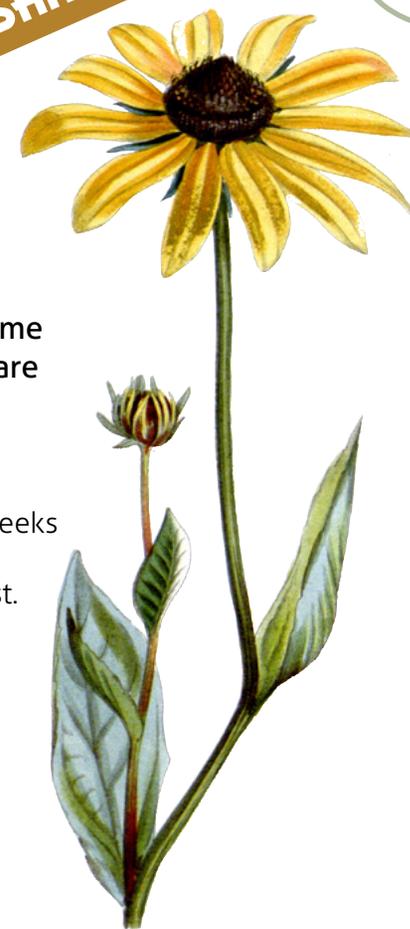
Spacing: 9-12"

Pinch out center leaves: No

Harvest: When flowers are beginning to open

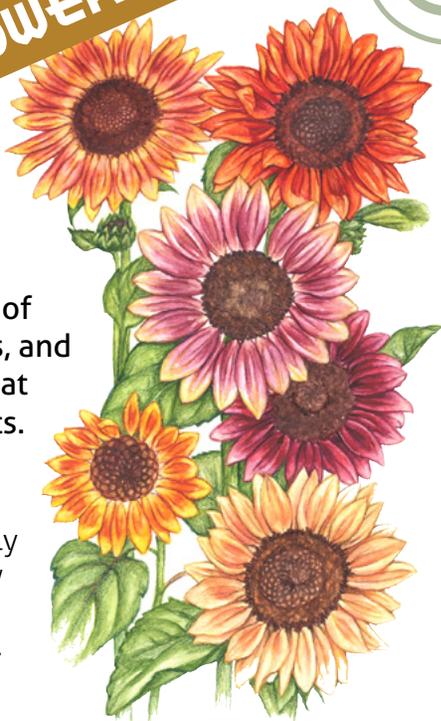
Suggested Varieties: *Rudbeckia hirta* - Cherokee Sunset, Indian Summer, Prairie Sun

Notes: These varieties flower the first year and are often grown as annuals in this climate. *Rudbeckia fulgida* and *Rudbeckia triloba* are hardy perennials and can also be used for cut flowers. *Rudbeckia* needs long daylight hours and may bloom on very short stems if grown for fall harvest.



BRANCHING SUNFLOWER

These come in a wide range of colors, are productive plants, and produce stunning flowers that look great in mixed bouquets.



How to Sow: Plant seeds directly into garden after last frost. Sow 2-3 seeds per hole ½" deep, then thin to one plant per hole.

Cover Seed: Yes

Days to Germinate: 7-14

Days to Bloom: 40-110 (depends on variety)

Height: 48-72"

Spacing: 12-18"

Pinch out center leaves: Yes (see p. 2)

Harvest: When flowers are barely beginning to crack open

Suggested Varieties: *Helianthus annuus* - Autumn Beauty, Cherry Rose, Ruby Eclipse, Sonja, Soraya

Notes: These are branching varieties that produce lots of stems per plant. Many commercial growers also grow single-cut varieties such as ProCut and Sunrich that can be planted very close together and produce consistent blooms, but only one flower per plant.

CELOSIA

This plant loves the heat and comes in many varieties. *Cristata* are brain-like flowers, *Plumosa* are long feathery flowers, and *Spicata* are spiky wheat-like flowers.



How to Sow: Transplant or direct seed. If transplanting, sow 6-8 weeks before last frost, transplant into garden after frost. Or direct seed after last frost by sowing seeds 4" apart, cover lightly, then thin once true leaves emerge.

Cover Seed: Yes

Days to Germinate: 8-14

Days to Bloom: 90-100

Pinch out center leaves: Yes, see p. 2 (or don't pinch for one much larger flower per plant)

Height: 24-36"

Spacing: 6-12" (depends on variety and pinching)

Harvest: When flowers are fully open

Suggested Varieties: *Celosia cristata* - Chief Mix, *Celosia plumosa* - Pampas Plume, *Celosia spicata* - Purple Flamingo

Notes: Celosia can also be dried – harvest when flowers are fully open and hang to dry.

MARIGOLD

The varieties with large flowers and long stems are known as African or American Marigolds. They are heat-loving, very bright, and prolific.



How to Sow: Transplant or direct seed. If transplanting, sow 4 weeks before last frost, transplant into garden after frost. Or direct seed after last frost by sowing seeds $\frac{1}{4}$ " deep, then thin to 12" spacing.

Cover Seed: Yes

Days to Germinate: 4-7

Days to Bloom: 60-75

Pinch out center leaves: Yes, see p. 2

Height: 36"

Spacing: 12"

Harvest: when flowers are fully open

Suggested Varieties: *Tagetes erecta* - Babuda, Jedi, Narai

ZINNIA

The workhorse of the summer flower garden, this plant is highly productive, comes in a huge range of colors and sizes, and is very easy to grow.



How to Sow: Transplant or direct seed. If transplanting, sow 4 weeks before last frost, transplant into garden after frost. Or direct seed after last frost by sowing seeds every couple inches $\frac{1}{4}$ " deep, then thin to 6-9" spacing.

Cover Seed: Yes

Days to Germinate: 3-5

Days to Bloom: 75-90

Pinch out center leaves: Yes, see p. 2

Height: 24-36"

Spacing: 6-9"

Harvest: When flower is fully open, hold stem about 8" below the bloom and gently wiggle to make sure stem is stiff

Suggested Varieties: *Zinnia elegans* - Benary's Giant, Lilliput

Notes: Late in the season, zinnias often get powdery mildew (white spots on the leaves). Succession planting and organic and conventional remedies can help, but some growers rip out plants when the problem becomes significant.

Products

Flowers can be sold in many ways, depending on your audience and what you enjoy. Some options include individual stems, pre-made bouquets, and "by-the-bucket."

Outlets

Flowers are often sold through farm stands, bouquet subscriptions, florists, or farmers markets. Some ideas for community-managed open spaces to raise funds through flower sales include:

Make-your-own bouquets: A great activity at a block party or community event, participants can harvest themselves or use pre-harvested buckets of flowers.

Churches: Many churches have fresh flowers every week and are happy to support neighborhood businesses.

Subscriptions: As you become more confident, consider selling a weekly or monthly bouquet subscription.

Barbers/Trades: Trade with a local business or restaurant for credit, goods, or services.

Farm stand: With some experience and enough production, consider setting up a stand at one of Baltimore's many farmers markets.

Pricing

When pricing any product, it is important to consider your costs (seed, compost, etc.) and your time. Flower prices vary with stem length, quality, size, availability, and sales outlet. One way to think about pricing bouquets, arrangements, and buckets is a "per stem cost." The flowers profiled in this booklet generally sell for \$0.50-\$1/ stem. For example, a \$10 bouquet might have 15-20 stems. Visit farmers markets and florists to get a feel for pricing.



Beginner Blooms

In addition to the six flowers outlined in this guide, other tried-and-true, easy annuals include: Amaranth, Bachelor's Button, Bouquet Dill, Calendula, Cosmos, Gomphrena, False Queen Anne's Lace, Snapdragons and Strawflower.

Beyond Annuals

Consider enhancing your garden and your bouquets with some of these plants that also make great cuts:

Bulbs such as tulips, daffodils, and allium

Herbs such as mint, basil, rosemary, and lavender

Perennials such as coneflower, yarrow, phlox, and hydrangea



On The Edge

Flowers are a great way to get production out of borders, tree lawns, and awkward spaces on your lot that may not be suitable for other plants.

In The Shade

There are some great shade-tolerant plants for cutting, including: Astilbe, Bleeding Heart, Coral Bells, Columbine, Ferns, Hostas, Lenten Roses, and Solomon's Seal.

Etcetera

As you add new varieties and expand your flower garden, you may want to try horizontal netting for support, plastic low-tunnels for season extension, and fall-sown hardy annuals.

More Resources

Learn more

Classes

Local Color Flowers, a florist using only local blooms, offers floral design classes throughout the year, and Butterbee Farm in Pikesville has workshops for growers.

Books

The Flower Farmer by Lynn Byczynski is a good general handbook.

The Flower Farmer's Year by Georgie Newbery gives an overview of starting a flower business.

Cool Flowers by Lisa Mason Ziegler has detailed information on fall-sown annuals.

Online

Helpful growing and design information is available at Floret Flower Farm's website www.floretflowers.com and on the Love 'n Fresh Flowers blog at www.lovenfreshflowers.com

Look for land

Adopt-a-Lot: Department of Housing and Community Development provides one-year licenses for City-owned vacant lots. To find lots and learn more, visit: www.baltimorehousing.org/adopt_a_lot

Homegrown Baltimore Land Leasing Initiative: If you are a farmer interested in a long-term lease on City-owned vacant land, please visit: <http://www.baltimoresustainability.org/projects/baltimore-food-policy-initiative/homegrown-baltimore/urban-agriculture-2/> to learn more about eligibility requirements.

Find supplies

Seeds: Southern Exposure Seed Exchange (local, cooperatively run), Baker Creek (heirlooms), Johnny's (worker-owned), GeoSeed (bulk)

Seedlings: Sharp's at Waterford (MD), Plantmasters (MD), Gloeckner

Compost: Chesapeake Compost Works and Veteran Compost

Netting, Stakes, Irrigation, Trays, and more: local hardware store, Maryland Plants and Supplies, Meyer Seed, Nolt's Produce Supplies

Get connected:

Community Greening Resource Network: Workshops, tool banks, plant give-aways for community, school, and backyard gardeners www.parksandpeople.org/greening/resource-network

Farm Alliance of Baltimore City: Network of urban production farms with shared sales outlets, workshops, farm tours, and more www.farmalliancebaltimore.org

Maryland Cut Flower Growers Association: Group of experienced and novice local growers with email listserv and winter meetings www.marylandgrownflowers.com

University of Maryland Extension: Offers cut flower tour, cut flower short course, workshops, and runs the Master Gardener program www.extension.umd.edu

Association of Specialty Cut Flower Growers: National group with a growers school, quarterly publications, bulletins, and conferences www.ascfg.org



