BALTIMORE IN BLOOM

How to Grow and Sell Cut Flowers on Vacant Land

Established 2016
In partnership

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

Booklet content and design created by Maya Kosok, founder of Hillen Homestead, a small cut flower farm in Baltimore City. Editing and contributions from Baltimore’s Office of Sustainability.

Illustrations used with permission from Jessie Doyle/Southern Exposure Seed Exchange (p. 1, 3, 7, 9, 10, 11) and Peter H. Raven Library/Missouri Botanical Garden (p. 4, 5, 7, 8).

Cover photo by Andy Cook. All other photos by Maya Kosok.
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.
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 ¾ 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.

---

**Ageratum**

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.
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

**Height:** 24-36”

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

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

**Harvest:** When flowers are fully open

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

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

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 annus* - 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.
**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 ¼” 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 ¼” 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.
Sales & Pricing

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.
- **Barters/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.

Expansion Ideas

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

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