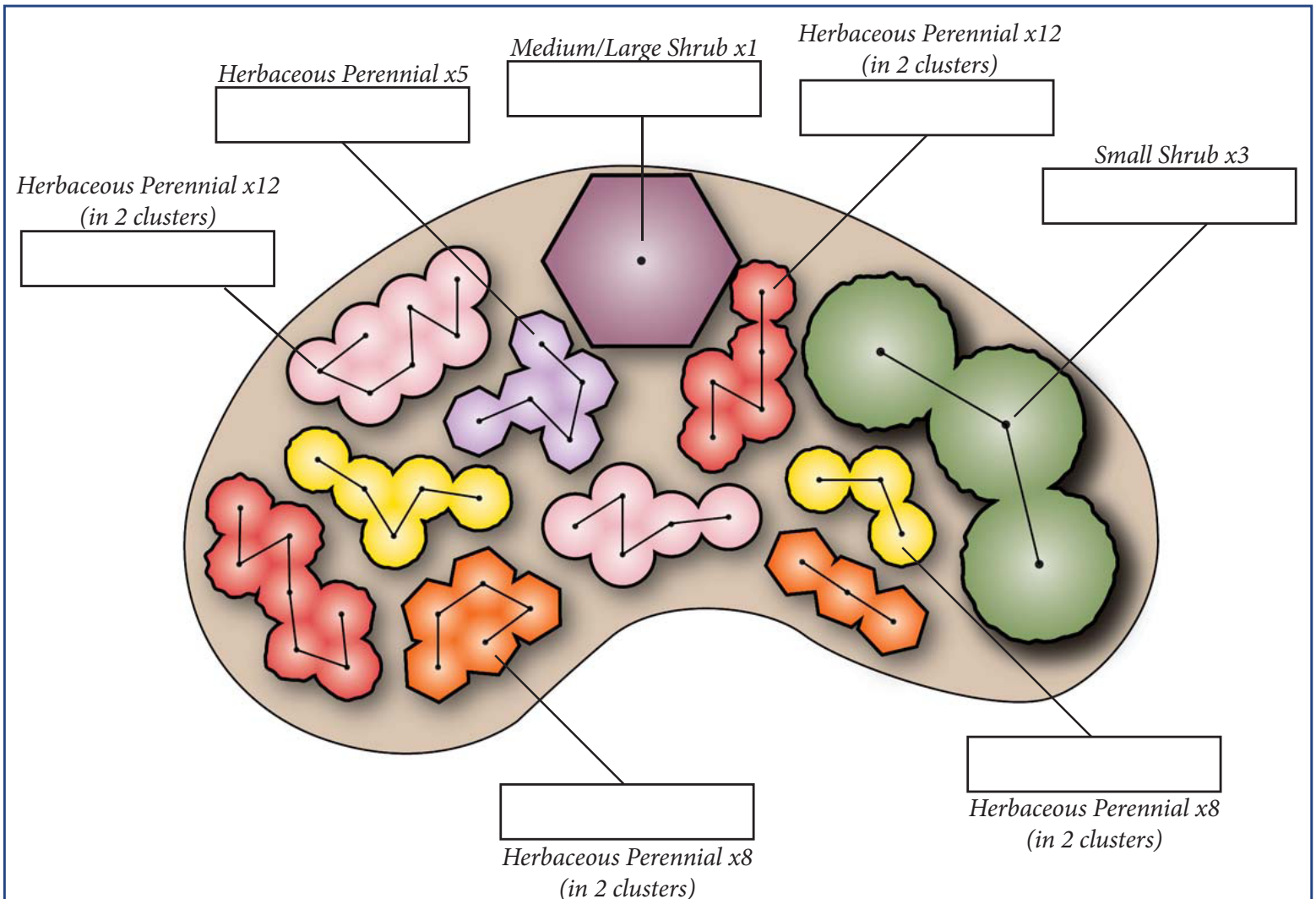


## Butterfly Garden – 120 square feet

*Sunny, moderately drained soils*

(contained in 17 x 10.5 foot area)



### Average Spacing between Plants

Refer to plant nursery tags and adjust as needed

Shrubs = 30"	Grasses = 18"	Perennials = 9-12"
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2 cubic feet of mulch covers ~12 square feet of the garden

Scale: 1 inch = 3 feet



Consider adding a rain barrel to your Conservation Landscape. For more info, visit the [Rainwater Harvesting chapter](#).



## Number of plants

- Herbaceous perennial type 1: 12 plants
- Herbaceous perennial type 2: 12 plants
- Herbaceous perennial type 3: 8 plants
- Herbaceous perennial type 4: 8 plants
- Herbaceous perennial type 5: 5 plants
- Medium/Large Shrub: 1 plant
- Small Shrub: 3 plants

## Recommended plant options for Anne Arundel County, MD and surrounding areas

These plants are native, and typically successful in the climate zone for Anne Arundel County. For more information about these plants, and for additional plant options, the [Ladybird Johnson native plant database](#), is recommended. (Note: for shady conditions, ferns can function in place of a grass/sedge/rush or an herbaceous perennial.)

Plant Type	Plant Latin Name	Plant Common Name	Planting Condition	Maintenance Type	Spacing
Grass/Sedge/Rush	Chasmanthium latifolium	Northern Sea Oats	Sun/Medium	Minimal	30" apart
Grass/Sedge/Rush	Panicum virgatum 'Cape Breeze'	Cape Breeze Switchgrass	Sun/Medium	Minimal	30" apart
Grass/Sedge/Rush	Panicum virgatum 'Cloud Nine'	Cloud Nine Switchgrass	Sun/Medium	Minimal	36" apart
Grass/Sedge/Rush	Panicum virgatum 'Heavy Metal'	Heavy Metal Switchgrass	Sun/Medium	Minimal	36" apart
Grass/Sedge/Rush	Panicum virgatum 'Northwind'	Northwind Switchgrass	Sun/Medium	Minimal	36" apart
Grass/Sedge/Rush	Panicum virgatum 'Prairie Sky'	Prairie Sky Switchgrass	Sun/Medium	Minimal	36" apart
Grass/Sedge/Rush	Panicum virgatum 'Rotstrahlbusch'	Rotstrahlbusch Switch Grass	Sun/Medium	Minimal	36" apart
Grass/Sedge/Rush	Schizachyrium scoparium 'Standing Ovation'	Standing Ovation Little Blue Stem	Sun/Medium	Minimal	18" apart
Grass/Sedge/Rush	Sorghastrum nutans	Indian Grass	Sun/Medium	Minimal	30" apart
Herbaceous Perennial	Amsonia hubrichtii	Threadleaf Bluestar	Sun/Medium	Low	18" apart
Herbaceous Perennial	Asclepias incarnata	Swamp Milkweed	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	Asclepias tuberosa	Butterfly Weed	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	Boltonia asteroides	False Aster	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	Eupatorium 'Little Joe'	Little Joe Joe Pye Weed	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	Heliopsis helianthoides	False Sunflower	Sun/Medium	Medium	18" apart



Plant Type	Plant Latin Name	Plant Common Name	Planting Condition	Maintenance Type	Spacing
Herbaceous Perennial	<i>Liatris spicata</i>	Gayfeather	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Penstemon digitalis</i> 'Husker Red'	Beardtongue	Sun/Medium	Medium	18" apart
Herbaceous Perennial	<i>Phlox divaricata</i>	Wild Phlox	Sun/Medium	Medium	18" apart
Herbaceous Perennial	<i>Phlox maculata</i>	Speckled Phlox	Sun/Medium	Medium	18" apart
Herbaceous Perennial	<i>Rudbeckia fulgida</i> var. <i>fulgida</i>	Black Eyed Susan	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Rudbeckia hirta</i>	Black Eyed Susan	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Rudbeckia maxima</i>	Coneflower	Sun/Medium	Medium	18" apart
Herbaceous Perennial	<i>Solidago rugosa</i> 'Fireworks'	Fireworks Goldenrod	Sun/Medium	Minimal	18" apart
Herbaceous Perennial	<i>Vernonia</i> 'Iron Butterfly'	Iron Butterfly New York Ironweed	Sun/Medium	Medium	18" apart
Shrub	<i>Aronia arbutifolia</i>	Chokeberry	Sun/Medium	Minimal	48" apart
Shrub	<i>Aronia arbutifolia</i> 'Brilliantissima'	Brilliantissima Chokeberry	Sun/Medium	Minimal	18" apart
Shrub	<i>Callicarpa americana</i>	Purple Beautyberry	Sun/Medium	Low	48" apart
Shrub	<i>Clethra alnifolia</i> 'Ruby Spice'	Ruby Spice Sweet Pepper Bush	Sun/Medium	Minimal	48" apart
Shrub	<i>Clethra alnifolia</i> 'Sixteen Candles'	Sixteen Candles Sweet Pepper Bush	Sun/Medium	Minimal	48" apart
Shrub	<i>Cornus sericea</i>	Red Twig Dogwood	Sun/Medium	Minimal	48" apart
Shrub	<i>Hibiscus coccineus</i>	Scarlet Rose Mallow	Sun/Medium	Minimal	48" apart
Shrub	<i>Hibiscus moscheutos</i>	Rose Mallow	Sun/Medium	Minimal	48" apart
Shrub	<i>Ilex glabra</i>	Inkberry	Sun/Medium	Minimal	36" apart
Shrub	<i>Ilex verticillata</i> 'Southern Gentleman'	Pollinator for Sparkleberry Winterberry	Sun/Medium	Minimal	36" apart
Shrub	<i>Ilex verticillata</i> 'Sparkleberry'	Sparkleberry Winterberry	Sun/Medium	Minimal	60" apart
Shrub	<i>Viburnum dentatum</i>	Arrowwood Viburnum	Sun/Medium	Minimal	48" apart
Shrub	<i>Viburnum nudum</i> 'Winterthur'	Winterthur Viburnum	Sun/Medium	Minimal	48" apart
Tree	<i>Amelanchier laevis</i>	Allegheny Serviceberry	Sun/Medium	Minimal	60" + apart
Tree	<i>Carpinus caroliniana</i>	Ironwood	Sun/Medium	Medium	60" + apart
Tree	<i>Cercis canadensis</i>	Redbud	Sun/Medium	Minimal	60" + apart
Tree	<i>Chionanthus virginicus</i>	Fringe Tree	Sun/Medium	Minimal	60" + apart
Tree	<i>Ilex opaca</i>	American Holly	Sun/Medium	Minimal	60" + apart
Tree	<i>Juniperus virginiana</i>	Eastern Red Cedar	Sun/Medium	Minimal	60" + apart
Tree	<i>Magnolia virginiana</i>	Sweet Bay Magnolia	Sun/Medium	Minimal	60" + apart
Tree	<i>Taxodium distichum</i> 'Peve Minaret'	Peve Minaret Bald Cypress	Sun/Medium	Minimal	60" + apart



## Materials Needed

**Mulch:** 30 cubic feet (1.1 cubic yards) – this assumes 3” of mulch cover

**Compost:** 20 cubic feet (0.7 cubic yards) – this assumes the top 6” of soil is being amended with compost

**Soil media:** 120 cubic feet (4.4 cubic yards) – this is only required if replacing soil

**Soil removal:** 50 cubic feet (1.9 cubic yards) if amending soil, 150 cubic feet (5.6 cubic yards) if replacing soil

The plants recommended above are reliable, hardy, area-appropriate plants for central and eastern Maryland and the surrounding areas. However, many other options are available. Other references for appropriate plants include the [Maryland Stormwater Design Manual, Appendix A](#), the [Ladybird Johnson native plant database](#), and the [Piedmont Natives plant database](#).

There are alternative layouts possible with the same general character and plant makeup. [Click here for alternative layouts](#).

Also, if you use a custom size practice, by area or depth, the material quantities change. Use the following calculator to give you a more accurate set of material quantities. It will also calculate the amount of pollutant removal, which may be of interest. Note: this pollutant removal is not yet approved by the Chesapeake Bay Program, but is based on other Bay Program protocols for runoff reduction.

[Conservation Landscape calculator](#)

## Installation Steps

(For more detail on these steps, please see the Conservation Landscape chapter of the WSA Manual.)

1. Call Miss Utility to mark any existing utilities
  - a. (800) 257-7777 or 811 for most of Maryland, and Washington, DC
  - b. (800) 441-8355 for Eastern Shore Maryland
  - c. (800) 282-8555 for Delaware
2. Outline the area for the conservation landscape
3. Remove the turf grass
4. If amending existing soil:
  - a. Remove excess soil
  - b. Add compost
  - c. Till soil to work compost in
5. If replacing soil:
  - a. Remove existing soil
  - b. Replace with new soil mixture
6. Install stone inlet channel (if receiving water from uphill)
7. Install plants and mulch
8. Water!



## Maintenance Plan

### Recommended Maintenance Tasks for Conservation Landscapes

Maintenance Tasks	Frequency
<ul style="list-style-type: none"> <li>Water once every three days for the first month and then weekly during the first growing season (April-October), depending on rainfall.</li> <li>Expect up to 10% of the plant stock to NOT do well in the first year, and plan accordingly for replacement plants.</li> </ul>	Upon establishment
<ul style="list-style-type: none"> <li>Check inlets and overflow areas for debris or leaves that are blocking flow.</li> <li>Check and repair erosion areas.</li> </ul>	After heavy rains in 1 <sup>st</sup> month; periodically in subsequent years
<ul style="list-style-type: none"> <li>Remove weeds by hand.</li> </ul>	Monthly for first growing season; every 3 months in subsequent years
<ul style="list-style-type: none"> <li>For “meadow” type Conservation Landscapes consisting of grasses, mow in early spring.</li> <li>For other types of landscapes, check for winter damage and add mulch to bare spots as desired (2–3 inches)</li> <li>Cut back perennials and remove dead growth</li> </ul>	March or April
<ul style="list-style-type: none"> <li>Add reinforcement planting to maintain the desired vegetation density.</li> <li>Prune trees and shrubs; thin herbaceous plants as desired.</li> </ul>	Fall
<ul style="list-style-type: none"> <li>Remove invasive and non-native plants using recommended control methods.</li> <li>Remove any dead or diseased plants.</li> <li>Stabilize any eroded or bare areas</li> <li>Remove trash</li> </ul>	As needed

## Additional References

[WSA Rainscaping Manual](#)

[RainScapes Program \(Montgomery County, MD\)](#)

[U.S. Fish & Wildlife Service - BayScapes](#)