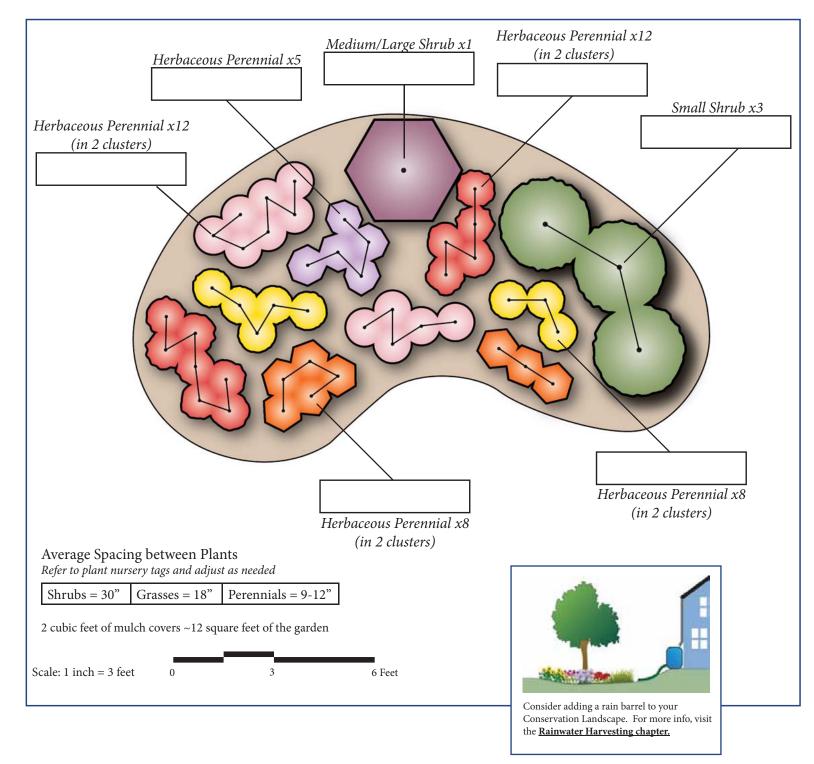
WSA Conservation Landscape Design Tool

# Butterfly Garden - 120 square feet

## Sunny, Dry soils

(contained in 17 x 10.5 foot area)



## 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 <u>Ladybird Johnson native plant database</u> 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/Dry	Minimal	30'' apart
Grass/Sedge/ Rush	Panicum virgatum 'Cape Breeze'	Cape Breeze Switchgrass	Sun/Dry	Minimal	30'' apart
Grass/Sedge/ Rush	Panicum virgatum 'Cloud Nine'	Cloud Nine Switchgrass	Sun/Dry	Minimal	36'' apart
Grass/Sedge/ Rush	Panicum virgatum 'Heavy Metal'	Heavy Metal Switchgrass	Sun/Dry	Minimal	36'' apart
Grass/Sedge/ Rush	Panicum virgatum 'Northwind'	Northwind Switchgrass	Sun/Dry	Minimal	36'' apart
Grass/Sedge/ Rush	Panicum virgatum 'Prairie Sky'	Prairie Sky Switchgrass	Sun/Dry	Minimal	36'' apart
Grass/Sedge/ Rush	Panicum virgatum 'Rotstrahlbusch'	Rotstrahlbusch Switch Grass	Sun/Dry	Minimal	36'' apart
Grass/Sedge/ Rush	Schizachyrium scoparium 'Standing Ovation'	Standing Ovation Little Blue Stem	Sun/Dry	Minimal	18'' apart
Grass/Sedge/ Rush	Sorghastrum nutans	Indian Grass	Sun/Dry	Minimal	30'' apart
Herbaceous Perennial	Agastache	Нуѕѕор	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Asclepias tuberosa	Butterfly Weed	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Coreopsis verticillata 'Moonbeam'	Moonbeam Tickseed	Sun/Dry	Medium	18'' apart
Herbaceous Perennial	Coreopsis verticillata 'Zagreb'	ZagrebTickseed	Sun/Dry	Medium	18'' apart

Plant Type	Plant Latin Name	Plant Common Name	Planting Condition	Maintenance Type	Spacing
Herbaceous Perennial	Heliopsis helianthoides	False Sunflower	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Liatris spicata	Gayfeather	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Penstemon digitalis 'Husker Red'	Beardtongue	Sun/Dry	Medium	18'' apart
Herbaceous Perennial	Phlox divaricata	Wild Phlox	Sun/Dry	Medium	18'' apart
Herbaceous Perennial	Phlox maculata	Speckled Phlox	Sun/Dry	Medium	18'' apart
Herbaceous Perennial	Rudbeckia fulgida var. fulgida	Black Eyed Susan	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Rudbeckia hirta	Black Eyed Susan	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Rudbeckia maxima	Coneflower	Sun/Dry	Medium	18'' apart
Herbaceous Perennial	Solidago rugosa 'Fireworks'	Fireworks Goldenrod	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Verbena bonariensis	Tall Verbena	Sun/Dry	Minimal	18'' apart
Herbaceous Perennial	Vernonia 'Iron Butterfly'	Iron Butterfly New York Ironweed	Sun/Dry	Medium	18'' apart
Shrub	Aronia arbutifolia	Chokeberry	Sun/Dry	Minimal	48'' apart
Shrub	Aronia arbutifolia 'Brilliantissima'	Brilliantissima Chokeberry	Sun/Dry	Minimal	48'' apart
Shrub	Clethra alnifolia 'Ruby Spice'	Ruby Spice Sweet Pepper Bush	Sun/Dry	Minimal	48'' apart
Shrub	Clethra alnifolia 'Sixteen Candles'	Sixteen Candles Sweet Pepper Bush	Sun/Dry	Minimal	48'' apart
Shrub	Cornus sericea	Red Twig Dogwood	Sun/Dry	Minimal	48'' apart
Shrub	llex glabra	Inkberry	Sun/Dry	Minimal	36'' apart
Shrub	Viburnum nudum 'Winterthur'	WinterthurViburnum	Sun/Dry	Minimal	48'' apart
Tree	Cercis canadensis	Redbud	Sun/Dry	Minimal	60'' + apart
Tree	Juniperus virginiana	Eastern Red Cedar	Sun/Dry	Minimal	60'' + apart
Tree	Magnolia virginiana	Sweet Bay Magnolia	Sun/Dry	Minimal	60'' + apart
Tree	Quercus alba	White Oak	Sun/Dry	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 <u>Maryland</u> <u>Stormwater Design Manual, Appendix A</u>, the <u>Ladybird Johnson native plant database</u>, and the <u>Piedmont Natives plant</u> <u>database</u>.

There are alternative layouts possible with the same general character and plant makeup. <u>Click here for alternative layouts</u>.

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.)

- I. 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> <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> <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		
• Remove weeds by hand.	Monthly for first growing season; every 3 months in subsequent years		
<ul> <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> <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> <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**

<u>WSA Rainscaping Manual</u> RainScapes Program (Montgomery County, MD) U.S. Fish & Wildlife Service - BayScapes</u>







