



# Mid-Atlantic Ecological Landscapes

## RAIN GARDEN

Creating Biodiversity and Habitat While Conserving Water

What we plant in our yards plays an important role in determining the future diversity of wildlife in Pennsylvania. The need to create ecological landscapes has never been greater due to the increase in development and shrinking natural areas. Rain gardens are an impressive example of how easy it is to make your garden more environmentally friendly. They mimic the natural absorption and filtering abilities of a forest, meadow or prairie while creating habitat for a variety of plants and animals.



A Cedar Waxwing takes advantage of a winter food source. A well-planned rain garden provides fruits, seeds and nectar and is a valued food source year around. Migrating birds will find refuge, food and shelter, completing this unique habitat.



A Swallowtail Butterfly stops to refuel on *Cephalanthus occidentalis*, Buttonbush. Temporary pooling of rainwater will draw an influx of birds, mammals and insects—especially dragonflies. The mud and moisture is a necessity for the male butterflies shown puddling above, while it provides a cooling area for cold-blooded amphibians and reptiles during the hottest parts of the year.

### Natives Attract Natives!

Landscaping for wildlife restores critically needed habitat. The rain gardens attract a different variety of wildlife than the Entrance, Meadow and Edge gardens. The native plants that make up the unique rain gardens attract butterflies, frogs, turtles, toads and birds that depend on them for food, shelter, and water.

Rain Gardens are being used to improve sites such as...

- Residential yards
- Common areas in residential developments
- Areas around business buildings and manufacturing facilities
- Public parks and gardens

### Will mosquitoes like rain gardens too?

No. Mosquitoes require at least seven days of standing water to complete their cycle before. A properly constructed rain garden should drain within twenty-four hours after a rain event.

### Wet Zone: Holds Water Longest

#### Trees & Shrubs

- |                                  |                    |
|----------------------------------|--------------------|
| <i>Betula nigra</i>              | River Birch        |
| <i>Cephalanthus occidentalis</i> | Buttonbush         |
| <i>Nyssa sylvatica</i>           | Black Gum          |
| <i>Sambucus canadensis</i>       | Elderberry         |
| <i>Viburnum dentatum</i>         | Arrowwood Viburnum |
| <i>Viburnum nudum</i>            | Possumhaw Viburnum |

#### Perennials

- |                               |                    |
|-------------------------------|--------------------|
| <i>Asclepias incarnata</i>    | Swamp Milkweed     |
| <i>Caltha palustris</i>       | Marsh Marigold     |
| <i>Eupatorium perfoliatum</i> | Common Boneset     |
| <i>Iris versicolor</i>        | Blue Flag Iris     |
| <i>Juncus effusus</i>         | Soft Rush          |
| <i>Lobelia siphilitica</i>    | Great Blue Lobelia |
| <i>Onoclea sensibilis</i>     | Sensitive Fern     |
| <i>Osmunda cinnamomea</i>     | Cinnamon Fern      |
| <i>Packera aurea</i>          | Golden Ragwort     |
| <i>Scirpus atrovirens</i>     | Green Bulrush      |

### Middle Zone: Drains More Quickly

#### Trees & Shrubs

- |                          |                     |
|--------------------------|---------------------|
| <i>Asimina triloba</i>   | Paw Paw             |
| <i>Clethra alnifolia</i> | Summersweet         |
| <i>Cornus sericea</i>    | Redosier Dogwood    |
| <i>Ilex glabra</i>       | Inkberry Holly      |
| <i>Itea virginica</i>    | Virginia Sweetspire |

#### Perennials

- |                                    |                             |
|------------------------------------|-----------------------------|
| <i>Amsonia tabernaemontana</i>     | Blue Star                   |
| <i>Baptisia australis</i>          | Blue False Indigo           |
| <i>Chelone glabra</i>              | White Turtlehead            |
| <i>Eupatorium fistulosum</i>       | Hollow-stemmed Joe Pye Weed |
| <i>Hystrix patula</i>              | Bottlebrush Grass           |
| <i>Monarda didyma</i>              | Oswego Tea                  |
| <i>Panicum virgatum</i>            | Switch Grass                |
| <i>Physostegia virginiana</i>      | Obedient Plant              |
| <i>Veronicastrum virginicum</i>    | Culver's Root               |
| <i>Symphotrichum novae-angliae</i> | New England Aster           |

### Transition Zone: Dries Out First

#### Trees & Shrubs

- |                             |                                 |
|-----------------------------|---------------------------------|
| <i>Aesculus pavia</i>       | Red Buckeye                     |
| <i>Hamamelis virginiana</i> | Witch Hazel                     |
| <i>Hypericum prolificum</i> | Shrubby St. John's Wort         |
| <i>Rhus aromatica</i>       | Fragrant Sumac                  |
| <i>Viburnum trilobum</i>    | American Cranberrybush Viburnum |

#### Perennials

- |                                |                      |
|--------------------------------|----------------------|
| <i>Aquilegia canadensis</i>    | Eastern Columbine    |
| <i>Chrysogonum virginianum</i> | Green and Gold       |
| <i>Coreopsis verticillata</i>  | Threadleaf Coreopsis |
| <i>Eupatorium coelestinum</i>  | Mistflower           |
| <i>Oenothera fruticosa</i>     | Sundrops             |
| <i>Ruellia humilis</i>         | Wild Petunia         |
| <i>Silene caroliniana</i>      | Wild Pink            |
| <i>Solidago sphacelata</i>     | False Goldenrod      |
| 'Golden Fleece'                | Upland Ironweed      |
| <i>Vernonia glauca</i>         |                      |

### Plant Communities

Rain garden plants include a variety of trees, shrubs, herbaceous perennials, ferns and grasses. Plant selection should be carefully based on the three zone conditions. Combine short, medium and tall plants to create layers of vegetation that will provide the structure and variety needed to attract a diversity of wildlife.

