

AAH Wildlife Waystations: Captivating Containers with Native Plants

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Overview/Introduction

If you live in an apartment or townhouse with a balcony, patio, or very small yard, you may like to use your outdoor space to connect to the natural world around you. In order to attract and support native wildlife in these settings, a garden comprised largely of native plants in containers or small planting areas provides an attractive and simple solution. A surprising number of insects, birds and even small mammals are drawn to container and pocket gardens.

The Audubon at Home program encourages you to beautify and increase the wildlife value of these small spaces. Although much of this content is directed to container gardening, patios and “pocket gardens” are merely larger extensions of the same concept, with the possible advantage of natural soils that need less additional replenishment.



Ten bees and a Skipper forage on Agastache in a pot

General considerations on gardening with native plants in containers

Many native plants make excellent specimens for container and small space gardening. As with any other type of planting, limitations include: site conditions such as sun and wind exposure, size of the mature plant, size of the container, and attractiveness of the plant’s appearance over time. Other factors unique to containers include: appropriate initial soil mix and ongoing maintenance needs. All of these factors are addressed in pages in this section.

Care in plant species selection can result in a more successful planting from the perspective of wildlife. Biomass and blooms make a big impact in attracting wildlife to container plantings. The biomass (stems, twigs, leaves, etc.) created by small shrubs and trees, vines, grasses, and herbaceous plants provides cover, nesting sites, and food for wildlife looking to use your garden, and is best created with plants that create a lot of top growth for their root mass. These plants are very desirable to wildlife. For this reason, vines are excellent container choices. Vines that cling may be

trained to a wall (Virginia Creeper) and vines that twine may be trained into living curtains or screens with either structural or shrub support (Passion vine, Scarlet Honeysuckle). Blooms on vines, shrubs and herbaceous plants provide instant impact in the appearance of containers, both to wildlife and viewers. Red, tubular blooms are a hit with hummingbirds, and the composite flowers of Asters, Goldenrod, Mountain Mint and Boneset are endlessly covered in pollinating insects and butterflies. Many birds will be attracted to your garden if you create a thicket-like habitat with twiggy shrubs and small trees--they will flit from feeder to "thicket" to water feature to thicket to feeder and return frequently if they are provided with the food, water and cover they need.

Choose an assortment of plants that will bloom throughout the growing season, spring, summer and fall. Although space may be limited in your container or patio garden, an assortment of plants that will bloom or provide food throughout the growing season will provide you with multi-season interest and wildlife with a reason to return to your way station on a daily basis.

An excellent resource on plants that are native to our region is the U.S. Fish and Wildlife Service's (FWS) document: Native Plants for Wildlife Habitat and Conservation Landscaping, Chesapeake Region, which is available for download at <http://www.nps.gov/plants/pubs/chesapeake/>. The plant lists on other pages in this Wildlife Waystation section are organized by small trees/shrubs, vines, grasses and herbaceous plants according to their light needs, and to some extent their moisture needs, and the suggested container combination plantings also group plants with similar needs. If you would like more specific information on a plant species, consult this FWS booklet or do a Google search on the species and you will find a number of websites that provide more information on the species' plant and wildlife associations and natural habitats in the wild.

Small water gardens and features for balconies and patios

Water is a primary draw for wildlife, especially in urban and suburban settings where most fresh water has been collected and piped underground. Try to include a water source near your native plants. Ponds and water gardens will draw the most birds and insects, but if a water garden seems daunting, consider providing a bowl- or wall-mounted fountain or a simple ground-level birdbath to accompany your plantings. The sound of water trickling and the reflections of light on water will draw wildlife in for a brief drink or a bath. Observe the water source to ensure that wildlife can actually access it. Steep sides will deter many birds from bathing or drinking, and splashing or excessively moving water will not allow bees and other insects to drink at the edges. If your water source is still, such as a bird bath, daily use by birds for bathing, the presence of fish, or changing the water every three days (in warm weather) will prevent any mosquitoes from breeding.



In order to create a pond planter or wet (bog) planter for your collection, you will need the following:

- A container that holds water - either watertight or lined with a 'rubber' (EPDM) liner
- A surface that supports water's 8.3 pounds per gallon of weight - in addition to that of the container, stones and plants.
- A small electric pump that will circulate and aerate your water to reduce mosquito breeding and stagnation

Other factors include:

- Most emergent/aquatic plants in water gardens will need a minimum of 6 hours of direct sunlight per day.
- Water plants should remain in their pots in heavy clay soil with pea gravel on top of the soil to conserve it.
- Bricks or stones can be used to raise each plant to its preferred depth and also raise the pump outflow (or fountain) to the correct height in the water.
- A minimum of 20 gallons will help moderate water temperature swings and reduce water level fluctuations from evaporation.
- Shading the container itself will also reduce temperature and water-level swings.

Choice, design and arrangement of containers

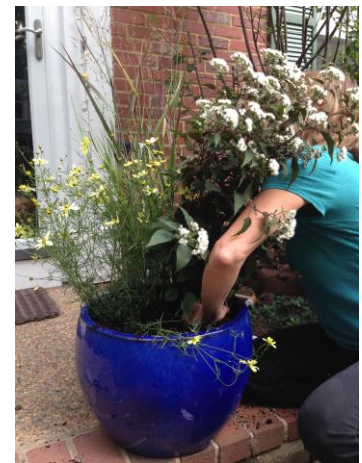
- Use large enough containers – usually many times the size of the pot the plant came in. Larger pots hold moisture evenly, weigh enough to resist wind, and contain adequate soil volume for several years of growth. Use a saucer if it is difficult to soak the soil appropriately, if the plant is routinely too dry, or if the surface below needs protection. Use a set of wheels under large pots if you want to be able to move them easily. A wheeled platform is also an option for multiple pots
- Match the container style to the type of plant and its growth habits. The container should visually (and physically) balance the plant. For example, an upright, multi-stemmed shrub would work best in a low, wide container. An arching grass might look best in an upright container, and a low creeping plant would look nice in a sculptural container such as a shell, boot or urn.



Filter fabric over three drain holes



Gently loosening excess roots



Back-filling soil around roots

- Add interesting items to your containers, if you like. Your containers are a nice spot to place rocks, shells, driftwood or other weatherproof items you have collected in your travels to accent them. A container can become a small display or diorama for your own enjoyment when wildlife is absent.

- Group containers together. If the heights of the pots are very similar, raising one or two on cinder blocks will create a nice display. Some groupings can even be used to create privacy screening. Grouping containers together helps them insulate and shade each other and creates a more humid microclimate. Additionally, these groupings are more likely to attract wildlife than solitary pots. With careful plant species selection, a container grouping can offer something for wildlife year-round.
- Include a wet planter or a pond planter if you can. Cover 50-60% of the water surface and with plants and add a submerged plant or two. Snails and fish can be added for ecological balance. (Be sure never to release non-native organisms into the wild). Observe how wildlife accesses the water and make it easier if necessary.
- Properly support vines with shrubs, lattice, or deer/ bird netting. Well-supported vines create highly desirable bird real estate for nesting. Unsupported vines grow poorly and look unattractive. Vigorous or aggressive vines might be best suited for those aware of their tendencies and interested in trying their hand at training the vines in small spaces. (Virginia Creeper, Trumpet Creeper).



Soil, planting material, container hygiene

Soils for containers should be somewhat light, drain easily yet retain moisture for a day or so depending on temperature, humidity and exposure. This is most easily achieved using commercial potting mixes. These mixes contain long-lasting (slowly biodegrading) organic matter, such as coir and sphagnum which keeps the soil mix loose for a few years. Many commercial mixes also contain time-release fertilizers which last for a few months. Potting mix with moisture-retention treatment is not recommended. Home soil mixes may be made with native topsoil, loamy compost and construction (not play) sand. A starting point for mixture proportions would be 50:25:25 – but this varies greatly based on the quality of the topsoil used. Woodland native plants will probably prefer soils with more organic matter (compost). A small piece of landscape fabric or screening over the drainage holes will help keep earthworms, sowbugs and ants from excavating soil from the bottom and helps retain soil.

Soil organic matter is constantly decomposing, yet the proportions in the soil should remain the same or the plants may suffer. Mulching in the fall and again in spring (if the fall mulch has thinned) is one way to add organic matter. Fertilizing with soil fungus and microbes using dilute fish emulsion and other natural extracts may help, although there is little research to support these products as benefiting the soil rather than the plants. Most container plants in commercial potting mix need to be repotted with fresh soil every few years for continued growth. Without repotting, container soils tend to accumulate mineral salts from watering with tap water and these salts kill the fine absorbing root hairs of the plants. Additionally, the loss of organic matter in the soil (from natural decomposition) reduces both the drainage (pore space) and the moisture-holding capacity of the soil resulting in “drought and deluge” watering cycles.

Plants that prefer dry, poor soils should have their container soils amended appropriately with sharp sand and/or gravel to avoid root rot. A product called Grani-grit (for chickens) is one of the best for pH-neutral amendments, but is typically only available in larger amounts from feed stores or the internet. The pot size for these plants and for native succulents should be smaller in proportion to the plants' above-ground size. Plants that like these conditions are excellent for wide bowl and tray gardens. Some native plants actually prefer a rock garden setting and will need extra gravel and rock in their containers. Crushed bluestone or 'stone dust' is a common patio base medium many of these plants seem to like, and they may reseed readily between the stones of a nearby patio or walk.

- Containers that never receive natural rainfall should be hosed down occasionally for health and hygiene.
- Mulching once or twice a year with composted leaf mulch should be enough fertility for most plants. Use compost tea or fish emulsion for additional fertility and for the rare feeding of rock garden planters

Plant Selection

- Consider planting together several plants with complementary shapes and, of course, similar maintenance needs. Some plants even prefer a companion plant or two. Consider plants that might be found in similar environments such as a woodland shrub and a groundcover (Spicebush and Lady Fern) for a shady, protected spot or a woody-stemmed meadow perennial and a grass (Goldenrod and Lovegrass) for a sunny, hot area.
- Some plants may not enjoy sharing space with others in a mixed planter and will either die or crowd out their companions. Other plants are actually biennial or short-lived perennials (i.e. Coneflowers- Rudbeckia and Echinaceae) and will need replanting or re-seeding after a year or two. Some plants need slightly harsher growing conditions to avoid becoming weedy or outgrowing their pots too rapidly. If this happens, reduced but regular watering, thinning or dividing the root ball, and repotting in a smaller container will help.
- There are many cultivated varieties of native plants available for purchase, but they were not created with the needs of wildlife in mind (i.e. adequate pollen and nectar, proper bloom season). Buy the basic species, not the cultivar, if possible. Purchasing plants legally propagated from local plant populations is the best way to provide for your local wildlife populations, as the food and its consumers have evolved together in your location.

The native plants for containers are included here because of their small, space-appropriate size and restrained growth; relatively neat appearance when in good health; and attractiveness to wildlife. They are also generally available for sale by local retailers and non-profit groups. The plant lists here are by no means completely inclusive of all the wonderful native container plants that are out there. Most of them have been selected from the U.S. Fish and Wildlife Service's document: "Native Plants for Wildlife Habitat and Conservation Landscaping, Chesapeake Region", which is available for download at <http://www.nps.gov/plants/pubs/chesapeake/>. These species have varying moisture needs – most will take medium moisture conditions, but some prefer more moisture and some less.

In order to make grouping by needs simpler, at the end of the lists are suggestions of plant combinations for containers for any type of site conditions you may have. These suggestions are limited only by space available. Many great combinations still wait to be discovered by designers and wildlife!



Quick tips to attract particular species

- Native bees: Consider installing a Mason bee or Bumblebee home near your containers. These houses are a single block of prepared wood; small; and the bees are tame when untouched. Bee behavior is fun and relaxing to watch.
- Insects: If you have perennials with woody stems, leave as much of the stems on the plant as possible. Many insects overwinter or leave larvae inside the stems which then hatch in the spring. Upright stems are more protected from moisture and predators. If you must cut stems, pile them someplace unnoticed so they still serve as housing for a time. Debris from grasses and strap-leaved perennials will be used by nesting birds during the growing season
- Hummingbirds: The top ten plants for hummingbirds include a small tree, a shrub, two vines, and six perennials (listed below). The excellent thing about these species is that together they bloom across the entire growing season, and the (aggressive) Trumpet Creeper provides excellent nest sites. A property with these species and protected nesting areas would likely have a pair of resident Hummingbirds every year.

Ten species that will attract hummingbirds in order of bloom time:

Columbine – *Aquilegia canadensis*
Red Buckeye – *Aesculus pavia*
Rosebay Rhododendron – *Rhododendron catawbiense*
Scarlet Honeysuckle – *Lonicera sempervirens*
Trumpet Creeper – *Campsis radicans*
Jewelweed – *Impatiens capensis*
Cardinal flower – *Lobelia cardinalis*
Canada Lily – *Lilium canadense*
Bee Balm – *Monarda didyma*
Indian Pink – *Spigelia marilandica*

The following is a list of butterfly species along with the plant species you may be able to attract them with:

Admirals: Willow, Birch, Aspens, Black Oaks, Poplar, Wild Cherry
American Copper: Sorrels, Docks
American Painted Lady: Pearly Everlasting, Pussytoes, related composites

Baltimore Checkerspot: Turtlehead, Plantains
 Banded Hairstreak: Oaks, Hickory, Butternut
 Buckeye: Plantains
 Eastern Tailed Blue: Clovers, other legumes
 Henry's Elfin: Redbud, Blueberry, Maple Leaved Viburnum, Yaupon Holly
 Fritillaries: Violets, Purslane
 Gulf Fritillary: Passion Vines
 Gray Hairstreak: many plants, especially legumes, Mallows
 Long Tailed Skipper: Groundnut, climbing legumes (edible Beans, Peas)
 Monarch and Queen: Common Milkweed, Butterfly weed
 Mourning Cloak, Comma, Question Mark: Elms, Nettles, Hackberry, (Hops)
 Painted Lady: Thistles, Composites
 Pearl Crescent: Asters
 Pygmy Blue: Lamb's Quarters, Pigweed
 Red Admiral: Nettles
 Satyrs: Grasses and Sedges
 Skippers: Grasses
 Silver Spotted Skipper: Locusts, Wisteria, other Legumes
 Snout and Hackberry Butterflies: Hackberry
 Spring Azure: Dogwood, Wild Cherry, Meadowsweet
 Suphurs: Clovers, Legumes, Sneezeweed, Senna, Asters
 Swallowtail, Black: Honewort, Sweet Cicely, (Parsley, Dill)
 Swallowtail, Pipevine: Pipevine
 Swallowtail, Spicebush: Spicebush, Sassafras
 Swallowtail, Tiger: Black Cherry, Tulip Poplar, Sweetbay Magnolia
 Swallowtail, Zebra: Paw Paw
 Swallowtail, Giant: Prickly Ash, Hop Tree, Citrus family
 Whites and Orange Tips: Mustards (Cabbage, Broccoli)

Vine species for containers and gardens

Annotations include: (EG) – Evergreen; (A) – Annual; (M) – Monarch larval food; (H) – Hummingbird favorite.

All species are twining and need appropriate diameter supports (except as noted).

| | |
|---|------------------------|
| <i>Apios americana</i> | Groundnut |
| <i>Clematis viorna</i> * | Leatherleaf Clematis |
| <i>Clematis virginiana</i> | Virgin's Bower |
| <i>Lonicera sempervirens</i> (EG)(H) | Scarlet Honeysuckle |
| <i>Parthenocissus quinquefolia</i> [®] | Virginia Creeper |
| <i>Passiflora incarnata</i> | Passionflower, Maypops |
| <i>Passiflora lutea</i> * | Yellow Passionflower |

* These species are delicate enough to use shrubs for support, if desired.

[®] This species clings by discs and needs a flat surface for climbing; also used as groundcover.

These additional Vine species could be used in small patio gardens with structural support of a trellis, pergola or arbor

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| <i>Bignonia capreolata</i> | Crossvine |
| <i>Campsis radicans</i> (H) | Trumpet Creeper |
| <i>Celastrus scandens</i> | American Bittersweet |
| <i>Wisteria frutescens</i> | American Wisteria |
| <i>Vitis aestivalis</i> | Summer Grape |
| <i>Vitis labrusca</i> | Fox Grape |
| <i>Vitis vulpina</i> | Winter Grape |

Woody species – Shrubs and small Trees

Some larger species may outgrow containers over time; all are appropriate for small patio gardens and can be planted in patches of exposed ground or in containers.

Annotations include: (EG) – Evergreen; (A) – Annual; (M) – Monarch larval food; (H) – Hummingbird favorite

Woody species for shade

| | |
|----------------------------------|----------------------|
| <i>Hammamelis virginiana</i> | Common Witchazel |
| <i>Hydrangea arborescens</i> | Smooth Hydrangea |
| <i>Kalmia angustifolia</i> (EG) | Mountain Laurel |
| <i>Kalmia latifolia</i> (EG) | Mountain Laurel |
| <i>Lindera benzoin</i> | Spicebush |
| <i>Rhododendron maximum</i> (EG) | Rosebay Rhododendron |
| <i>Rubus odoratus</i> | Flowering Raspberry |
| <i>Viburnum acerifolium</i> | Mapleleaf Viburnum |

Woody species tolerant of or needing some shade

| | |
|-------------------------------------|--------------------------------|
| <i>Amelanchier canadensis</i> | Thicket Serviceberry |
| <i>Arborvitae occidentalis</i> (EG) | Atlantic Whitecedar |
| <i>Aronia arbutifolia</i> | Red Chokeberry |
| <i>Ceanothus americanus</i> | New Jersey Tea |
| <i>Clethra alnifolia</i> | Summersweet, Sweet Pepperbush |
| <i>Chionanthus virginicus</i> | Fringetree |
| <i>Comptonia perigrina</i> | Sweetfern |
| <i>Eubotrys racemosa</i> | Swamp Doghobble, Sweetbells |
| <i>Ilex glabra</i> (EG) | Inkberry holly |
| <i>Ilex verticillata</i> | Winterberry |
| <i>Itea virginica</i> | Virginia Sweetspire |
| <i>Lyonia ligustrina</i> | Maleberry |
| <i>Magnolia virginiana</i> (s-EG) | Sweetbay Magnolia |
| <i>Photinia melanocarpa</i> | Black Chokeberry |
| <i>Photinia pyrifolia</i> | Red Chokeberry |
| <i>Rhododendron calendulaceum</i> | Flame Azalea |
| <i>Rhododendron periclymenoides</i> | Pinxterbloom Azalea |
| <i>Rhododendron viscosum</i> | Swamp Azalea |
| <i>Staphylea trifolia</i> | American Bladdernut |
| <i>Vaccinium angustifolium</i> | Late Lowbush (Sweet) Blueberry |
| <i>Vaccinium corymbosum</i> | Highbush Blueberry |
| <i>Vaccinium pallidum</i> | Early Lowbush Blueberry |
| <i>Vaccinium stamineum</i> | Tall Deerberry |

| | |
|-------------------------------|-----------------------------------|
| <i>Vaccinium vacillans</i> | Early Lowbush (Dryland) Blueberry |
| <i>Viburnum trilobum</i> | American Cranberry Bush |
| <i>Yucca filamentosa</i> (EG) | Adam's Needle |

Woody species for full sun

| | |
|-----------------------------------|---------------------------|
| <i>Amorpha fruticosa</i> | Leadplant, Indigobush |
| <i>Diervilla sessifolia</i> | Southern Bush Honeysuckle |
| <i>Juniperus virginiana</i> (EG) | Eastern Red Cedar |
| <i>Morella cerifera</i> (EG) | Southern Wax Myrtle |
| <i>Morella pennsylvanica</i> (EG) | Bayberry |
| <i>Rhus aromatica</i> | Fragrant Sumac |
| <i>Rhus glabra</i> | Smooth Sumac |
| <i>Yucca filamentosa</i> (EG) | Adam's Needle |

Ferns and Grasses

Ferns

All ferns need shade; but this may vary with the amount of moisture they receive. These are listed in order of drought tolerance after establishment (rather than alphabetical). Sensitive and Ostrich Fern will tolerate full sun with wet conditions.

| | |
|--|-------------------------------|
| <i>Polystichum acrostichoides</i> (EG) | Christmas Fern |
| <i>Dryopteris marginalis</i> (EG) | Evergreen Shield or Wood Fern |
| <i>Onoclea sensibilis</i> | Sensitive Fern |
| <i>Thelypteris novaboracensis</i> | New York Fern |
| <i>Matteuchia strutheropteris</i> | Ostrich Fern |
| <i>Athyrium felix-femina</i> | Lady Fern |

Grasses

Grasses for medium shade

| | |
|------------------------------|------------------------|
| <i>Carex blanda</i> | Eastern Woodland Sedge |
| <i>Carex glaucoidea</i> | Blue Sedge |
| <i>Carex pennsylvanica</i> | Pennsylvania Sedge |
| <i>Carex plantaginifolia</i> | Plantain-Leaf Sedge |
| <i>Carex platyphylla</i> | Broad-Leaf Sedge |
| <i>Elymus hystrix</i> | Bottlebrush grass |
| <i>Festuca rubra</i> | Red Fescue |
| <i>Luzula echinata</i> | Spike Wood Rush |

Part shade-tolerant grasses

| | |
|--------------------------------|-------------------|
| <i>Chasmanthium latifolium</i> | Sea or River Oats |
| <i>Panicum virgatum</i> | Panic Grass |

Grasses needing full sun

| | |
|-------------------------------|-----------------------|
| <i>Andropogon virginicus</i> | Broomsedge |
| <i>Carex intumescens</i> | Greater Bladder Sedge |
| <i>Carex lurida</i> | Lurid Sedge |
| <i>Eragrostis spectabilis</i> | Purple Love Grass |

| | |
|--------------------------------|---------------------|
| <i>Muhlenbergia capillaris</i> | Hairawn Muhly Grass |
| <i>Schizachirium scoparuim</i> | Little Bluestem |
| <i>Sporobulus heterolepis</i> | Northern Dropseed |
| <i>Tridens flavus</i> | Purpletop Grass |

Submerged and Emergent Aquatic Garden Species

Emergent Plants

These plants differ in the depths they prefer.

| | |
|--------------------------------|---------------------------------|
| <i>Peltandra virginica</i> | Arrow Arum |
| <i>Sagittaria latifolia</i> | Arrowhead |
| <i>Saururus cernuus</i> | Lizard's Tail |
| <i>Acorus calamus</i> | Sweet Flag |
| <i>Hibiscus moscheutos</i> | Marsh Hibiscus |
| <i>Iris versicolor</i> | Blue Flag, Blue Water Iris |
| <i>Juncus effusus</i> | Soft Rush |
| <i>Kosteletskyia virginica</i> | Seashore Mallow |
| <i>Nuphar lutea</i> | Spatterdock, Yellow Water Lily |
| <i>Nymphaea odorata</i> | American or Fragrant Water Lily |
| <i>Pontaderia cordata</i> | Pickerelweed |
| <i>Typha angustifolia</i> | Narrow-leaf Cattail |

Submerged Plants

These provide oxygen to the water

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|---|-------------|
| <i>Vallisneria sp.</i> | Wild Celery |
| <i>Cabomba canadensis, C. caroliniana</i> | Fanwort |

Herbaceous Perennials

Annotations include: (EG) – Evergreen; (A) – Annual; (M) – Monarch larval food; (H) – Hummingbird favorite

Herbaceous species for (mostly) part shade to full shade

| | |
|------------------------------------|---------------------------------|
| <i>Actaea racemosa</i> | Black Snakeroot |
| <i>Arisaema triphyllum</i> | Jack-in-the-Pulpit |
| <i>Asarum canadense</i> | Wild Ginger |
| <i>Campanula americana</i> | American Bellflower |
| <i>Chrysogonum virginicum</i> | Green and Gold |
| <i>Conoclinium coelestinum</i> | Blue Mist Flower, Wild Ageratum |
| <i>Cryptotaenia canadensis</i> (M) | Honewort |
| <i>Dicentra eximia</i> | Fringed Bleeding Heart |
| <i>Eurybia (Aster) cordifolius</i> | Blue Wood Aster |
| <i>Eurybia (Aster) divaricata</i> | White Wood Aster |
| <i>Heuchera americana</i> | American Alumroot |
| <i>Heuchera villosa</i> | Hairy Alumroot |
| <i>Iris cristata</i> | Crested Iris |
| <i>Maianthemum racemosum</i> | False Solomon's Seal |
| <i>Mertensia virginica</i> | Virginia Bluebells |
| <i>Mitchella repens</i> (EG) | Partridgeberry |
| <i>Pachysandra procumbens</i> (EG) | Allegheny Spurge |
| <i>Packera aurea</i> (EG) | Golden Ragwort |

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|-----------------------------|--------------------------------|
| <i>Phlox divaricata</i> | Wild Blue Phlox |
| <i>Polygonatum biflorum</i> | Solomon's Seal |
| <i>Sedum ternatum</i> (EG) | Wild Stonecrop |
| <i>Solidago caesia</i> | Bluestem or Wreath Goldenrod |
| <i>Solidago flexicaulis</i> | Broadleaf or Zig-Zag Goldenrod |
| <i>Teucrium canadense</i> | Wood Sage, American Germander |
| <i>Tiarella cordifolia</i> | Foamflower |
| <i>Viola canadensis</i> | Canada violet |

Herbaceous species for full sun to part sun

Most of these species tolerate more sun with somewhat more, consistent moisture, except those preferring poor soils

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|---|----------------------------------|
| <i>Amsonia tabernaemontana</i> | Blue Star Flower |
| <i>Anemone canadensis</i> | Canada Anemone |
| <i>Antennaria plantaginoides</i> , <i>A. neglecta</i> | Pussy-toes |
| <i>Aquilegia canadensis</i> (H) | Canadian, Wild Columbine |
| <i>Cheolone glabra</i> | White Turtlehead |
| <i>Coreopsis verticillata</i> | Threadleaf Tickseed |
| <i>Eupatoradelphus fistulosa</i> | Hollow Joe Pye Weed |
| <i>Eupatorium hyssopifolium</i> | Hyssop-leaved Boneset |
| <i>Fragaria virginiana</i> | Wild Strawberry |
| <i>Geranium maculatum</i> | Wild Geranium |
| <i>Heliopsis helianthoides</i> | Ox-eye, False Sunflower |
| <i>Hypericum hypericoides</i> | St Andrews Cross |
| <i>Liatris spicata</i> | Dense Gayfeather, Blazing Star |
| <i>Lilium superbum</i> | Turk's Cap Lily |
| <i>Lobelia cardinalis</i> (H) | Cardinal flower |
| <i>Lobelia siphilitica</i> | Great Blue Lobelia |
| <i>Mimulus ringens</i> , <i>M. alatus</i> | Monkey Flower |
| <i>Monarda fistulosa</i> | Wild Bergamot, Horsemint |
| <i>Packera aurea</i> (EG) | Golden Ragwort |
| <i>Penstemon digitalis</i> | Beardtounge Penstemon |
| <i>Penstemon laevigatus</i> | Smooth Penstemon |
| <i>Phlox paniculata</i> | Summer Phlox |
| <i>Phlox stolonifera</i> | Creeping Phlox |
| <i>Phlox subulata</i> (EG) | Moss Phlox, Moss Pink |
| <i>Physostegia virginiana</i> | Obedient Plant, False Dragonhead |
| <i>Pycnanthemum muticum</i> | Blunt Mountain Mint |
| <i>Pycnanthemum tenuifolium</i> | Narrow leaved Mountain Mint |
| <i>Ruellia caroliniensis</i> | Carolina Wild Petunia |
| <i>Salvia lyrata</i> | Lyre-leaf Sage |
| <i>Solidago sphacelata</i> | Autumn Goldenrod |
| <i>Spigelia marilandica</i> (H) | Indian Pink, Maryland Pinkroot |
| <i>Symphyotrichum (Aster) ericoides</i> | Heath or Dense-flowered Aster |
| <i>Symphyotrichum (Aster) laevis</i> | Smooth Blue Aster |
| <i>Symphyotrichum (Aster) lateriflorum</i> | Calico Aster |
| <i>Symphyotrichum novae-anglae</i> | New England Aster |
| <i>Symphyotrichum novae-belgii</i> | New York Aster |
| <i>Sysyrinchium angustifolium</i> | Blue-eyed Grass |
| <i>Tradescantia virginiana</i> | Virginia Spiderwort |
| <i>Veronicastrum virginicum</i> | Culver's Root |
| <i>Zizia aurea</i> (M) | Golden Alexanders |

Herbaceous species for full sun

| | |
|-------------------------------|-------------------------------------|
| <i>Agastache foeniculum</i> | Anise Hyssop |
| <i>Asclepias tuberosa</i> (M) | Butterflyweed |
| <i>Coreopsis lanceolata</i> | Lance leaved Coreopsis |
| <i>Echinacea purpurea</i> | Purple Coneflower |
| <i>Eryngium yuccafolium</i> | Rattlesnake Master |
| <i>Hypericum prolificum</i> | Shrubby St John's Wort |
| <i>Monarda didyma</i> (H) | Bee Balm, Oswego Tea |
| <i>Rudbeckia fulgida</i> | Black-eyed Susan, Orange Coneflower |
| <i>Rudbeckia hirta</i> | Black-eyed Susan |
| <i>Rudbeckia triloba</i> | Three-lobed Coneflower |
| <i>Solidago juncea</i> | Early Goldenrod |

Combination Plantings – Shrub and perennial

The plant combinations below are selected for their similar light, moisture and soil needs. The shapes of the plants and the bloom times should be complimentary to one another.

For Shade to part shade

Flowering Raspberry, Bottlebrush grass, Blue Wood Aster
Rubus odoratus, *Elymus hystrix*, *Symphotrichum cordifolius*
Mountain Laurel, Christmas Fern, Wintergreen
Kalmia latifolia, *Polystichum acrostichoides*, *Gaultheria procumbens*
Witchhazel, Wood Fern, White Wood Aster
Hamamelis virginiana, *Dryopteris marginalis*, *Symphotrichum divaricata*
Spicebush, Jack-in-the-Pulpit, Canada Anemone
Lindera benzoin, *Arisaema triphyllum*, *Anemone canadensis*
Winterberry, Christmas Fern, Blue Wood Aster
Ilex verticillata, *Polystichum acrostichoides*, *Eurybia cordifolia*

For part Shade to more sun

Bladdernut, White Turtlehead, Virginia Spiderwort
Staphylea trifolia, *Cheolone glabra*, *Tradescantia virginiana*
Serviceberry, Christmas Fern, Bluestem Goldenrod
Amelanchier canadensis, *Polystichum acrostichoides*, *Solidago caesia*
Sweetbay Magnolia, Bee Balm, Sensitive fern
Magnolia virginiana, *Monarda didyma*, *Onoclea sensibilis*
Pinxterbloom Azalea, Blue Star Flower, White Wood Aster
Rhododendron periclymenoides, *Amsonia tabernaemontana*, *Symphotrichum divaricata*
Atlantic White Cedar, Solomon's seal, Wild Strawberry
Arborvitae occidentalis (small cultivar), *Polygonatum biflorum*, *Fragaria virginica*
Fringetree, Hairy Alumroot, Pennsylvania Sedge
Chionanthus virginicus, *Heuchera villosa*, *Carex pennsylvanica*
Red Chokeberry, Blue Wood Aster, New York Fern
Aronia arbutifolia, *Eurybia cordifolia*, *Thelypteris novaboracensis*
Summersweet, Virginia Spiderwort, Obedient Plant
Clethra alnifolia, *Tradescantia virginiana*, *Physostegia virginiana*

For full sun

Eastern Red Cedar, Broomsedge Bluestem, Early Goldenrod
Juniperus virginiana, *Andropogon virginicus*, *Solidago juncea*
Northern Bayberry, Sweetfern, Butterflyweed
Morella pennsylvanica, *Comptonia perigrina*, *Asclepias tuberosa*

Smooth Sumac, Anise Hyssop, Purple Lovegrass
Rhus glabra, Agastache foeniculum, Eragrostis spectabilis

Combination Plantings - Perennials only

For full sun to part shade

Hyssop-leaved Boneset, Autumn Goldenrod, Spike Gayfeather
Eupatorium hyssopifolium, Solidago sphacelata, Liatris spicata

Rattlesnake Master, Threadleaf Tickseed, Purple Coneflower
Eryngium yuccafolium, Coreopsis verticillata, Echinaceae purpurea

Hollow Joe Pye Weed, Autumn Goldenrod, Heath Aster, New York Aster
Eupatoriadelphus fistulosus, Solidago sphacelata, Symphyotrichum ericoides, Symphyotrichum nova-belgii

Shrubby St John's Wort, New York Aster, Northern Dropseed
Hypericum prolificum, Symphyotrichum nova-belgii, Sporobolus heterolepis

Ox-eye, Spike Gayfeather, Purple Coneflower
Heliopsis helianthoides, Liatris spicata, Echinaceae purpurea

Black-eyed Susan, Anise Hyssop, Spike Gayfeather
Rudbeckia fulgida, Agastache foeniculum, Liatris spicata

Turks Cap Lily, New York Aster, Blunt Mountain Mint
Lilium superbum, Symphyotrichum nova-belgii, Pycnanthemum muticum

Wild Geranium, Threadleaf Tickseed, Obedient Plant
Geranium maculatum, Coreopsis verticillata, Physostegia virginiana

Narrow leaved Mountain Mint, Anise Hyssop, Heath Aster
Pycnanthemum tenuifolium, Agastache foeniculum, Symphyotrichum ericoides

Panic Grass, Purple Coneflower, Brown-eyed Susan
Panicum virgatum, Echinaceae purpurea, Rudbeckia hirta

For part Shade

Ostrich Fern, Virginia Bluebells, Golden Alexanders
Matteuchia strutheropteris, Mertensia virginiana, Zizia aurea

Culvers Root, Bee Balm, Monkey Flower
Veronicastrum virginicum, Monarda didyma, Mimulus ringens

Blue Mist Flower, Great Blue Lobelia, White Turtlehead, Greater Bladder Sedge
Conoclinium coelestinum, Lobelia siphilitica, Chelone glabra, Carex intumescens

Vine and Perennials – for mostly sun

Scarlet Honeysuckle, Creeping Phlox, Smooth Blue Aster
Phlox stolonifera, Lonicera sempervirens, Symphyotrichum laevis

American Wisteria, White Turtlehead, Blue Sedge
Wisteria frutescens, Chelone glabra, Carex glaucoidea

Groundnut, Blue Mist Flower, Bottlebrush Grass
Apios americana, Conoclinium coelestinum, Elymus hystrix

Rock Garden Planter – For part Shade

These containers may be shallow, wide bowl - style, if desired.

Wild Columbine, Wild Stonecrop, American Alumroot
Aquilegia canadensis, Sedum ternatum, Heuchera americana

St Andrew's Cross, Pussytoes, Spike Wood Rush
Hypericum hypericoides, Antennaria neglecta, Luzula echinata

Wetland Planter – for mostly sun

Ensure proper size and depth of these containers, as mentioned above.

Marsh Hibiscus, Blue Flag, Soft Rush

Hibiscus moscheutos, *Iris versicolor*, *Juncus effusus*

Monkey Flower, Cardinal Flower, Lurid Sedge

Mimulus ringens, *Carex lurida*, *Lobelia cardinalis*

Seashore Mallow, Great Blue Lobelia, Lurid Sedge

Kosteletskya virginica, *Carex lurida*, *Lobelia siphilitica*

Single Plant Containers

These plants form large columns or have circular rosettes of foliage which will fill and cover the edges of their pot. They have bold, architectural forms and will make excellent accent specimens.

Black Snakeroot – *Actaea racemosa* (shade)

Yucca – *Yucca filamentosa* (sun/part shade) (EG)

Rosebay Rhododendron - *Rhododendron maximum* (shade) (EG)

Red Cedar – *Juniperus virginiana* (sun) (EG)

AAH Wildlife Waystation Animal and Insect Species to Observe

Included here are some species that might occur in properties or balconies adjacent to or near natural areas and parks in our area (Hermit Thrush, Mourning Cloak butterfly) as well as some more urban-adapted species such as Eastern Chipmunk and Song Sparrow.

Birds

Cooper's Hawk

Sharp-shinned Hawk

Woodpecker Species

White-breasted Nuthatch

House Wren

Eastern Phoebe

Ruby-crowned Kinglet

Golden-crowned Kinglet

Blue-gray Gnatcatcher

Hermit Thrush

Tufted Titmouse

Song Sparrow

White-throated Sparrow

Butterflies

Mourning Cloak

Comma

Question Mark

Monarch

Insects

Grasshopper species

Katydid species

Hummingbird Clearwing Moth

Snowberry Clearwing Moth

Flower Fly (Hover Fly or Syrphid Fly)

Spiders

Orb Web Species

Mammals

Bat Species

Eastern Chipmunk