



**MD STATE BUTTERFLY &  
CATERPILLAR**



**BALTIMORE CHECKERSPOT**

# **GARDENS TO ATTRACT BUTTERFLIES**

**PRESENTED BY THE CHARLES CO. MASTER GARDENERS**



UNIVERSITY OF  
MARYLAND  
EXTENSION



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# TOPICS

**Butterfly Life Cycle**

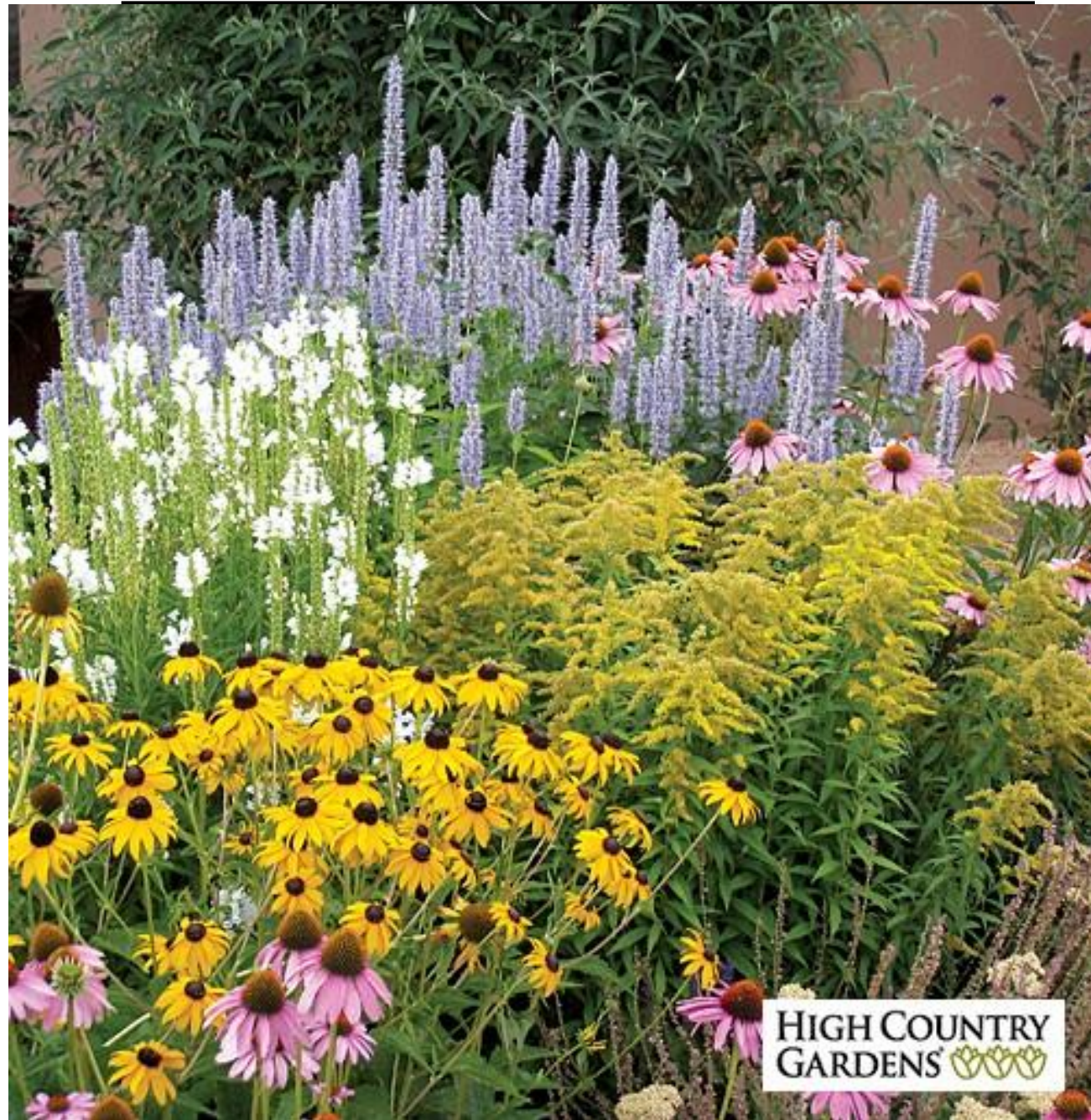
**Butterfly Needs**

**Definition of Terms**

**Plants for 3 Garden  
Types including  
seasons:**

- Sunny & Dry**
- Sunny & Wet**
- Annuals & Herbs**

**Top Ten MD  
Butterflies**



# BUTTERFLY LIFE CYCLE--MONARCH



Egg



Larva



Pupa



Adult





# BUTTERFLY NEEDS

- **Host & nectar plants**
- **Sunny garden location, protected from the wind**
- **Boldly colorful succession of blooms from spring to autumn--orange, purple, yellow, dark pink--flat, clustered flowerheads**
- **Clustered patches of habitat**
- **Wet mud/sand & rocks for puddling & warming**
- **No pesticide use**
- **Messy gardens! Relax! Clean up in early spring, not autumn**

# EXPLANATION OF TERMS

- **Common names**: Non-Latin names. Regional differences can be confusing.
- **Latin names**: *Genus & species*, most accurate term
- **Straight species**: Occurs naturally and is usually superior for habitat formation. Greater genetic variation than cultivars.
- **Cultivars**: Natural hybrids or cultivated hybrids selected for specific trait(s). Individuals of the same cultivar are genetically identical or very similar to each other. Designated by single apostrophes.
- Beware of drastic changes to flower shape/size (in some cultivars) which can inhibit the butterflies & other pollinators.
- DR & RR indicate “Deer Resistant” & “Rabbit Resistant”



## Sunny, Medium – Dry Garden: Perennials for Spring Blooms, Apr-Jun



**'May Night' *Salvia x sylvestris*: 2 ft tall, zones 4-8, DR & RR, prune in summer for rebloom in autumn**



**'Moonshine' Yarrow, *Achillea spp.*: 2 ft tall, zones 3-8, DR & RR, fades fast in summer heat**



**'Huskers Red' *Penstemon digitalis*: 3 ft tall, zones 3-8, DR & RR, attractive foliage, may reseed, host plant for Checkerspot, native**



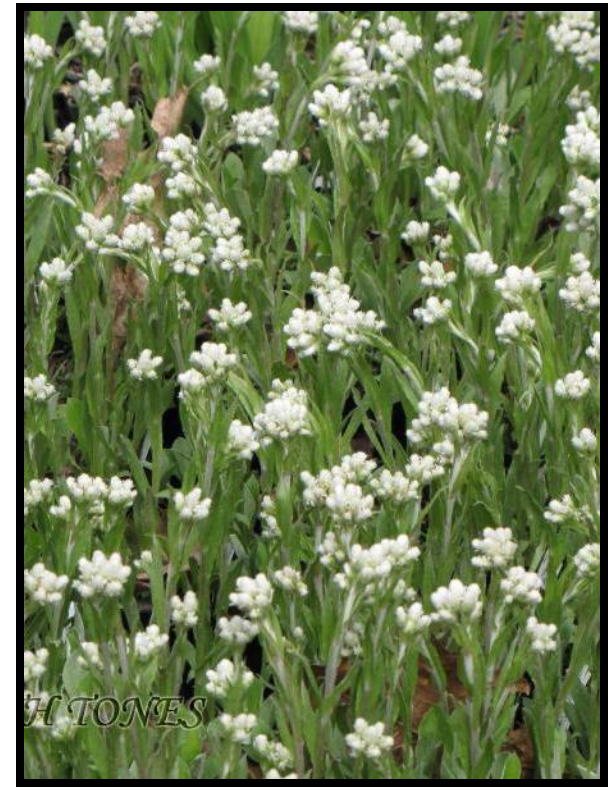
## Sunny, Medium-Dry Garden: Perennials for Spring Blooms, Apr-Jun



**Evening Primrose,**  
***Oenothera speciosa*: 1 ft**  
**tall, zones 4-9, DR & RR,**  
**spreading groundcover,**  
**fades in summer**



**Wild Columbine,**  
***Aquilegia canadensis*: 2**  
**ft tall, zones 3-8, DR &**  
**RR, will reseed,**  
**attractive groundcover**  
**foliage effect, native**



**Pussytoes, *Antennaria***  
***plantaginifolia*: 1 ft tall,**  
**zones 3-8, ground cover,**  
**native, nectar & host**  
**plant for American Lady**  
**butterfly**



## Sunny, Medium-Dry Garden: Perennials for Spring Blooms, Apr-Jun



**False Blue Indigo,**  
***Baptisia australis:*** 3-4 ft tall, zones 3-9, DR & RR, deep taproot, needs space, native, nitrogen fixer, cultivars available



**Pincushion flower,**  
***Scabiosa spp:*** 1 ft tall, zones 5-9, DR, deadhead for rebloom



**'Walker's Low' Nepeta**  
***spp,*** catmint: 2 ft tall, zones 4-8, DR & RR, long bloom time, shear in summer for autumn bloom, can reseed

## Sunny, Medium-Dry Garden: Perennials for Summer Blooms, Jun-Aug



**Butterfly Weed, *Asclepias tuberosa*: 1-3 ft tall, zones 3-9, DR & RR, slow to establish, aphids can be nuisance, deep taproot, can reseed, native, Monarch host & nectar plant**



**Common Milkweed, *Asclepias syriaca*: 4-5 ft tall, zones 3-9, DR & RR, can reseed, irritating sap, native, spreads vigorously by rhizomes, Monarch host & nectar plant**



**Sunny, Medium-Dry Garden: Perennials for Summer Blooms, Jun-Aug**



**Blanket Flower, *Gaillardia spp.***  
**1-2 ft tall, zones 3-10, native,  
RR, short-lived, long lasting  
flower, available as annual**



**New Jersey Tea, *Ceanothus  
americanus***: 3 ft tall, zones 4-8,  
**shrub, drought tolerant, native,  
nitrogen fixer, protect from  
deer, host & nectar plant**



## Sunny, Medium-Dry Garden: Perennials for Summer Blooms, Jun-Aug



**Oxeye sunflower,**  
***Heliopsis helianthoides:***  
**3-6 ft tall, zones 3-9,**  
**long bloom time, native**



**Shasta daisy,**  
***Leucanthemum spp:*** 3-4  
**ft tall, zones 5-9, good**  
**cut flower, foliage acts**  
**as groundcover,**  
**cultivars available**



**Hummingbird Mint,**  
***Agastache spp:*** 2-3 ft  
**tall, zones 5-9, DR & RR,**  
**can reseed, cultivars**  
**available**



## Sunny, Medium-Dry Garden: Perennials for Summer Blooms, Jun-Aug



**Russian Sage, *Perovskia atriplicifolia*: 3-5 ft tall, zones 5-9, DR & RR, long lasting flowers, hardy, drought tolerant**



**Mountain Mint, *Pycnanthemum spp.*: 1-3 ft tall, zones 4-8, DR & RR, native, hardy, not aggressive, pollinator magnet!**



**'Siskiyou Pink' Guara *Guara lindheimeri*: 2-3 ft tall, zones 5-9, long bloom time, shear in summer for autumn rebloom, can be short lived**



## Sunny, Medium-Dry Garden: Perennials for Summer Blooms, Jun-Aug



**Tickseed, *Coreopsis verticillata*: 2 ft tall, zones 3-9, DR & RR, native, cultivars available**



**Speedwell, *Veronica spp*: 2 ft tall, zones 4-9, DR & RR, shear in summer for autumn rebloom**



**Wild Bergamot, *Monarda fistula*: 2-4 ft tall, zones 3-9, DR & RR, native, nectar & host plant, can reseed, deadhead for rebloom**



## Sunny, Medium-Dry Garden: Perennials for Autumn Blooms, Aug-Oct



**Bluebeard, *Caryopteris* spp:** 2-3 ft tall, zones 5-9, DR & RR, shrub-like, long-lasting blooms, cultivars available



**Spotted Bee Balm, *Monarda punctata*:** 2 ft tall, zones 4-8, DR & RR, native



***Boltonia asteroides*:** 3-4 ft tall, zones 3-10, native



## Sunny, Medium-Dry Garden: Perennials for Autumn Blooms, Aug-Oct



**Goldenrod, *Solidago* spp:**  
1-4 ft tall, zones 4-8, DR  
& RR, native, host &  
nectar plant, do not  
confuse with Ragweed!



**Tall Sedum: 2 ft tall,**  
zones 3-9, hardy,  
drought tolerant  
succulent, long lasting  
bloom, protect from deer



**Wild Senna, *Senna***  
***marylandica:*** 3-6 ft tall,  
zones 4-9, DR & RR,  
native, host plant



## Sunny, Medium-Wet Garden: Perennials for Spring Blooms, Apr-Jun



**Blue Star, *Amsonia spp*:  
2-3 ft tall, zones 3-9, DR  
& RR, native, attractive  
fall color**



**Phlox spp. (Phlox  
*paniculata* in picture):  
Groundcover to 4 ft tall,  
zones 3-8, native, DR &  
RR, many cultivars  
available**



**Coneflowers, *Echinacea  
*purpurea**: 2-5 ft tall,  
zones 3-8, DR & RR,  
native, cultivars available  
but straight species is  
best for pollinators &  
birds**



## Sunny, Medium-Wet Garden: Perennials for Summer Blooms, Jun-Aug



**Bottlebrush Buckeye, *Aesculus parviflora* (shrub): 8-12 ft tall, zones 4-8, DR & RR, native to SE, will sucker to cover large area**



**Bee Balm, *Monarda didyma*: 2-5 ft tall, zones 4-9, DR & RR, hardy, will spread by rhizomes, native, host & nectar plant, deadhead for reblooming**



**Buttonbush, *Cephalanthus occidentalis* (shrub): 6-12 ft tall, zones 5-9, native, host & nectar plant, adaptable to flooding and drought-tolerant**



## Sunny, Medium-Wet Garden: Perennials for Summer Blooms, Jun-Aug



**Swamp Milkweed,**  
***Asclepias incarnata*: 4-6**  
**ft tall, zones 3-6, DR &**  
**RR, native, deep taproot,**  
**irritating sap, Monarch**  
**host & nectar plant**



**Blazing Star, *Liatris***  
***spicata*: 2-4 ft tall, zones**  
**3-8, DR, native**



**Black-eyed Susan,**  
***Rudbeckia spp*: 1-3 ft tall,**  
**zones 3-7, DR, will reseed**  
**and spread, native, host**  
**& nectar plant**



## Sunny, Medium-Wet Garden: Perennials for Summer Blooms, Jun-Aug



**Blue Vervain, *Verbena hastata*: 2-5 ft tall, zones 3-8, native, host & nectar plant**



**Joe Pye Weed, *Eupatorium maculatum*: 3-5 ft tall, zones 4-8, DR & RR, native, host & nectar plant, shorter cultivars available**



**Cardinal flower, *Lobelia cardinalis* (red) or *L. siphilitica* (blue): 2-3 ft tall, zones 4-9, DR & RR, native, long bloom time. Blue is hardier & more adaptable, straight species is best!**



## Sunny, Medium-Wet Garden: Perennials for Autumn Blooms, Aug-Oct



**Rose Mallow, *Hibiscus moscheutos*: 3-6 ft tall, zones 5-9, DR & RR, native, host plant, cultivars available**



**Asters, *Symphyotrichum* spp: 1-5 ft tall, zones 4-8, many attractive natives available, host & nectar plant, needs protection from rabbits, 'Purple Dome' has less nectar & pollen**



**NY Ironweed, *Vernonia noveboracensis*: 4-6 ft tall, zones 5-9, DR & RR, native, can reseed**



## Sunny, Medium-Wet Garden: Perennials for Autumn Blooms, Aug-Oct



**Culver's Root,**  
***Veronicastrum***  
***virginicum*: 3-6 ft tall,**  
**zones 4-7, native, slow**  
**to establish**



**Sneezeweed, *Helenium***  
***autumnale*: 2-5 ft tall,**  
**zones 3-8, DR & RR,**  
**native**



Dan Eusemeyer, Illinois Natural History Survey

**Common Boneset,**  
***Eupatorium perfoliatum*:**  
***4-6 ft tall, zones 3-8, DR***  
***& RR, native***



## Sunny, Medium-Wet Garden: Perennials for Autumn Blooms, Aug-Oct



**Turtlehead, *Chelone glabra*: 2-4 ft tall, zones 3-8, native, white and pink available, Baltimore Checkerspot host & nectar plant**



**Obedient Plant, *Physostegia virginiana*: 2-4 ft tall, zones 3-9, DR & RR, native, will spread by reseeding and rhizomes**



# Annuals for Sunny Locations and Summer-Long Blooms



**Garden Verbena:** 3 types-  
Annuals, tender  
perennials such as  
*'Homestead Purple'*  
(ground cover) & *Verbena*  
*bonariensis*, (Tall  
Verbena), 3-5 ft tall, zones  
7-10, DR & RR



**Lantana spp:** Drought  
tolerant, DR & RR, many  
cultivars available, do not  
buy sterile varieties-have  
less nectar & pollen



**Pentas spp:** Needs evenly  
moist soil, deadhead for  
more blooms



# Annuals for Sunny Locations and Summer-Long Blooms



**Zinnia spp:** DR & RR, good cut flowers, many cultivars available, keep flower simple, 'Cut & Come Again', easily started from seeds sown in ground



**Marigold, Tagetes spp:** DR & RR, fragrant and easy to grow, good companion plant for edibles, repels pests, keep flower simple, easily grown from seeds sown in ground



**Globe Amaranth, Gomphrena spp:** Long lasting blooms, can be dried, many cultivars available

## Annuals for Sunny Locations and Summer-Long Blooms



***Cosmos spp:* 3-4 ft tall, DR & RR, easily grown from seed sown in ground, good cut flowers, keep flower simple**



***Sunflowers, Helianthus spp:* 2 ft to 6ft tall, DR & RR, easily grown from seed, good for pollinators & birds, many cultivars available, host & nectar plant, keep flower simple**



# Herbs (Carrot family) as Host Plants for Swallowtail Butterflies



**Parsley, *Petroselinium*  
*spp*: 1 ft tall, zones 4-9,  
Curly or Italian, biennial,  
full to part sun**



**Fennel, *Foeniculum*  
*vulgare*: 3-5 ft tall, zones  
5-9, full sun, long-lived**



**Dill, *Anthemum*  
*graveolens*: 3-4 ft tall,  
zones 3-11, full sun, can  
reseed**

**Plant enough to share! Need to tolerate the caterpillars!**

# Eastern Tiger Swallowtail (*Papilio glaucus*): 3 - 6 inches



**Male**



**Caterpillar**



**Female-black form**



**Female-yellow form**

**Host plants: Wild cherry (*Prunus*), Sweetbay (*Magnolia*), Basswood (*Tilia*), Tulip Poplar (*Liriodendron*), Birch (*Betula*), Ash (*Fraxinus*), Cottonwood (*Populus*), Mountain Ash (*Sorbus*), Willow (*Salix*), Dill, Fennel, & Parsley**

**Habitat: Meadow, gardens, parks & roadsides**



**Zebra Swallowtail (*Eurytides marcellus*)—only common Kite Swallowtail in North America: 2 - 4 inches**



**Caterpillar forms**



**Adult**



**Host plant: Paw Paw  
(*Asimina triloba*)**

**Habitat: Forested areas near rivers and swamps**

# Spicebush Swallowtail (*Papilio troilus*): 3 - 5 inches



**Adult**



**Caterpillar**



**Spicebush  
(*Lindera*)**



**Sassafras**

**Habitat: Deciduous woods or woody swamps. Both sexes are thought to be edible mimics of the distasteful Pipevine Swallowtail.**





# Black Swallowtail (*Papilio polyxenes*): 3 – 4 inches



**Male**



**Caterpillar**



**Female**

**Habitat: Vacant lots,  
neglected areas, gardens**

**Host plants: Dill, Fennel,  
Parsley, Queen Anne's  
Lace, Celery & Carrot  
leaves**

**Most widespread  
swallowtail from coast to  
coast**

# Monarch (*Danaus plexippus*): 3 – 5 inches



**Male**



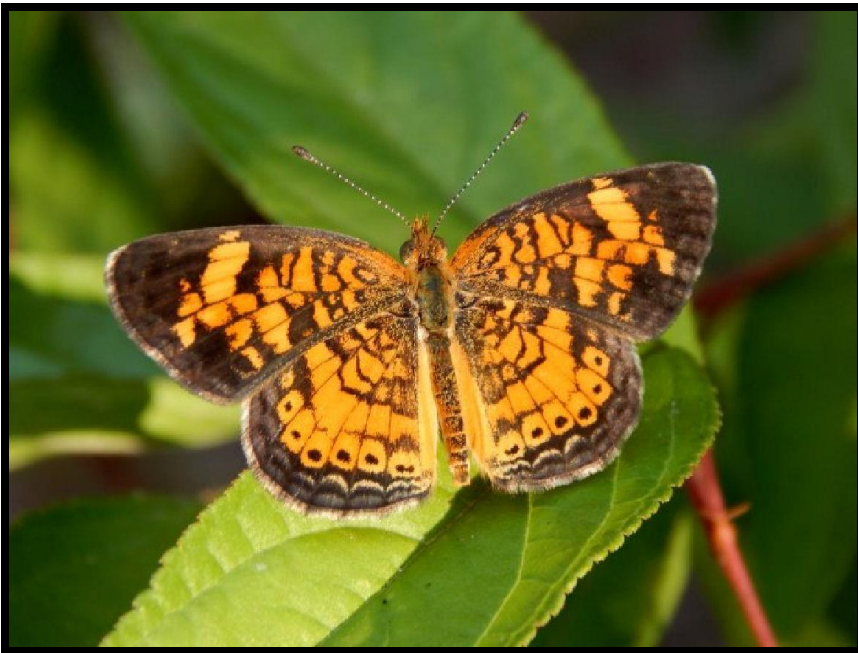
**Caterpillar**

**Host Plants: Milkweed. Toxins in milkweed make them distasteful to birds. The orange is a warning color to birds. Viceroy butterfly is an edible mimic.**

**Habitat: Open areas throughout U.S. & southern Canada. Long distance, 2 way migration! Overwinter in a few spots in central Mexico and coastal California.**



**Pearl Crescent (*Phyciodes tharos*): 1 – 2 inches**



**Butterfly**



**Caterpillar**

**Host Plants: Asters**

**Habitat: Open, weedy areas, vacant lots, roadsides, pastures. One of our most common and widespread temperate butterflies. Eggs are laid in masses.**

## Cabbage White (*Pieris rapae*): 2 inches



**Butterfly**



**Caterpillars**

**Host Plants:** Caterpillars can be a pest on cabbage, broccoli & kale. Mustard family (Brassicaceae)

**Habitat:** Most common butterfly found in yards & gardens throughout most of U.S. and southern Canada



**American Lady (*Vanessa virginiensis*): 2 inches**



**Butterfly**



**Caterpillar**

**Host Plants: Pussytoes (*Antennaria*) & yard weeds**

**Habitat: Meadows, dunes, open lots with low vegetation**

**Red Admiral (*Vanessa atalanta*): 2 – 3 inches**



**Butterfly**



**Caterpillar**

**Host Plants: Nettles, hops, oak trees**

**Habitat: Openings in river or swamps. Widespread because adults travel extensively and overwinter in the southern U.S.**



**Silver-spotted Skipper (*Epargyreus clarus*): 2 – 3 inches**



**Butterfly**



**Caterpillar**

**Host Plants: American wisteria, pea family (legumes), locust**

**Habitat: Open, brushy fields**

**Baltimore Checkerspot (*Epargyreus phaeton*): 2 – 3 inches**

**MARYLAND STATE BUTTERFLY**



**Butterfly**



**Caterpillar**

**Host Plants: Turtlehead, Penstemon. Eggs laid in mass.**

**Habitat: Marshes, along streams and dry hillsides. Uncommon, but a confirmed sighting occurred on the Indian Head bike trail in 2015!**



# Where to buy native plants?

- **Major Retail Chains—limited**
- **Local Independent Nurseries—always look and ask for special orders. Slowly improving native plant selections—mostly cultivars**
- **Maryland Native Plant Society—Lists native plant nurseries in MD and sales.  
[www.mdflora.org](http://www.mdflora.org) Also on Facebook**

# Native Plant Sales

- **Chesapeake Natives: Non-profit nursery at Rosaryville State Park in Upper Marlboro. Sales on various weekends and by appointment.**
- **Nature by Design: Alexandria, VA**
- **Adkins Arboretum: On the eastern shore of MD. Maintain a native plant nursery and hold periodic sales.**
- **Irvine Nature Center: Owings Mills, MD., NW of Baltimore. Last Saturday in August, they hold a big native plant sale and seminar. 8 vendors from VA, MD and PA—Great selection!**
- **Investigate mail order nurseries & Master Gardener Plant Sales in early May.**



# **MILLION POLLINATOR GARDEN CHALLENGE**

**Register your garden on the  
Pollinator Partnership website:**

**[www.share.pollinator.org](http://www.share.pollinator.org)**

**Native & non-native, nectar & pollen-rich  
plants which are non-invasive. Big and  
small gardens qualify!**

# Reference Material

1. **US Fish & Wildlife Service, NATIVE PLANTS FOR WILDLIFE HABITAT AND CONSERVATION LANDSCAPING, Chesapeake Bay Watershed, 2003/2005.**
1. **Tallamy, Douglas W., BRINGING NATURE HOME, Timber Press, 2009.**
1. **Xerces Society, ATTRACTING NATIVE POLLINATORS, Storey Publishing, 2011.**
4. **Opler, Paul A., EASTERN BUTTERFLIES (Peterson Field Guide), Houghton Mifflin, 1998.**
5. **Xerces Society, GARDENING FOR BUTTERFLIES, Timber Press, 2016.**