



## Butterfly Gardening Information May 5, 2009

rainscapes.org

<u>BUTTERFLY</u>	<u>CATERPILLAR HOST PLANT</u>	<u>BUTTERFLY NECTAR SOURCE</u>
American Painted Lady	Everlasting, Daisy, Burdock	Aster, Dogbane, Goldenrod, Mallow, Privet, Vetch
American Snout	Hackberry	Aster, Dogbane, Dogwood, Goldenrod, Pepperbush
Anise Swallowtail	Queen Anne's Lace	Buddleia, Joe Pye Weed
Baltimore Checkerspot	Turtlehead, False Foxglove, Plantain	Milkweed, Viburnum, Wild Rose
Black Swallowtail	Parsley, Dill, Fennel	Aster, Buddleia, Joe Pye Weed, Alfalfa
Clouded Sulphur	Clover	Goldenrod, Grape Hyacinth, Marigold
Cloudless Sulphur	Cassia, Apple, Clover	Zinnia, Butterfly Bush, Cosmos, Cushion Mum
Comma	Elm, Hops, Nettle	Butterfly Bush, Dandelion
Common Buckeye	Snapdragon, Loosestrife	Carpetweed
Common Checkered Skipper	Mallow/Hollyhock	Shepherd's needles, Fleabane, Aster, Red Clover
Common Sulphur	Vetch	Aster, Dogbane, Goldenrod
Common Wood-nymph	Purpletop Grass	Purple Coneflower
Eastern Pygmy Blue	Glasswort	Salt Bush
Eastern Tailed Blue	Clover, Peas	Dogbane
Falcate Orangetip	Rock Cress, Mustard	Mustard, Strawberry, Chickweed, Violet
Giant Swallowtail	Citrus	Joe Pye Weed, Buddleia
Gorgone Checkerspot	Sunflower	<a href="#">Sunflower</a> , Goldenrod
Gray Hairstreak	Mallow/Hollyhock, Clover, Alfalfa	Thistle, Ice Plant
Great Spangled Fritillary	Violet	Thistle, Black-eyed Susan, Milkweed, Ironweed
Greater Fritillary	Violet	Joe Pye Weed
Gulf Fritillary	Pentas, Passion-vine	Joe Pye Weed
Hackberry Emperor	Hackberry	Sap, Rotting fruit, Dung, Carrion
Little Glassywing	Purpletop Grass	Dogbane, Zinnia
Little Yellow	Cassia, Clover	Clover

Monarch	Milkweed	Dogbane, Buddleia
Mourning Cloak	Willow, Elm, Poplar, Birch, Nettle, Wild Rose	Butterfly Bush, Milkweed, Shasta Daisy, Dogbane
Orange Sulphur	Vetch, Alfalfa, Clover	Alfalfa, Aster, Clover, Verbena
Orange-barred Sulphur	Cassia	Many plants
Painted Lady	Thistle, Daisy, Mallow/Hollyhock, Burdock	Aster, Zinnia
Pearl Crescent	Aster	Dogbane
Pipevine Swallowtail	Dutchman's Pipe, Pipevine	Buddleia
Polydamus Swallowtail	Pipevine	Buddleia
Queen	Milkweed	Milkweed, Beggar-tick, Daisy
Question Mark	Hackberry, Elm, Nettle, Basswood	Aster, Milkweed, Sweet Pepperbush
Red Admiral	Nettle	Stonecrop, Clover, Aster, Dandelion, Goldenrod, Mallow
Red-spotted Purple	Black Cherry, Willow, Poplar	Privet, Poplar
Silver-spotted Skipper	Black Locust, Wisteria	Dogbane, Privet, Clover, Thistle, Winter Cress
Silvery Checkerspot	Sunflower	Cosmos, <a href="#">Blanket</a> Flower, Marigold, Phlox, Zinnia
Sleepy Orange	Cassia, Clover	Blue Porter, Beggar Tick, Aster
Spicebush Swallowtail	Spicebush, Sassafras	Dogbane, Joe Pye Weed, Buddleia
Spring Azure	Dogwood, Viburnum, Blueberry, Spirea, Apple	Blackberry, Cherry, Dogwood, Forget-me-not, Holly
Tawny Emperor	Hackberry	<a href="#">Tree</a> sap, Rotting fruit, Dung, Carrion
Tiger Swallowtail	Black Cherry, Birch, Poplar, Willow	Joe Pye Weed, Buddleia
Variiegated Fritillary	Violet, Passion Vine	Joe Pye Weed
Viceroy	Willow, Poplar, Fruit Trees	Thistle, Beggar-tick, Goldenrod, Milkweed
Western Tailed Blue	Clover, Peas	Legumes
White Admiral	Birch, Willow, Poplar, Honeysuckle	Aphid Honeydew, Bramble Blossom
Zabulon Skipper	Purpletop Grass	Blackberry, Vetch, Milkweed, Buttonbush, Thistle
Zebra Longwing	Passion-vine	Verbena, Lantana, Shepard's Needle
Zebra Swallowtail	Pawpaw	Dogbane, Joe Pye Weed, Buddleia, Privet, Blueberry

<http://butterflywebsite.com/butterflygardening.cfm>

checklist of Maryland butterflies and moths <http://www.butterfliesandmoths.org/map?ds=21&dcs=1>  
<http://www.butterfliesandmoths.org/map?x=163&y=106&si=21> (Montgomery County checklist)

## Butterfly Nectar Preferences and Larval Food Plants

### [Buckeye Butterfly](#)

- Larval food plant: snapdragon
- Nectar: aster, milkweed chickory, coreopsis

### [Comma](#)

- Larval food plant: nettle, elm
- Nectar: rotting fruit & sap, butterfly bush, dandelion

### [Great Swallowtail](#)

- Larval food plant: citrus trees, prickly ash
- Nectar: [lantana](#), Japanese honeysuckle, milkweed, lilac, goldenrod, azalea

### [Great Spangled Fritillary](#)

- Larval food plant: violet
- Nectar: ironweed, milkweed, black-eyed susan, verbena

### [Monarch](#)

- Larval food plant: milkweed
- Nectar: milkweed, butterfly bush, goldenrod, thistle, ironweed, [mints](#)

### [Mourning Cloak](#)

- Larval food plant: willow, elm, poplar, aspen, birch, hackberry
- Nectar: rotting fruit & sap, butterfly bush, milkweed, shasta daisy

### [Painted Lady](#)

- Larval food plant: daisy, [hollyhock](#)
- Nectar: goldenrod, aster, [zinnia](#), butterfly bush, milkweed

### [Red Admiral](#)

- Larval food plant: nettle
- Nectar: rotting fruit and sap, daisy, aster, goldenrod, butterfly bush,
- milkweed

### [Tiger Swallowtail](#)

- Larval food plant: cherry, ash, birch, tulip tree, lilac
- Nectar: butterfly bush, milkweed, Japanese honeysuckle, phlox, lilac, ironweed

## Viceroy

- Larval food plant: willow, poplar, apple
- Nectar: rotting fruit, sap, aster, goldenrod, milkweed

<http://www.ca.uky.edu/entomology/entfacts/ef006.asp>

## **A TEACHER'S GUIDE TO CREATING A SCHOOL BUTTERFLY GARDEN**

The ideas and information in this section come from an article written by Jennifer Goodwin Smith in the January 1995 issue of *Science and Children* (p. 29-32). She planned and planted a school butterfly garden with sixth and seventh graders in Maryland, and wrote the article to make it easier for others to do similar projects.

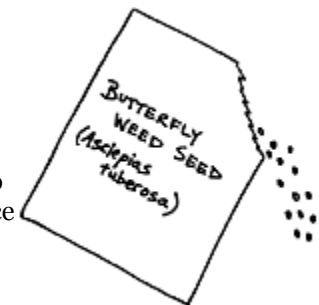
### **Step 1: Planning to Plant**

Smith outlines a series of planning steps as follows:

- Get permission from the school administration and maintenance personnel to plant a garden. It is especially important to gain the support of the people who mow the grounds.
- Hold a brainstorming session with the class to generate interest in butterflies. Talk about how butterflies use plants, and how they need special plants at different times in their life cycle.
- Discuss the work involved in a garden, including maintaining the garden during the summer and raising money for seeds and other materials. Also brainstorm benefits of a garden (their list included decreased noise and air pollution from reduced mowing; reduced soil erosion; a beautiful garden; a supply of cut flowers to sell or give to nursing homes, hospitals, etc.).
- Develop a time line for the garden. If you start from seed, as she did, you will need at least three months. Their time line was roughly as follows. First month: get administrative support, choose a site, hold fund-raisers, order seeds, germinate seeds. Second month: monitor plant growth, design the garden. Third month: prepare garden site, transplant seedlings.
- As a class, decide on the criteria you will use to judge a site. Smith's class considered available sunlight, level of foot traffic, visibility to school and community, and vulnerability to vandalism. They chose a courtyard that was visible but protected.

### **Step 2: Planning the Garden**

- Choose plants as a class, perhaps in small groups. Sources of information include seed catalogs, gardening magazines, books about butterflies and butterfly gardening (see bibliography), and other resources.
- Encourage students to choose plants that bloom at different times. Also consider plant height, color, and length of blooming time. Variety is nice in all these variables.
- Make suggestions as to the garden design, such as choosing colors that



blend and making sure all plants are visible (i.e., tall in back, short in front). Offer resources that have other suggestions for garden planning. Plan the garden together.

### Step 3: Starting Seedlings

- Buy seeds. Sources include gardening catalogs, hardware stores, and nurseries.
- Have students bring in yogurt containers, foam egg cartons, and the like to use to start seeds. Smith bought the other supplies from hardware stores and nurseries, including seed-starting potting soil, fertilizer, and straw, shovels, a rake, and a hoe.
- Look into donations. Smith received horse manure from a stable, grass clippings from a school playing field for mulch, and tools students had at home.
- Plant seedlings: Punch a small hole in the bottom of containers, fill with soil, bury seeds according to instructions, place containers on trays to catch extra water. Students should be responsible for caring for their plants. They can also measure plant growth, germination time, and other variables and keep track of the information in a science journal or lab notebook.
- After 4 to 6 weeks, seedlings will be ready to transplant.



### Step 4: Planting the Garden

- Prepare the soil. Turn it over and add some fertilizer.
- Plant seedlings. Make sure danger of frost is past.
- Apply mulch to prevent soil erosion and maintain soil moisture.
- Set up a schedule for garden maintenance as a class. Tasks may include watering, weeding, and replacing mulch.
- Smith's class set up a time to observe the garden and its health once a week.
- Clarify a no pesticide policy.

### Step 5: Enjoying the Garden

Once the garden is going, and especially after flowers bloom, take time to enjoy the garden and to observe butterfly activity there. Smith's students were very enthusiastic, cared for the garden all summer long, and asked to stay involved the following year.

**Good Luck & Happy Gardening!**

<http://www.monarchwatch.org/garden/guide.htm>

**Other links:**

Monarch Watch: <http://www.monarchwatch.org/garden/index.htm>

Pollinator gardening: <http://www.kidsgardening.org/pollinator/curriculum/index.php>

<http://www.uky.edu/Ag/Horticulture/butterflypages/resources.htm>

blogs: <http://www.blogcatalog.com/blogs/school-garden-weekly/posts/tag/butterfly+garden/>

6<sup>th</sup> & 7<sup>th</sup> grade example <http://davesgarden.com/guides/articles/view/1659/>

MD butterfly gardens to visit: <http://users.sitestar.net/butterfly/publicgardens.html#Maryland>

Butterfly Club of MD: <http://users.sitestar.net/~jmfarron/bfgardening/resources.htm>

Frederick MD Master Gardeners Butterfly Garden article

[http://www.emmitsburg.net/gardens/articles/frederick/2001/butterfly\\_garden.htm](http://www.emmitsburg.net/gardens/articles/frederick/2001/butterfly_garden.htm)

Silver Spring MD Butterfly site (personal page of an enthusiast) <http://mysite.verizon.net/vze8fvo3/>