# Plant Care and Butterfly/Caterpiller Identification, Butterfly-Hummingbird Garden, Bath Community Center

#### Bath Alpha Garden Club

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## Introduction

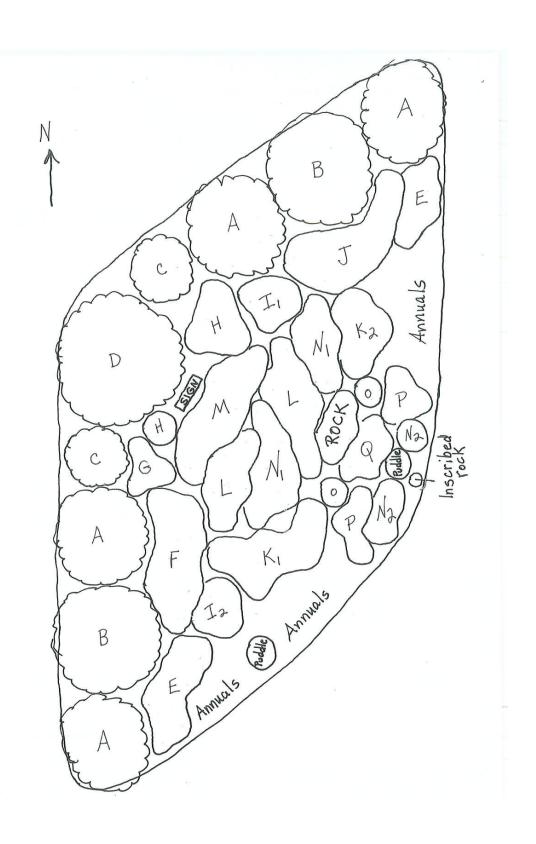
This book is intended to provide guidance for the care of the plants, and help in identifying butterflies and caterpillers, in the Bath Alpha Garden Club Butterfly and Hummingbird Garden at the Bath Community Center.

- \*No insecticides should be used.
- \*Nectar plants were included for butterflies and hummingbirds.
- \*Host plants were included to provide food for caterpillers. Do not destroy them.
- \*Dead flowers and unsightly leaves/stalks should only be removed if they do not include butterfly eggs, larvae, cocoons, or chrysalis.
- \*Dry flower heads may provide seeds for other birds to eat.

The members of Bath Alpha Garden Club, and the Landscape Committee, hope this garden will benefit wildlife, and provide enjoyment to the members of our community for many years.

## Map Key

- A. Butterfly Bush
- B. Wegelia 'Varigata'
- C. Joe Pye Weed
- D. Lilac 'Miss Canada'
- E. Sedum 'Autumn Joy'
- F. Purple Coneflower 'Magnus'
- G. Foxglove
- H. Hyssop
- 11. Yarrow 'Coronation Gold'
- 12. Yarrow 'Moonshine'
- J. Bee Balm 'Jacob Cline'
- K1. Aster 'Purple Dome'
- K2. Aster
- L. Liatris 'Kobold'
- M. Butterfly Weed
- N1. Coreopsis 'Golden Shower'
- N2. Coreopsis 'Moonbeam'
- O. Pearly Everlasting 'New Snow'
- P. Salvia
- Q. Beardtongue



## Annuals

Candytuft

Cosmos

**Impatiens** 

Mexican Sunflower

**Nicotiana** 

Parsley, Host plant for Black Swallowtail caterpiller

**Pentas** 

Snapdragon, Host plant for Buckeye caterpiller

Spider Flower or Beeplant, Host plant for Checkered White caterpiller

Verbena, Host plant for the Buckeye caterpiller

Zinnia

Host plants should be in the garden every year, although some will reseed themselves. Some of the others should also be included, but the selection may vary from year to year.

### **Candytuft**

#### **Iberis Umbellata**



#### **Blooms spring-summer**

Trim faded flower clusters to prolong bloom or allow to reseed.

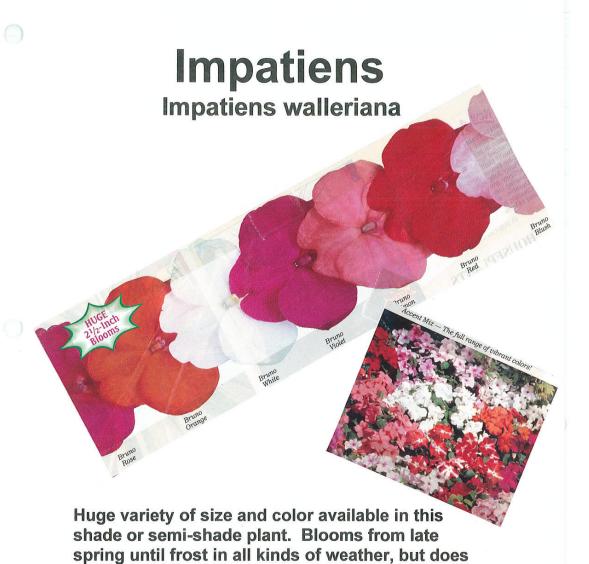
## Cosmos



Blooms - summer

Allow to reseed.

Clean up dead foliage after frost.



not like to be wet or cold. Varieties for sun are

also available.

#### **Mexican Sunflower**

#### Tithonia rotundilfolia



Blooms – Beginning mid-july. Ht. 28-30"

Clean up spent foliage after frost.

#### **Nicotiana**

#### Flowering Tobacco



Blooms – summer Ht. 12-36"

Will self-sow freely.

Clean up dead foliage & stems after frost.

## Parsley

Petroselinum, any variety





Parsley is a biennial, which means it lives two years. It blooms the second year, and will reseed. The seedlings should be allowed to grow wherever they are, unless they are seriously interfering with another plant. Parsley needs no special care.









Parsley is a host plant for the Black Swallowtail caterpiller. The caterpiller changes in appearance as it developes, with the earliest stages resembling bird droppings. The mature stage, with some color variations, is shown above.

## Pentas

#### Pentas lanceolata, several cultivars





Pentas are available in various colors, including white lavender, pink, and red. They are all excellent nectar flowers for butterflies, and the redder tones also attract hummingbirds. Pentas are not hardy in Ohio, so must be grown as annuals. Pinching will promote branching and more flowering.

## Snapdragon

Antirrhinum majus, any cultivar



Snapdragons are annuals, and need no special care, although deadheading will prolong bloom.

Care must be taken when deadheading that eggs, caterpillers, and cocoons, are not removed. Snapdragons will reseed, and do not need to be pulled out unless they are crowding other plants. Dead plants can be removed in late fall.





The caterpiller of the Buckeye Butterfly feeds on many plants, including snapdragons. This butterfly also gets nutrients from mud puddles.

## SPIDER FLOWER or BEEPLANT

#### Cleome hassleriana-any cultivar



Annuals, no special care needed. They will reseed, and can be pulled out if they are crowding other plants, or are much taller than surrounding plants





Checkered white

Checkered White caterpillers feed on this plant. Pupae can overwinter, so be careful about discarding dead plant material. The chrysalis is blue-gray with black speckles.

## Verbena

Verbena bonariensis, v. x hybrida many cultivars







Verbena x hybrida

Verbena x hybrida cultivars are excellent low, spreading ground covers. They are available in many colors. V. bonariensis is a tall growing plant. They all have a long blooming period, and are heat and drought tolerant. No special care is needed.

Verbenas are host plants for the Buckeye butterfly, which also feeds on Snapdragons.

#### **Zinnia**

#### **Profusion**



Blooms – Summer Ht. 12-15"

Little or no deadheading necessary

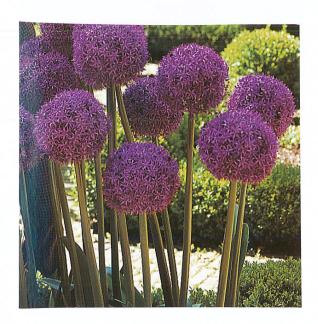
Remove dead plants after frost.

## Perennials

Allium **Arabis** Aster, (K1, K2), Host for Pearl Crescent caterpiller Beardtongue, (Q) Bee Balm, (J) Butterfly Bush, (A) Butterfly Weed, (M), Host for Monarch caterpiller Columbine Coreopsis, (N1, N2) Foxglove, (G) Hyssop, (H) Joe Pye Weed, (C) Lamium, Host for Red Admiral, Eastern Comma, and Question Mark caterpillers Liatris, (L) Lilac, (D) Pearly Everlasting, (O), Host for American Painted Lady caterpiller Purple Coneflower, (F) Salvia, (P) Sedum, (E), Host for Varigated Fritillary caterpiller Violet, Host for Buckeye caterpiller Weigela, (B) Yarrow, (11,12)

Plants without letters do not have specific places on the plant map. They should be allowed to grow wherever they appear, as long as they are not crowding out the plants assigned to that space.

#### **Allium**



Blooms – late spring to early summer.

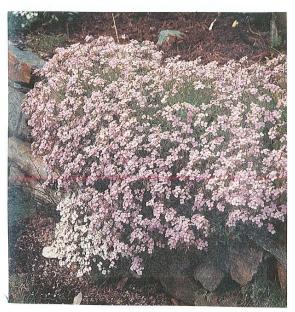
Foliage (appearing grass-like the first year then strap-like by the third year will die down

Globes can remain to reseed or clean up as desired

### **Arabis**

### **Rock cress**

Cruciferae albida



A large genus, but most species are too invasive for the garden. Loose clusters of white flowers on short stems 6-9 inches long. Forms a large mat. Requires full sun.

## Aster

Aster novae-angliae 'Purple Dome,' and unknown



Asters flower in the fall, and do not need much care. Purple Dome is about 2' tall and will not fall over; taller types can be cut back 1/2-2/3 in early-mid June. Lower leaves may die due to dry weather. Clumps will expand by underground rhizomes, and can be divided if they get too large.





Asters are a host plant for the Pearl Crescent caterpiller. Young larvae feed as a group. As they get bigger, they move out and become solitary feeders. When mature they are dark brown or black, with yollow stripes on each side, yellow spots on top, and brownish-yellow spines. Male Pearl Crescent butterflies are very territorial, and will defend their area. They have been known to fly at humans!

## Beard Tongue Penstemon

#### Scrophulariaceae







A very large genus of herbaceous perennials, most native to North America. Colorful tubular flowers form close to the stem in spikes 12-24 inches tall. Requires well-drained soil and sun. Will not flourish in poor conditions. Dead heading will produce a second flush of bloom. (See back)

#### Beard Tongue Penstemon (Continued)

#### PENSTEMON (Beardtongue)

An essential plant in any xeriscape, Penstemon are unsurpassed in attracting hummingbirds to your garden. For beginners, we recommend growing a few of the easier species like Rocky Mountain Beardtongue (P. strictus), Pineleaf Beardtongue (P. pinifolius) and the beautiful Penstemon Elfin Pink'.

Because many *Penstemon* are adapted to grow in harsh Western habitats, it is important to keep a few cultural considerations in mind when bringing them into our gardens:

- 1. Plant only in well-drained soils; wet clay soils and Penstemon aren't compatible. Avoid overly enriched soils; too much compost can shorten their life span. (See p. 40 for details on "Proper Soil Preparation".)
- 2. Plant high, leaving the top of the rootball just above the surrounding soil to avoid burying the crown of the plant.
- 3. Avoid bark, grass clippings or compost as mulch materials. These mulches are detrimental to healthy Beardtongues. They will cause disease in wet, cold weather. It is better to leave them non-mulched or use gravel.

  4. Allow to re-seed. Penstemon will sometimes live for only 2 or 3 years (e.g., P palmeri). To keep them going, allow some of the plants to set seed (don't deadhead them). The volunteer seedlings will be more vigorous and longer lived than the original parent plant.

  5. Earthlig consider.
- 5. Fertilize sparingly. Beardtongues like "tough love" and need only to be fertilized once each year in the fall. Apply a light application of an organic or natural fertilizer. Yum Yum Mix (p. 40) is an excellent fertilizer for Penstemon and other native plants. It has a high trace mineral and phosphorus content while being low in nitrogen.

#### **Bee Balm**

#### **Jacob Cline**

#### Monarda



Member of mint family.

Blooms July – August Ht. – 36-48"

Remove dead foliage & stems after frost.

Divide every 3-4 years to rejuvenate.

## **Butterfly Bush**

#### Buddleia davidii



Tall shrub that grows up to 10 feet with long racemes up to 2 feet in shades of pink, purple, white and yellow. Attracts butterflies and humming birds. Should be pruned back hard in spring, cutting out old dead wood from the past year. Plant in full sun in well-drained soil.

## Butterfly Weed Asclepias tuberosa



A member of the milkweed family, this plant is an important nectar source for many varieties of butterflies. It is frequently late to emerge in the spring, and doesn't need pruning or deadheading. Dead stalks can be left until spring to mark the plant location.







Milkweeds are the ONLY food source for the caterpillar of the Monarch butterfly.

#### Columbine

## Aquilegia canadensis and other cultivars







Blooms – early spring Ht. 1-3 ft.

Spent flower heads can be allowed to go to seed and plants cut down for neatness at end of season.

## Coreopis

### **Tickweed**

Compositae



A bounty of blooms over a long season- summer well into fall. Tough and long-lived, it tolerates heat and drought. Dead-heading promotes rebloom. Moombeam is a creamy yellow and Golden Shower a deep rich yellow.

Foxglove Digitalis



Perennials or biennials originating in Europe. Tall spikes of tubular flowers in shades of pink, purple, yellow and apricot. Grow in either sun or partial shade in rich, well-drained moist soil. Most forms are short lived. Dead heading will produce a second bloom.

## Hyssop

#### Labiateae officinale



Blue flowers with semi evergreen leaves – aromatic in nature. Likes light dry soil and full sun.

### **HYSOPP (Continued)**

AGASTACHE (ah-gah'stah-kee) Lamiaceae
This genus of about 30 aromatic species is native to
central and eastern Asia, Mexico, and the United
States. Careful breeding and selection have given us
newcomers that offer exceptional garden performance and a long season of bloom. In full sun and
well-drained soil, they happily shrug off both summer heat and early frosts. Bareroot, except as noted.

A. 'Blue Fortune' S20970. Robust 'Blue Fortune' is a mass of soft powder-blue flower spikes from July onwards, making it a magnet for butterflies and admiring visitors alike. The well-branched stems are a great addition to bouquets.

ZONES 5–9S/10W JUL−OCT HT36−48" SP15" ○
each \$9.25, 3 \$27.25, 6 \$53.25

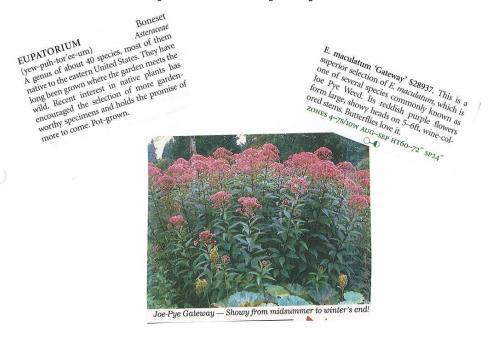
A. 'Firebird' S20980. During the dog days of summer, 'Firebird' produces long-lasting blooms that range from a coppery orange to a glowing coral-pink over delicate, almost airy, fragrant gray-green foliage. A hard-to-find combination. Pot-grown.

ZONES 5-9S/10W JUL-OCT HT24-30" SP12" O



## Joe-Pye Weed

#### **Eupatorium purpureum**



One of the most versatile native U.S. plants, this bushy plant grows up to 5 feet tall with huge flower heads in shades of pink, lilac and purple. Blooms in late summer in full sun to part shade.

## Lamium or Dead Nettle

Lamium maculatum, any variety





Lamiums are low growing, spreading ground covers, with varigated foliage. Flower colors vary according to variety. It prefers partial sun.







Red Admiral caterpillers feed on Lamium. Young caterpillers live in a shelter made of a folded leaf, while older ones make a nest of several leaves held together by silk. Cocoons vary in color from gray-brown to red-brown, with black markings and golden bumps. Adult butterflies will feed on fermenting fruit.

## Lamium continued

Eastern Comma and Question Mark larvae also feed on Lamium.







fall and spring form, dorsal



The Eastern Comma gets its name from the silver "comma" shaped marking on the under side of the lower wing. They vary in color from spring to fall. Its caterpillers also vary in color, from black to green-brown and white. Spine colors go from black to white. Mature caterpillers feed at night, and hide under leaves whose edges have been drawn together with silk. Their chrysalis are gray or brown with two rows of gold or silver projections.



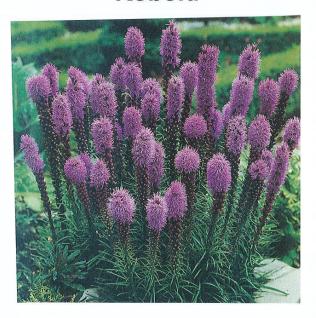




The Question mark butterfly gets its name from the silver "question mark" on the under side of its lower wing. This butterfly will feed on rotting fruit. The caterpiller is extremely variable in color. The body can be black to yellow, sometimes with red or yellow irrregular stripes along the sides. Bumps on the back can go from yellow to red, and spines from yellow to red-orange. The pupae varies from yellow to dark brown, and has metallic silver spots.

#### **Liatris Spicata**

#### Kobold



Blooms – June into early August

If spent flowering stems are cut before frost – leave 2/3 of the stem for plant food production.

Remove dead stems after frost.

## Lilac

#### **Miss Canada**

### Syringa prestonia



Grows to a small spreading tree 10-12 ft.

Sporadic blooms all summer

Prune out dead wood.

## PEARLY EVERLASTING

#### Anaphalis margaritacea 'New Snow'



Pearly Everlasting spreads by underground stems to form clumps. Divide every 3-4 years in late fall or early spring, if necessary. Dead stalks may be cut back at these times. Established plants are drought tolerant, but may lose lower leaves in dry weather







Pearly Everlasting is a host plant for the caterpillars of the American Painted Lady butterfly. Young caterpillers live and feed in a nest of leaves tied together with silk. Older caterpillers abandon the nest. The chrysalis is brown during the first few days, but changes to gray, marked with brown vertical stripes. The chrysalis can also be golden green marked with purple-brown.

#### **Purple Coneflower**

#### **Echinacea Magnus**

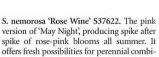


Blooms - Mid to late summer Ht. 3-4 ft.

Clean up dead stems and foliage after frost or leave seed heads for birds until spring.

Divide every 3-4yrs. in spring to rejuvenate.

# Salvia Sage Labiatae

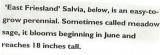


nations. Pot-grown.

ZONES 4–78/10W MAY—AUG HT18" SP15" *each* \$9.25, 3 \$26.25, 6 \$49.95



Zones 4–7s/10w may–aug ht18–24" sp15"  $\bigcirc$ 







Only a few perennials in this genus are hardy, but the ones that are provide spikes of densely packed flowers in shades of blue, pink and purple. Salvia has a long bloom period, and it does well in hot dry areas. All plants prefer sun and good drainage. Dead heading may produce a lighter second bloom.

## SEDUM

Sedum spectabile 'Autumn Joy'



Sedum 'Autum Joy' can be pinched back by half for height control when stalks get 8 inches tall, if desired. This may delay flowering slightly. It does not need to be deadheaded. Old flower stalks should be cut off in spring.

Sedum is a host plant for the caterpillars of the Varigated Fritillary butterfly, as is violet. The chrysalis is an iridescent pearly white, with dark brown patches and points.





## Viola, any variety



Violets don't need any special care. They are low, spring flowering plants that will increase by creeping stems and reseeding. Pull them out if they become invasive.

Larvae of three Fritillaries feed on violets, including the Varigated Fritillary, which also feeds on sedum.

Great Spangled Fritillary larvae feed on violets. The larvae hatch in the fall, and overwinter without feeding. They emerge in spring, and feed at night, resting off the plant during the day. The male butterflies usually emerge in June, the females about a month later.

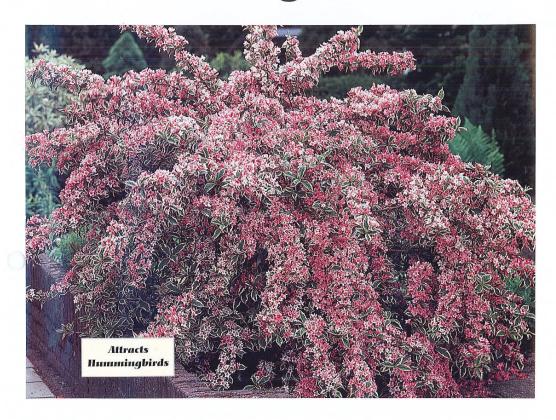






Meadow Fritillary caterpillars also feed on violets. The mature caterpiller is shiny green with a fuzzy band along the sides. Spines and bumps on the top are vellow-browm. This caterpiller also overwinters, and matures into a butterfly the following year.

## Weigela



After flowering, prune branches that have bloomed back to unflowered side branches.

Prune out older branches and dead wood.

#### **Yarrow**

## Coronation Gold & Moonshine Achillea filipendulina



Blooms June-July Coronation Gold 3 ft. - Moonshine 1 ½ ft.

Remove dead foliage & stems after frost.

Divide every 3-4 years to rejuvenate.