

### The Hospitable Gardener:

#### *Etiquette Tips for Lepidoptera Hosts and Menu Suggestions*

*Presented by Alyssa Ford Morel*

### Do's and Don'ts to be an Excellent Butterfly Host

1. Do offer a drink of water: Put in a butterfly puddle
  - Butterflies, particularly males, need salts and other minerals.
  - Puddles can be created with a buried container or liner filled with sand, soil, or gravel plus water.
  - Place near thirsty plants.
  - Give a landing spot.
  - Occasionally add salt, compost or fruit.
2. Do offer a warm space: Plant in the sun and out of the wind.
  - Butterflies are cold-blooded and need the sun to warm up. Their ideal body temperature is about 85 degrees.
3. Do have something to eat whenever they arrive: Have season-long blooms
  - Consult a bloom-time calendar or create your own.
4. Do offer food they can see: Plant in mass
  - Butterflies are generally near-sighted, and rely on big blocks of color to find flowers.
  - Butterflies prefer red or purple flowers. (Bees prefer white, yellow and blue, and hummingbirds prefer red, tubular flowers.)
5. Don't poison your guests: Eschew pesticides
  - Pesticides don't discriminate which insects they kill.
  - Pesticides kill life in the soil.
  - Organic pesticides are still pesticides.
  - Fungicides may be just as bad.
  - Use non-toxic controls as a first choice.
  - Cultivate natural controls and change your standards.
  - If you do use chemicals, read and follow label instructions.

## Welcoming Beautiful Butterflies, Moths and Skippers

### 6. Don't kill them where they rest: Leave the leaves

- Lepidoptera overwinter in one of the stages of development: egg, caterpillar, chrysalis or adult. Most of the overwintering lepidoptera use leaf litter for winter cover.
- Leaves provide good mulch over winter and break down during the warm months.
- Rake leaves off lawns into beds. If your beds aren't large enough for the leaves, expand the beds.
- Plant stems provide nesting spaces for other insects. Leave 12" to 18" of stems that are the diameter of a pencil or larger for nesting bees.
- Learn to embrace nature's groundcover. If you must clean up, wait until there are five consecutive nights above 50 degrees.

### 7. Do offer them the healthy food they need: Native Plants

- As the basis of the local food chain, native plants are key for maintaining biodiversity.
- Native plants have co-evolved in the environment with the fungi, microbes, insects and wildlife thereby forming mutually dependent relationships.
- Excellent range of choices in Northern Virginia.
- Adapted to local growing conditions, including weather and water.
- Adapted to feed local insects but not be killed by them.
- We have great information about and access to native plants in Northern Virginia.
- Aim at a minimum of 70 percent native biomass to make a real difference in supporting wildlife.

A couple of notes . . .

#### 1. Straight species vs. cultivars - Cultivars risk being less attractive or palatable or nutritious to insects. Look out for:

- Double flowers and change to fertile areas
- Flower or leaf color change.

#### 2. Butterfly Bush is a classic non-native butterfly attractor. But,

- It is invasive
- Its abundant nectar pulls pollinators away from native plants that need pollination.

### Great Host Plants to Consider for Your Garden

#### 1. Milkweed (*Asclepias*)

- Host plants for Monarch butterfly (*Danaus plexippus*) and Milkweed tussock moth (*Euchaetes egle*).
- Over 100 species of milkweed in North America. Ten of them are found in our area. The three most common in Arlington are Common Milkweed (*Asclepias syriaca*), [Swamp Milkweed \(\*Asclepias incarnata\*\)](#), and [Butterfly-weed \(\*Asclepias tuberosa\*\)](#).
- Common Milkweed, which is the favorite for Monarchs, is a very aggressive spreader.
- Avoid using species not local to our area - may discourage migration at appropriate time and can serve as a disease vector.
- Good idea to cut back while growing to encourage tender leaves later in the season.

#### 2. Pussytoes (*Antennaria*)

- Hosts American lady (*Vanessa virginiensis*).
- *Antennaria neglecta* is great for hot sun. *Antennaria plantaginifolia* likes some shade, too.
- Likes moist to dry conditions.

#### 3. Violets (*Viola*)

- Hosts Great spangled fritillary (*Speyeria cybele*), Meadow fritillary (*Boloria Bellona*), *Variegated fritillary* (*Euptoieta claudia*).
- Easy-to-grow flowers that take a variety of conditions.

#### 4. Golden Alexander (*Zizia aurea*)

- Hosts Black Swallowtail (*Papilio polyxenes*).
- A member of the *Apiaceae* or *umbelliferae* family, which includes carrots, celery, dill, fennel, lovage, and parsley.
- Grows one to two feet high, and takes all light conditions.
- Of special value to native bees, this plant also attracts beneficial insects that prey on pests.

#### 5. [Spicebush \(\*Lindera benzoin\*\)](#)

- Hosts Spicebush swallowtail (*Papilio troilus*).
- A shrub or small tree that grows 6.5 to 16 feet. Takes sun to shade.
- Dioecious, separate male and female plants. Both are needed to set drupes.
- Drupes have a high fatty-lipid content and are excellent for birds.

## Welcoming Beautiful Butterflies, Moths and Skippers

- Beautiful yellow fall foliage.
- Deer resistant.
- Aromatic. Used for teas.

### 6. [Pawpaw \(\*Asimina triloba\*\)](#)

- Hosts Zebra swallowtail (*Eurytides marcellus*) and Pawpaw Sphinx Moth (*Dolba hyloeus*).
- Large shrub or small tree at 10 to 40 feet high. Takes sun to shade. Like moist soil.
- A member of the custard-apple family (Annonaceae) with tasty fruit.
- Best fruit set when pollinated by a different Pawpaw.
- Deer resistant.

### 7. Blueberries (*Vaccinium*)

- Hosts Striped hairstreak (*Satyrium liparops*) and Brown elfin (*Callophrys augustus*).
- Lowbush and [Highbush](#) (1.5 - 2' and 6 - 12') varieties.
- Though self-fertile, best berry-set occurs with more than one variety with synchronous bloom.
- Likes acid soil.
- High wildlife value.
- Brilliant red to burgundy autumn color.

## Great Nectar Plants

### 1. [New England Aster \(\*Symphotrichum novae-angliae\*\)](#)

- Host to Pearl Crescent (*Phyciodes tharos*) butterfly.
- Asters support 112 species of Lepidoptera
- Like sun and moist soil.
- Can grow to 6 feet tall.
- Cut back during growing season until early July to make a more compact plant.
- Provides abundant late-season bloom.

### 2. [Purple Coneflower \(\*Echinacea purpurea\*\)](#)

- Coneflowers support 12 species of Lepidoptera.
- Grows to 2 to 4 feet high.
- Prefers sun and moist soil.
- Seed heads offer winter interest and attract Goldfinches.



### 3. [Gayflower \(\*Liatris\*\)](#)

- Purple or white spikes 1 to 4 feet provide vertical interest.
- Likes sun and moist soil.
- Blooms from the top down.
- Inexpensive if you purchase as tuber.

### 4. [Goldenrod \(\*Solidago\*\)](#)

- Supports 115 species of Lepidoptera.
- Grows 1 to 6.5 feet - cut back until early July to make more compact.
- Often confused with hayfever-causing Ragweed.
- Great for a late season show.
- Likes sun and moist soil.
- Deer rarely severely damage.

### 5. Joe-Pye Weed ([Eutrochium dubium](#) and *Eutrochium fistulosum*)

- Eupatorium (Joe-Pye and Bonesets) support 42 species of Lepidoptera.
- Larval host to several moths.
- Grow 2 to 8 feet, depending on type.
- Like sun and moist soil.

### 6. Blue Wild Indigo ([Baptisia australis](#)) and Yellow Wild Indigo (*Baptisia tinctoria*)

- Hosts Wild indigo duskywing (*Erynnis baltisiae*), Eastern Tailed-Blue (*Cupido comyntas*), and Hoary Edge Skipper (*Acalarus lyciades*).
- Perennial that grows up to 5 feet, looks shrub-like.
- A member of the pea family, *Baptisia* fixes nitrogen.
- High value to native bees.
- An extensive root system makes this plant difficult to move - and it doesn't like being moved.

### 7. [Field Thistle \(\*Cirsium discolor\*\)](#)

- Host plant to Painted Lady (*Vanessa cardui*).
- A biennial, growing to 3 to 7 feet in second year.
- Contrast with invasive Bull thistle - Field thistle has white undersides.
- Goldfinches use thistledown to line nests.
- Taproot makes this plant tricky to transplant.
- Great late-season pollinator attractor.



### A Dozen Additional Supportive Native Plants

#### TREES

Oak Species (Quercus)	557 Lepidoptera species supported
Black Cherry (Prunus)	456 Lepidoptera species supported
Willow (Salix)	455 Lepidoptera species supported
Birch (Betula)	413 Lepidoptera species supported
Poplar, Cottonwood (Salicaceae)	368 Lepidoptera species supported
Crabapple (Malus)	311 Lepidoptera species supported

#### PERENNIALS

Strawberry (Fragaria)	67 Lepidoptera species supported
Switchgrass (Panicum)	25 Lepidoptera species supported
Geranium (Geranium)	25 Lepidoptera species supported
Rosemallow (Hibiscus)	25 Lepidoptera species supported
Lupine (Lupinus)	24 Lepidoptera species supported
Ironweed (Vernonia)	19 Lepidoptera species supported

Excerpted from Doug Tallamy

<https://canr.udel.edu/wp-content/uploads/sites/16/2018/10/30121131/20-Most-Valuable-for-Biodiversity.pdf>

### Helpful Resources

- Master Gardeners of Northern Virginia Tried and True Selections plant information sheets: <https://mgnv.org/plants/>
- Audubon at Home Northern Virginia: <http://audubonva.org/audubon-at-home-1>
- Mid-Atlantic plant list for butterflies from Xerces: <https://xerces.org/publications/plant-lists/native-plants-for-pollinators-and-beneficial-insects-mid-atlantic>
- Plant NOVA Natives website
  - For native plants guide: <https://www.plantnovanatives.org/>
  - For native plant sales: <https://www.plantnovanatives.org/local-native-plant-sales>
  - Creating a butterfly garden: <https://www.plantnovanatives.org/butterflies>

