

A photograph of a yellow and black butterfly, likely a Gulf fritillary, perched on a purple flower. The background shows a lush garden with green foliage and a body of water in the distance.

# The Lost Summer of 2020: A Perfect Time to Plant Your Butterfly Garden!

Northern Neck Master Gardeners  
Summer 2020

Did you notice that this year  
butterflies seemed to appear in  
our gardens later than usual and  
in fewer numbers?

# Where were they in the spring?

- ▣ Did they just arrive late?
- ▣ Are reduced populations cyclical?
- ▣ Did the weather affect their numbers?

OR

- ▣ **Will this be a continuing trend – the result of declining habitat, limited food sources, destruction of habitat, and/or increased pesticide use?**



We cannot do anything about the weather (or the pandemic).

During these times when we may be spending more time at home, we can provide essential habitat – food and cover, places to lay eggs and raise young – for our native wildlife, especially insects.

**Plant a Butterfly/Pollinator Garden!**



# Some Context:

## The World of Insects – What is Happening?

- ▣ Globally, terrestrial insects appear to be declining at a rate of 9% per decade.
- ▣ More than 40% of insect species are declining and a third are endangered.
- ▣ Some of the insects most affected are bees, butterflies, moths, beetles, dragonflies, and damselflies.
- ▣ Example: Between 2000-2009, the number of widespread butterfly species on farmed land in the UK fell by 58%

(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4662585/>)

# Why Should We Worry?

## 1. Insects = Protein

(300 times more efficient than cows)

Although insects are near the bottom of the food chain, many creatures depend on them, directly or indirectly, as a food source.



Our food of the future?  
3,000 ethnic groups in 130  
countries already eat 2,086  
species of insects.

(Ramos-Elorduy, Julieta; Menzel, Peter (1998). **Creepy crawly cuisine: the gourmet guide to edible insects**)

## 2. Insects = pollinators.

The plant world relies on their services. Approximately 80% of flowering plants are pollinated by insects.

Commercial agriculture depends on insects for pollination and crop production. 35% of the world's crop pollination depends directly or indirectly on insects.

Insect pollinators contribute \$29 billion to the US economy



### **3. Insects = decomposers**

Insects recycle, break down biomass, and generate organic matter that fertilizes plants.

### **4. Insects = biological controls**

Their value as natural pest control is estimated at \$5.4 billion in the U.S. alone



# Back to the Butterflies

Butterflies are insects that pollinate, provide food (themselves and through their caterpillars) and also enrich our lives aesthetically – colorful, beautiful, graceful, mesmerizing.



# Some Common Butterflies in Our Gardens



For a more complete list, with identifications,  
see website entry “Common Butterflies on the Northern Neck.”

# Plants for Butterflies

- ▣ Butterflies require both **host plants** (to lay their eggs and to feed their larvae) and **nectar plants**, to sustain the mature butterflies.
- ▣ Each species of butterfly requires specific plants for its caterpillars to eat.
- ▣ Food for mature butterflies consists of an assortment of nectar-rich flowers and blooming shrubs. Some even like rotting fruit and tree sap!



# Know their Caterpillars and what they eat



# Eastern Swallowtail



## Host Plants:

Dill, Fennel,  
Queen Anne's Lace





# Black Swallowtail



**Host Plants: Dill, Fennel, Queen Anne's Lace**

# Spicebush Swallowtail



**Host Plants:**  
Spicebush,  
sassafras,  
swamp bay



# Zebra Swallowtail



Host  
Plant:

Paw Paw





# American Painted Lady



Host Plants:

*Antennaria dioica*,  
Pussy Toes



# Buckeye



**Host Plants:**

**Plantain,  
Snapdragon**





# Cabbage White



**Host Plants: Cabbage, Nasturtium**

# Clouded Sulphur



**Host Plant:**

**White Clover**



# Cloudless Sulphur



**Host Plants:**

**Senna family  
(Partridge Pea)**





# Eastern Tailed Blue



**Host Plants:**

**Alfalfa,  
Clover,  
Beans**



# Great Fritillary



**Host Plants:**

**Passion Vine  
Violets**





# Monarch

**Host plants:**

**Blood flower,  
Milkweeds**



# Red Admiral



**Host Plant:**

**False  
Nettle**



# Viceroy



Host  
Plants:  
  
Willows





# Top Nectar Flowers for Your Butterfly Garden









# Asters



# Blanket Flower



# Butterfly Weed





# Coneflowers





# Joe Pye Weed



# Lantana





# Milkweed



# Queen Anne's Lace





# Summer Phlox



# Tall Verbena





# Zinnias





# What about Butterfly Bush?

- ▣ Consider a native alternative to butterfly bush:
  - Sweet Pepperbush (*Clethra alnifolia*)
  - Buttonbush (*Cephalanthus occidentalis*)
  - New Jersey Tea (*Ceanothus americanus*)
- ▣ Butterfly bush is a fast growing invasive that spreads easily and outcompetes native plants.
- ▣ Butterfly bush is not a host plant for any butterfly species.
- ▣ Butterfly bush is butterfly junk food. Its nectar is a low-quality source of energy-producing proteins.
- ▣ Over time, sterile butterfly bush cultivars are displaying the ability to reproduce.

# And some other favorites from the gardens of our Northern Neck Master Gardeners



Anise Hyssop  
(*Agastache* 'Blue  
Fortune', 'Golden  
Jubilee')



# Bachelor Buttons





Black Eyed Susan  
(*Rudbeckia  
fulgida*)





Bee Balm  
(*Monarda  
didyma*)





Creeping Phlox  
(*Phlox subulata*)





Tatarian Aster  
*Aster Tataricus* 'Jindai'







Abelia 'Canyon Creek'



Mountain Mint (*Pycnanthemum*)



# Design Tips for a Butterfly Garden



- ❑ Plant continuous clumps of varied, colorful nectar plants;
- ❑ Plant for a season-long supply of nectar – flowers blooming throughout the summer;
- ❑ Include sacrificial plants for the larvae – caterpillars may eat all your parsley and dill;
- ❑ Have a water feature;
- ❑ Avoid all use of pesticides.



# Support biodiversity – Plant a Pollinator Garden!

## WHY?

- ▣ Development is destroying natural habitat at an ever increasing pace.
- ▣ Food and shelter for insects, and all creatures that depend upon them, are declining. Extinction already threatens many species.
- ▣ Well-designed suburban gardens can do much to replace vanishing areas of natural vegetation.



# WHEN?

- ▣ **NOW:** Start thinking and planning.  
(Remember to include both host plants and nectar plants.)
- ▣ Select a sunny area for your garden. Get a soil test. Prepare the soil - amend with compost. Research and select your desired plants.
- ▣ **IN THE FALL:** Buy your plants and get them in the ground. Mulch for weed, moisture and temperature control. Water until established.
- ▣ **IN THE SPRING:** Enjoy!

Now is the time to act.  
Let's use our pandemic-enforced time at  
home to make a change and make a  
difference

- ▣ “Like it or not, gardeners have become important players in the management of our nation's wildlife.”
- ▣ “As gardeners and stewards of our land, we have never been so empowered – and the ecological stakes have never been so high.”

Doug Tallamy,  
Chair, Dept of Entomology  
and Wildlife Ecology  
University of Delaware

# Additional Sources of Information.

## Recommended Books:

- ▣ Burris J. and Richards, W. 'The Life Cycles of Butterflies'. Storey Publishing, 2006.
- ▣ Tallamy, D. 'Bringing Nature Home: How you can Sustain Wildlife with Native Plants'. Timber Press, 2007.
- ▣ 'The Top 25 Butterfly Garden Plants'.  
[www.plantdelights.com](http://www.plantdelights.com)



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