

## Butterflies and Pollinators

For thousands of years humans have depended on pollinators to provide the essential service of pollinating the many plants that provide our food: vegetables, fruits, berries, nuts, oil, coffee chocolate and many others.

Now, pollinators need us to help them. Why? What can we as Fall Creek residents do? And what is a pollinator, anyway?



Flowering plants produce pollen which is a component of their sexual reproduction cycle. Any organism that comes in contact with the pollen from a species of plant and transfers that pollen to another plant of the same species which enables that species to be fertilized and produce fruit or seed is a pollinator. This process is called pollination. Pollinators include bats, other mammals, birds, beetles, bees, flies, butterflies and many other insects. The overwhelming majority of pollinators are insects.

Photo: Swallowtail butterfly on purple coneflower.

### Pollinator Value:

According to the USDA Natural Resources Conservation Service, 35 per cent of the world's food crops **"require"** animal or insect pollination! Up to 75 per cent of the world's food crops **"rely at least in part"** on pollination by some pollinator! So much of our food today comes from other areas of the world and what happens in other countries impacts us. But we still grow many of our fruits and vegetables. More importantly we are talking about a significant portion of the food people eat. Additionally, we also rely on flowering plants for forage for livestock, construction material, fibers, and medicines. This is no small matter, economically we are talking about hundreds of billions of dollars involved in the production and delivery of foods, all due to pollinators.

But pollination is so much more than just providing us with food. Nearly 90 per cent of wild flowering plants depend to some degree on animal pollinators (Food and Agriculture Organization of the United Nations). Just stop and think what our world be like if we lost 75 per cent of the flowering plants!

For example, would you miss the flowering of the Southern Magnolias growing in Fall Creek? Magnolias are one of the oldest (125 million years old) flowering trees still in existence! They are pollinated primarily by beetles. We have enjoyed the beauty of these trees, their dark green leaves with the cinnamon undersides, their huge bright white flowers, and their soft, clean, fragrance on our walks this spring when they were in flower. Their continued existence depends on the health of beetle populations.

Can you imagine a world without coffee and chocolate?! Coffee and chocolate also depend on pollinators.



Beetle Photo: [en.wikipedia.org/wiki/beetle](http://en.wikipedia.org/wiki/beetle). Amazingly colorful Beetles.

### Decline in Pollinators:

Research in Germany shows a 76 per cent loss in insect (pollinators) biomass (population) between 1989 and 2016. Significant declines have been reported in North America, Europe, Asia, Central and South America, Africa, and Australia. Butterflies and moths constitute more than half of all insect species listed as endangered (<http://ecos.fws.gov/servlet/TESSWebpage>) These alarming declines are thought to result from loss of habitat (loss of native flowering plants, living areas, and reproduction habitat), fragmentation and degradation (pesticides) of the little remaining habitat, competition from invasive species, and introduced diseases.

### What We Can Do:

The number one action that we can take to help our butterflies and other pollinators is to plant flowering plants that are **“native to the region”** that you live in. “Loosely speaking “ a native plant is one that occurs naturally in a region (not brought in by humans), and especially that is not imported from other countries. Native flowering trees, shrubs, vines, grasses, and wildflowers are what we need to plant. Be sure to select a variety of plants so that you have flowers in the spring, summer, and fall. Additionally, the greater the diversity of native plants you have the better the habitat for pollinators. Here is a link to plants that can help butterflies, birds and pollinators:

<https://fallcreekhouston.com/landscape-committee/>

The second action that we can take to help pollinators is to eliminate (or at least dramatically reduce) the use of pesticides and other chemicals used in the landscaping industry. Rest assured you will not be overrun and your family’s health will be much better for it. The only pesticide I use (sparingly) is to rid my yard of the non-native fire ant.



A third action we can take is to create suitable habitat for insects to nest and live in our yards. Planting native plants is a good start, but you can also add a bee box or bee chalet (see photo) for our plump, adorable native bumblebee to nest and sleep in. I took this image in a Costco. Additionally, leave a small patch of soil exposed (no grass or plants), as some of our native bees nest in the ground. A small brush pile in a corner of your yard is like a natural bee chalet where they can rest, sleep or nest. Each of these efforts will provide nesting/housing for

pollinators. Our native bees do not nest in large hives like the imported European Honeybee, so usually a small family of 5-7 bees will take up residence if you are lucky!

There are several other actions you can take to create a better habitat for pollinators in your yard. Please email me if you would like more information: [landscape@fallcreeklife.com](mailto:landscape@fallcreeklife.com)

Most people are pleasantly surprised by how much they enjoy their own little nature preserve they've created and they look forward to discovering the new butterflies and other pollinators that show up throughout the year. Creating a haven for pollinators is also a great way to get children outside!

Glenn Olsen