

PLANTING FOR POLLINATORS

Winter is in full force and inevitably turns our thoughts to early spring. Gardeners naturally start thinking of the creative possibilities for their gardens. For most gardeners, the joy of the entertaining dance of our favorite pollinators, from the ballet performance of butterflies, moths and skippers (*Order Lepidoptera*) to the business of honey, bumble, carpenter and sweat bees (*Order Hymenoptera*) and the magic of hummingbirds, is motivation enough to plan our gardens to attract these delights of nature. Naturally, we try to dismiss from our thoughts those pesky pollinators, such as flies, beetles, wasps and ants.

Encouraging pollinators to visit our gardens goes beyond entertainment. Planting flowers and plants to encourage visits from our pollinators is also good stewardship over our earth. Pollinating plants are not only important because the pollen is a food source for our winged friends, but they also propagate the flowers and plants by transferring the pollen from the stamen, which sticks to their legs and body, to the plants' stigma and allows the plant to develop seeds in the ovule at the stigma's base.

The best Pollinator plants are native species since they are adapted to Oklahoma soil and climate. For a gardener who desires a flower that blooms all summer long and attracts most all the pollinators, the purple-tinted **coneflower** or **bee balm** or yellow tinted **compassplant** should be considered. Not only do bees and butterflies seek out these flowers, but also the hummingbird, swallowtails and other birds find them appealing. The coral honeysuckle will also attract bees, butterflies and hummingbirds, but its bloom time is limited to May and June. Another favorite is **Russian sage** (*Perovskia atriplicifolia*), containing many small purple petals along the 12 to 24 inch stem (see photo below with yellow yarrow bordering). It thrives in full sun with little maintenance and grows well in Oklahoma soil without additional fertilization while spreading nicely each year. Local bee and butterfly populations find all of these extremely inviting. By the way, in 1995, the Russian sage was voted as the Perennial Plant Associations Plant of the year.



A few other native perennial Oklahoma pollinators which would add color to any garden would be:

- **Goldenrod** - a yellow flower which provides nectar for pollinators in the late summer and fall
- **Mexican hat** - a deep red flower which blooms all summer
- **Maximilian sunflower** - a narrow leaf sunflower which blooms in mid-summer into early fall, and other sunflower varieties
- **Indian blanket** - a rich red multi-hued wild flower which blooms all summer, and has the honor of being the Oklahoma State flower
- **Purple prairie flower** - a summer bloomer
- **Lance leaf tickseed** - a spring blooming yellow flower
- **Lead plant** - a purple flower resembling the Russian sage
- **Aster** - a white flower which blooms in late summer
- **Basket-flower** - a purple flower which blooms in spring and early summer.

Any of these native wildflowers will do very well in Oklahoma's soil and climate.

Now, we must momentarily turn to the "dark side of things". The most ominous threats to our Pollinators The statement about herbicides and pesticides is not true. The main cause for the Monarch's decline according to all legitimate sources is loss of habitat. Pesticides may play a small part, but the big culprit is that destruction of habitat due to man's agricultural and other activities are the main cause.

are the various herbicides and pesticides on the market. Herbicides can destroy food sources; pesticides can injure or kill our pollinators. This is obviously counter-productive to our planting efforts. Pesticide use around the world has been one of the main factors linked to the drastic decrease in our honey bee and butterfly populations. When using herbicide and/or pesticide sprays, it is very important to carefully read about toxicity warnings.

One of the most dramatic examples of the importance of planting for pollinators and protecting against pesticide toxicity is in the large and beautiful Monarch butterfly (*Danaus plexippus*). Every spring millions of Monarchs make their annual trek from Mexico to North America, making the return trip in the fall. The Monarch specifically seeks out the milkweed plant for the primary purpose of laying her eggs on the milkweed plant. Upon hatching, the larvae (being the caterpillar) require milkweed exclusively for food prior to forming its cocoon (pupa stage) in preparation for becoming another adult Monarch butterfly. But, Monarch numbers have dramatically decreased over the last several years. The main culprit is loss of habitat. While pesticides do kill the Monarch and its larvae and herbicides do destroy the milkweed plant, the main culprit is due to our agricultural practices and other activities. Be aware of this and always be careful when using chemicals. Always follow all label directions.

Gardeners can help the endangered Monarch by planting various milkweed varieties and providing the necessary food for their offspring. The milkweed flower can also brighten up your garden. There are many varieties native to Oklahoma and they are considered perennial flowers. Some of the most colorful varieties include: **butterfly weed**, **showy**, **swamp**, **antelope horn**, **whorled**, **purple** and **white milkweed** – all tend to be favored by many gardeners. In addition, bees are also attracted to most all milkweed varieties milkweed and hummingbirds are also attracted to **butterfly weed** and **swamp** varieties. If a gardener has a spacious open area for planting, the “common” milkweed should be considered since it spreads by rhizomes and will fill up a space without much effort. Because different varieties of milkweeds flower and mature at different times of the year, planting different varieties would be an added benefit to not only the Monarch larvae but also provide a pollen food source for most pollinators during the entire pollinating season.

For an excellent pictorial view of different Milkweed plants for our area, please visit <https://www.TulsaMasterGardeners.org>, click on “HOME”, then “Lawn & Garden Help”, then “Butterflies”, then “Milkweed Native to Oklahoma”.

Sources:

1. Oklahoma Cooperative Extension Fact sheets [EPP-7317](#) and [HLA-6430](#)
2. Biology of Plants, Missouri Botanical Gardens (2009), <http://www.mbgnet.net/bioplants/pollination.html>
3. Kerr Center Guide To Native Plants For Native Pollinators In Oklahoma, by Maura McDermott and David Redhage. Kerr Center for Sustainable Agriculture (2015).
4. Kerr Center Guide To Native Milkweeds of Oklahoma, by Maura McDermott, Kerr Center for Sustainable Agriculture (2015).