

Butterflies, So Far in 2019.

The Monarchs arrived in late March of 2019, unfortunately after the record freeze in mid November and the late freeze this spring, most gardener's milkweed plants had not produced blooms, or foliage enough to accommodate caterpillar production. For gardeners that did have foliage production, there was egg-laying and caterpillars. In some cases, gardeners were able to obtain leafed-out tropical milkweed (*Asclepias curassavica*) from area nurseries. In my landscape a 2-year old green milkweed (*A. viridis*) leafed out and was entirely consumed by Monarch butterflies. Three of the eight supplemental tropical milkweed that I purchased and planted were also consumed by Monarch caterpillars.

It appears that the milkweeds in area landscapes are finally growing. I have received reports of antelope horn (*A. asperula*) and butterfly weed (*A. tuberosa*), blooming along with the tropical milkweed. The foliage should be in time for the queen butterflies to lay their eggs. Queens are related to and resemble the Monarchs. In the summer and fall the usual caterpillars we see on the milkweed are Queens. Queen caterpillars resemble monarch caterpillars, but they have three sets of appendages emerging from the body instead of two, which is the case for monarchs. The third set of appendages emerge from the center of the Queen caterpillar's body.

Milberger's Nursery had an interesting development just before their Butterfly Seminar on May 11. An unidentified group of caterpillars hatched and spread out from the Certified Butterfly Garden. The caterpillars started out as malt colored but quickly became black and furry. Most unusually, they did not seem fussy about their food source, eating gaura, salvia, yarrow, alyssum and even milkweed! Staff was eventually able to identify them as caterpillars of the Salt Marsh moth! A quick mobilization was required to collect all but 2 of the voracious caterpillars when they started moving into the retail plant area!

Moths are very similar to butterflies except they generally fly at night and the antennae ends are feathery instead of clublike as in the case of the butterflies. Other common moths are tomato hornworms and hummingbird moths.

Other butterfly food plants to consider for your landscape are passion vine for Gulf Fritillary; citrus for Giant Swallowtail; parsley, dill or fennel for Black Swallowtail; ash, peach and Mexican plum for Tiger Swallowtail; cannas for Brazilian Skipper; esperanza for Texas Gray Hairstreak, sunflowers for Bordered Patch, cudweed for American Painted Lady, ruellia for Buckeye: and flame acanthus for both Janais Patch, Texas Crescent Spot.

One of the hardest issues to address when considering an initiative to increase butterfly production in your landscape is to come up with a reasonable plan for insecticide use. Here are some ideas to consider.

- 1) You could eliminate insecticide use, but that is tough to do if you have a large garden, and it is not necessary.
- 2) Be prepared to tolerate some level of damage or sharing of your plantings with insects, especially caterpillars.
- 3) Isolate the main portion of your "butterfly garden from plants like peaches or vegetables that are most likely to require insecticides.

- 4) It also works to eliminate some or all the plants from your garden that are likely to require insecticides.
- 5) Use insecticides with limited killing impact and short-term potency. It is important to remember that organic and manufactured insecticides can both kill butterflies and their caterpillars.
- 6) Realize that some compromises might have to be made such as in the case of mosquito sprays to protect youngsters or other vulnerable populations from the viruses they carry. Even in this case, however, the area that is necessary to spray can be reduced with conscientious elimination of breeding habitat, or by use of one of the new bait systems.