IT TAKES A VILLAGE . . .

**Milkweed villages important for monarchs,
but they're only part of the success equation**

By Soni Holladay

Cockrell Butterfly Center Horticulturist / Greenhouse ManagerExcerpted from http://blog.hmns.org/2014/09/it-takes-a-village-a-milkweed-village/

As the obligate host plants for monarch caterpillars, milkweeds are a staple in any butterfly habitat garden. However, many other insects call the genus Asclepias home, giving rise to the concept of a "milkweed village."

Milkweed plants produce cardiac glycocides, bitter-tasting toxins insects sequester to protect themselves from predators. Most if not all milkweed-eating insects have black, yellow and/or orange markings that warns predators of its foul flavor.

The bright yellow oleander aphid, Aphis nerii, sucks out sap, along with toxins and attracts predatory insects, including:

* The maggot-like larvae of syrphid. Syrphid pupae look like little brown or tan teardrops. Leave them in place to ensure another generation of these beneficial flies.

* Tiny parasitic wasps such as braconids lay eggs in aphids' bodies. A leftover brown "shell" is called an aphid mummy. These mummies are a good sign that your aphids are being parasitized. These wasps don't harm monarch caterpillars.

With great beneficial insects around, I hardly had to spray our milkweed crop at the museum with any insecticidal soap. Remove overwhelming aphid populations on milkweed with a sharp stream of water. Avoid damaging or knocking off beneficial insects.

Other "pests" of milkweed plants include:

* Milkweed leaf beetle, Labidomera clivicollis. Chunky, orange and black beetles and their larvae feed on milkweed leaves.

* Large milkweed bugs, Oncopeltus fasciatus, black and orange, oblong-shaped, sap-sucking true bugs, feed on the developing seeds, flowers and nectar of milkweed plants. They don't usually cause much damage.

The monarch butterfly, Danaus plexippus, eats voluminous quantities of milkweed leaves, and displays the textbook aposomatic coloration of white, black and yellow stripes. Monarch chrysalids, or pupae, are a gorgeous jade green with gold lines and spots.

Queen butterfly, Danaus gilippus, is similar to the monarch, with three pairs of tentacles instead of the monarch's two. Chrysalids are also similar, a bit smaller and may be a pale pink rather than green.

Monarch parasites include:

* the tachinid fly that leaves a trail of white strings hanging from the chrysalis..

* The assassin bugs, Zelus sp., that paralyzes victim and liquefys its insides.

* Vespid wasps - the familiar large red wasps, Polistes carolinus, and the smaller yellow and black European paper wasp, Polistes dominulus.

To protect caterpillars from these predators, place a screen such as a pop up or mesh laundry hamper between them and the wasps.

The protozoan parasite, Ophryocystis elektroscirrha (Oe) eventually cause problems such as weakness, deformity, and even death. The popularity of tropical perennial milkweed, Asclepias curassavica, in this area encourages some monarchs to stay all winter, rather than migrating. Oe spores remain viable on the perennial tropical leaves. Native milkweeds die back. We encourage gardeners to cut back tropical milkweed every spring after the first generation of monarchs arrive and eat the milkweed down, and then again in fall before or during the migration, so butterflies will migrate and not overwinter here.

Only five to ten percent of monarch eggs make it to adulthood. Without their survival and natural demise, our native ecosystem would not be as diverse as it is. Butterfly-friendly gardens, especially if they include milkweed, help mitigate this loss of habitat due to urban sprawl and other factors.

Butterfly host & nector plants will be available at the Sat., Oct. 11 Cockrell Butterfly Center sale, 9am-noon (or until sellout) at the Houston Museum of Natural Science parking garage's 7th Level. Bring your own wagon