

A Little Destruction – A LOT of Beauty

photos and text by Marilyn Sallee

We garden to grow and learn and produce beauty. But not everything that grows in our gardens is plants, and Nature herself is the best teacher. I got a lesson with an unexpected experience this summer that lifted my soul and expanded my understanding of how it all works together in a Grand Plan.

It started with some carefully tended Asclepias seeds from Plant Propagation class. In eight weeks, by the end of July, I had a healthy flat of baby Butterfly Weeds growing in pots on my patio. I had plans of just where in my garden this essential food

for the Monarch and Queen Butterfly larvae would grow. But the butterflies had their own schedule, and ideas about food. On July 30, I checked on my plants only to discover one was totally eaten to the nubs, and a second under vicious attack, not by one, but FIVE caterpillars at once. I suppose a good gardener would have just plucked those destructive caterpillars to their death. But... they were kinda pretty, in a caterpillar kind of way, with their bright

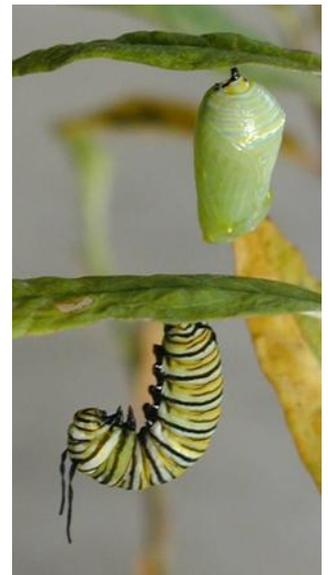
stripes and slinky bodies. And who was I growing Butterfly Weed for anyway? I had ten plants, so I moved a few into the garden and left the rest for the Monarchs. How much could such a tiny critter eat anyway?

I quickly found out – caterpillars live to eat and will chew a plant to nothing in short order. By the next day, I had no green leaves on the plants in pots. The entire flat was bare, naked stems; can I blame the Monarch for taking advantage of what I had created for them? I put out the word for anyone with Asclepias to spare, but I needed it fast. Luckily, Stuarts Nursery in Weatherford had a few large, old plants at a mid-summer discount of \$5.

The two large plants barely fed the five caterpillars for a

week. On Aug. 1, they measured almost two inches long. A caterpillar's skeleton is on the outside – an exoskeleton. As they grow, they molt their old shell and eat it. Monarchs do this five times, each stage is called an instar. So these two-inch babies were in their fifth instar and getting ready to chrysalis. With large plants to feed the crew, my original small transplants very quickly leafed out again, stronger than before. I noticed tiny white pin-size dots on the underside of the tender Asclepias – Monarch eggs – white when newly laid, but they turn black just before they hatch.

On Aug. 3, I woke to find one of the large caterpillars already in chrysalis, and another hanging in the classic J-shape and turning green indicating it would be in its shell soon. The chrysalis must hang free on a branch so the butterfly will have room to come out later. I wanted to stay home and watch, but had to get to the TCMGA meeting. When I got home, I had two chrysalides (the plural of chrysalis). This pupa or chrysalis stage looks boring to us – nothing happening for 7-10 days. But inside the green shell with metallic gold trim, the caterpillar is



totally making itself over, dissolving and reconstructing its organs and skeleton, growing folded up wings. A very busy time inside the chrysalis.

Besides, I had a dozen or so new Monarch eggs to tend to, and itsy-bitsy, 1/8 inch long transparent just-born baby (first instar) Monarchs on the freshly leafed out Asclepias. I got to see the entire sequence from the beginning. I put the Asclepias with babies into plastic domes to protect them. And wrote lots of gardeners to see if anyone wanted to adopt a few. I kept a few Monarchs, and a few Queens – the caterpillars look very similar, but Queens have an extra set of “horns” and wider white bands.



Late at night on Aug. 9th the original chrysalides were turning milky and transparent – a sign that the butterflies would be emerging very soon. When I woke at 7am on the 10th – there were two beautiful butterflies clinging to the clear plastic-like chrysalis shell – flexing their wings and drying them in the newly risen sun. At 10:30 am, the outside temperature hit 86 degrees – a magic number for butterflies, as it is warm enough for them to fly. But the two



sheltered on my patio had been beaten on-wing by three more, probably their brothers/sisters, who disappeared the previous week and were hiding until they were all ready to take flight together. After flexing their wings a few times, they tried short hops to the warm concrete, flexed a few more times, then leapt into the air and fluttered off to complete another leg on their multi-generational trip to Mexico.



Every year it takes 5-7 generations of Monarchs to migrate from Mexico to Canada in spring, and back again in fall. The adult butterflies mature in 3-5 days and begin laying hundreds of eggs as they travel. Asclepias, or milkweed, is the only plant that the larvae or caterpillars can feed on. It gives the caterpillar its bitter taste and protects it from predators.

While I missed the emergence of my first set of butterflies, I was ready for the next. They made half-dozen chrysalides by the 14th. By the 19th they were transparent. I stayed up all night. It was one of those hot nights that never really cooled off. By 6 am the temps were in the 80s, and the crystal

chrysalis started flexing, cracked and out eased a crumpled up bit of tissue paper in orange and black. It only took a few minutes to squeeze the fluids from a bloated abdomen into the wing veins, as its sails unfurled. They hung, dried, and rested for almost an hour. Then it was ready – hop, flex, hop. And away they flew.

I've gotten to see a dozen butterflies transform this summer, and it is truly a magical sight. But the most surprising part is they effect they had on their food crop. Far from destroying it, their chewing seems to encourage it to grow. I have the thickest, densest Asclepias shrubs now. They actually benefited from being chewed down. Stems I stuck in the dome for the caterpillars rooted and I have twice what I started with. We are all the richer for the experience – plant, butterfly, -- and especially me.

