

the secret lives of MONARCHS

[Excerpt from *Raised in Captivity: Friendship, Romance & Betrayal in a Patch of Urban Wilderness*, a novel by Marty Thompson Arnold, © 2018. Printed with permission.]

Along with the hordes of human tourists this summer, monarch butterflies will soon be arriving in West Michigan. These orange and black beauties delight us with their seemingly aimless fluttering in our gardens. But don't be fooled, these insects of the order *Lepidoptera* lead a purpose-driven life.

You probably know that monarchs winter in Mexico. But how exactly such a fragile creature accomplishes this epic journey was a mystery until quite recently. We now know that this annual migration is sort of a multi-generational relay.

To explain, I'm going to tell the story of one monarch family. Their saga began fourteen months ago, in April of last year, when one female emerged from her jade-green chrysalis near San Antonio, Texas. I will call her Antonia. She flutters off in search of three things: nectar, a healthy mate and milkweed plants on which to lay her eggs. Her quest brings her northward with the spring. Along the way, she lays hundreds of eggs on young milkweed plants in Texas, Oklahoma and Missouri. After a natural life span of about six weeks, she dies.

One of the eggs she laid in Missouri hatches. She's Dixie, our next butterfly. Dixie continues north through Illinois and Indiana into Michigan. One day in mid-June, she stops on a lovely red milkweed growing behind my barn. She lays an egg on the underside of a leaf, then she feeds on the nectar of a yellow coreopsis before she flutters off. She continues north and into Canada, where she, too, will end her days.

Three days later, I notice tiny holes in the leaves of my milkweed plant. A tiny, caterpillar with pretty black and yellow zebra stripes is busy eating. For two weeks I watch it munch through one leaf after another until its body is plump and nearly two inches long. Then one day, I find it hanging on the dried stem of a bush nearby. By morning it has encased itself in a sea-foam green sleeping bag decorated with a ring of gold—truly one of nature's most elegant creations. For the next two weeks, nothing happens that I can see. But one morning, the casing has become transparent. Inside, I can see tightly folded orange wings. In a few more hours, Dixie's daughter, Willow, emerges. She rests in the sun until her wings are dry and strong, then, lifts off in search of a nectar meal and a mate.

Her quest takes her to the Lake Michigan shore, where she joins other monarchs feeding among the dunes on fragrant raspberry-colored milkweed blooms. With fresh water as far as the eye can see, this is a monarch paradise, to be sure. Willow lays several eggs near the Little Point Sable lighthouse. These butterflies will be the fourth generation of this monarch family. One of them I will call Rosaria.

Rosaria is a late-season monarch. This means her life will be nothing like Willow's, Dixie's or Antonia's. She has no interest in finding a mate or a milkweed nursery. Some say she's bigger than her mother, but she's immature, like a robust teenager. Unlike her mother and grandmother, she's equipped with a strong homing instinct. In the fall, she will join millions of

her generation who will ride southbound winds, covering as much as twenty miles a day and stopping only for nectar and brief rests. For if this monarch family is to survive, Rosaria must fly over two thousand miles!

By November, Rosaria has miraculously reached her destination high in the mountains of Central Mexico. Today, the area is a Unesco World Heritage site known as El Rosario Monarch Butterfly Reserve.

Just how Rosaria finds her way to these mountains is still a tantalizing scientific mystery. Perhaps she follows markers left by northbound monarchs. No one knows for sure. But we do know she will spend the entire winter clinging sleepily to a pine tree high in the Reserve, living only on her own stored fat.

Then, in February, Rosaria will begin to stir. One day, she and millions of other butterflies will leave the Reserve and head north. Now a mature adult, Rosaria needs a mate. When she reaches Texas, she will be ready to lay her own eggs not far from her great-grandmother Antonia's birthplace. In the eight months of her life, she has covered more than 3,000 miles. There in Texas, her remarkable life will come to an end.

My story ends here, too, but remember, it is just one chapter of a family saga that has been repeating itself for thousands of years. Perhaps this summer one of Rosaria's offspring will find that little patch of milkweed behind my barn. I'll be watching.

So, my good readers, are you ready for monarch visitors this summer? You can welcome them to your yard by planting native flowers that adult monarchs love, like purple blazing star, red or lavender bee balm or yellow black-eyes Susans. But remember, monarch caterpillars, like persnickety toddlers, eat *only* milkweed leaves. So no butterfly garden is complete without this vital "host plant." A shallow saucer of water with a few pebbles for landing pads will complete your butterfly rest stop.

Attracting monarchs is more than mere summer entertainment. Monarch numbers have plummeted more than ninety percent in the last twenty-five years. The reasons are many: Our great Midwestern prairies are being paved, plowed and mowed at a rate of six thousand acres per day. Indiscriminate use of agricultural herbicides kills milkweed along field edges where these hearty plants used to flourish. And mind you, that bug spray in your garage doesn't know a

butterfly, ladybug, dragonfly or honeybee from an aphid; so please, don't use these products.

My fellow Saskawansians, we are fortunate to be on the monarch's migratory path. So, let's get planting and help our monarchs on their incredible journey.

[This essay from *Raised in Captivity*, is one of five presented as newspaper columns written by the fictional Iris VanWingen, an 84-year-old science teacher turned environmental activist. To read the novel, visit [Amazon.com](https://www.amazon.com) or order a copy from your favorite local bookstore. Also available in Kindle and ebook. For more about *Raised in Captivity* and its author, visit [MartyThompsonArnold.com](https://www.MartyThompsonArnold.com) or [Goodreads.com](https://www.Goodreads.com).]