



Crosscurrents

Monarch butterflies and the Mona Lisa

Published June 9, 2015 at 5:24 PM PDT

LISTEN • 7:26



Two Monarchs attempt to mate at the Monarch Grove Sanctuary in Pacific Grove, CA

Photo by: Marlo McKenzie



“There's one on the ground there. Are there two? No way! Are they mating?” I turn to ask longtime monarch sanctuary volunteer, Barb Thomas. We hover over the two butterflies at our feet and discover that they are indeed attempting to mate. Surrounded by trees, we stand in the middle of the Monarch Grove Sanctuary, in Pacific Grove, California. California has more than 450 monarch sanctuaries, and this is one of the oldest known ones, located about a two-hour drive south of San Francisco. Monarchs overwinter in the sanctuary from about October to March.

At the height of the season, thousands of butterflies will be in Pacific Grove. But it's late spring, so Thomas and I were only hoping to spot a few – and we didn't expect to see any mating so late in the season.

We watch the butterflies and cheer them on. The male monarch – who we can tell is a male by the black dot at the end of his wings – is trying to lift the female up into the trees, where they'll have a passionate evening of romance.

If they do successfully mate, the male will die and the female will fly to somewhere like Fresno to lay her eggs on a milkweed plant. Throughout the migration, monarchs rely on healthy habitat to support them, which is why sanctuaries like this one are really important.

Before we find out whether or not the pair of butterflies mated successfully, we have to go. On our way out, we pass a bench near a kiosk at one entrance to the sanctuary.

“This was the bench that was made in memory of Ro Vaccarro,” says Thomas.

Ro Vaccarro is known in Pacific Grove as “The Butterfly Lady”. She saved the Monarch Grove Sanctuary from development back in the '90s.

“If it weren't for her, we wouldn't have this at all. Period,” Thomas adds.

And the thousands of monarchs that overwinter here each year would have to find somewhere else to go.

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Despite efforts by people like Ro Vacarro and Barb Thomas, monarchs are in danger. Right now, the U.S. Department of Fish and Wildlife is considering classifying them as “threatened” under the Endangered Species Act. That’s because the monarch population has declined about 90% in the last 20 years.

To find out what’s causing their decline, I headed north to San Francisco, just like a monarch might in the springtime.

The monarch decline

If San Francisco has a butterfly guy, Liam O’Brien is him. He’s been part of conservation of the Green Hairstreak Butterfly, the endangered Mission Blues on Twin Peaks, and the Western Tiger Swallowtail.

He’s also spent a lot of time thinking about monarchs, and what’s killing them off. O’Brien says it’s hard to attribute their decline to just one thing.

For starters, there’s climate change.

“With global warming, we’re seeing such radical changes in a creature’s distribution and movement,” O’Brien says.

Monarchs use temperature as a gauge to know which way to migrate. If the temperature is off, they might head the wrong way.

Another major threat, says O’Brien, are “pesticides that are sprayed around farms killing the endemic milkweed.”

Milkweed is the only plant they can lay their eggs on to reproduce. So, if we lose milkweed, we lose monarchs.

I ask O’Brien what role monarchs play in the ecosystem and why they are important, starting with the question: do they pollinate?

“Butterflies, basically are not pollinators, that is a giant misconception,” explains O’Brien. “The pollinators are the stocky little robust guys that are doing the heavy lifting. The bees, the wasps, the flies, and the not-so-pretty cousins of the butterflies, the

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Even so, monarchs play an important role in the ecosystem.

“Butterflies are, and have always been, a moving smorgasbord, for everyone else,” says O’Brien.

In other words, if we lose butterflies, we’re taking away food for wasps, flies, and birds and the food-chain gets knocked out of balance.

But there’s something else about monarchs.

“No greater species makes people go cuckoo del fuego than the monarch,” says O’Brien. “It hits them like they’re blind!”

It’s true. People love monarch butterflies, so scientists say there’s a different way to think about them entirely.

“I’ve seen the Mona Lisa in Paris. What good is the Mona Lisa?” asks Lincoln Brower, a leading monarch researcher based at Sweet Briar College. “I mean, really, it’s just a painting on a piece of paper, but we revere it as part of our culture and part of our tradition. I think we need to realize that biological treasures, such as the monarch, are valuable in their own right.”

Liam O’Brien agrees. He thinks that people’s love of monarchs might mean there’s hope for the less adored, but equally endangered bugs out there.

“If it begins the conversation of insect conservation, then that’s great,” says O’Brien.

Scientists often refer to monarchs as the canary in the coalmine. Their decline means trouble is ahead for other species.

Fortunately, if you’re “cuckoo del fuego” over monarchs, O’Brien says there are things you can do to help out, like planting flowers in your yard. Or milkweed, if it’s native to your area.

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