



Encyclopedia of Life

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Monarch Butterflies Podcast II and Scientist Interview

Danaus plexippus

Episode II

Transcript

Ari: From the Encyclopedia of Life, this is One Species at a Time. I'm Ari Daniel Shapiro.

This is our second episode devoted to monarch butterflies, or *Danaus plexippus*. Our story comes from a Google Earth tour we've produced that showcases the migration of these insects. We actually had this epic journey music scored for the tour, because their migration – filled with obstacles – really is epic. It takes up to 4 generations of butterflies a full year to leave Mexico, flutter north as far as Canada, and then make it back to Mexico. Along the way, they come in contact with a kind of human army – thousands of citizen scientists, everyday people helping the butterflies out along the way.

Garland: We get an abnormal number of monarchs here because we're the very southern tip of New Jersey, and the land is literally tapering like a funnel.

Ari: That's Mark Garland – a naturalist in Cape May, New Jersey – who sees the butterflies in September, as they're heading south.

Garland: When there's a lot of monarchs around, they're everywhere. We laugh – sometimes you feel like you're inside an orange snow globe.

Ari: But Garland doesn't just watch the monarchs. He tags them. It's part of a citizen science project run out of the University of Kansas called Monarch Watch.

Garland: The tagging involves small adhesive stickers that are put on the wings of a monarch butterfly. The size of the sticker is about the same as your little fingernail.

Cunningham: By the time you catch it, put the sticker on and let it go, it's 30 seconds if you're good – if you've been doing it a long time.

Ari: That's Garland's wife – Paige Cunningham. She's a naturalist and educator, and she told me that before she lets the butterflies go, she whispers to them.

Cunningham: Sometimes I'm just like, "Have a good journey!" Sometimes I wish them good luck. I don't always know what I'm going to say to them until I have them in my hand. It's like a secret in a bottle. Or a wish, or a hope, or a dream, or something and then it flies away.

Ari: Cunningham and Garland recruit a bunch of people, and each year, the team dots hundreds of butterfly wings with these tiny sticker tags.

Garland: On the tag is a unique code of 3 letters and 3 numbers. It's like the social security number of the butterfly.

Ari: And it's this social security number that can be used to track the butterflies along their migration route – where other people catch them and read off the code.

Garland: We've found monarchs here in Cape May that have been tagged in New York state and Pennsylvania and other parts of New Jersey.

Ari: And the butterflies routing through Cape May have been found as far south as Florida and Texas – even Mexico. And there've been a few New Jersey monarchs that the wind's blown out to the Bahamas. Now, some of them pass through Georgia, where Mary Beth Cary teaches the fifth grade – in the town of Sylvester.

Cary: I want the students to use the butterflies to connect with and go beyond the boundaries of our town.

Ari: For the last few years, she told me that her students have been taking Scotch tape, placing it on monarch butterfly abdomens, peeling it off, and sending it to the University of Georgia. That's where a program called Monarch Health counts up the number of external parasites on the butterflies, to figure out how healthy they are. Cary's students love being part of the butterflies' lives.

Greer: I really like working with insects. We should help them.

Ari: As the butterflies flutter along, countless people are on the lookout. And some of them recorded themselves to tell us about their encounters, from Genie Robinson in Brackettville, Texas –

Robinson: The butterflies – I can't believe they're still here. I'm so excited.

Ari: To Olivia Vitagliano in Vermont, where the state butterfly is the monarch –

Olivia: When I was little, my mom would buy me the grow-a-monarch butterfly kit, and we would watch them in our house until they grew up, and then we would set them free.

Ari: To Brian Bockhahn in North Carolina –

Bockhahn: My wife came up with the theme of monarchs for our wedding. On our custom-made cake topper, the bride and groom chased a monarch hand-in-hand with the groom holding a butterfly net.

Ari: You get the idea. Monarch butterfly lovers are everywhere. As the butterflies make their way back towards Mexico – they gather into thicker and thicker ribbons as they fly. By the time they hit Texas, the monarchs stop people in their tracks, like Monika Maeckle and Carol Cullar.

Maeckle: They cluster up in these pecan trees like grapes. And just are draped everywhere. As you walk down the river trail, they just erupt in these butterfly clouds of orange.

Cullar: My house looks out onto the sunset in Mexico, seeing hundreds of thousands of monarchs, almost flowing like a river through the sky.

Ari: That river flows back into Mexico, winding around the mountaintops to settle down for another winter. It's a river of orange sunshine that graces the people it passes along its epic journey – so much so that many of those people reach up to touch the river, and to hold – if even for a moment – a single butterfly in their hands.

To watch this story on YouTube or as a Google Earth tour, visit eol.org.

Our series, One Species at a Time, is produced by Atlantic Public Media in Woods Hole, Massachusetts. I'm Ari Daniel Shapiro.

Meet the Scientist

Meet Paige Cunningham, one of the citizen scientists (and naturalist and educator!) featured in our podcast:



Where do you work?

The monarch work I do is a volunteer position with The Monarch Monitoring Project which is under the guidance of New Jersey Audubon. My other job is as a freelance naturalist and art educator.

What do you study?

The Monarch Monitoring Project is involved in tagging monarchs, counting roost sites, doing daily census on migrating monarchs, and educating the public about the monarch butterfly in general; metamorphosis, migration, food source, and habitat needs.

What are three titles you would give yourself?

I would say I'm an artist, educator, and community builder.

What do you like to do when you are not working?

When I'm not walking around Cape May, NJ with a net in hand, I'm playing with kids and adults creating art. I also enjoy swimming, hiking, reading, gardening, traveling and reading children's books.

What do you like most about science?

What I enjoy most about our field work is the interaction with the many people; locals, visitors, young or old, that we encounter. It's amazing to see their eyes light up when you talk about the monarchs and their migration, when they get to touch a butterfly, when they know they can plant milkweed to attract monarchs to their yard, and especially when they see the roosting of monarchs by the thousands! Many people become teary eyed at the sight. I know I cry at the sight of the first monarch back in Cape May every year.

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