

## Interview Spotlight

---

# Biologist Tierra Curry on Why Monarch Lovers Shouldn't Fear the Endangered Species Act

**“There’s a wide gap in public perception of how the ESA plays out and how the agency actually handles permitting.”**

When Tierra Curry emailed to book a room at our B&B a few years back, I recognized the name. As a senior scientist with the [Center for Biological Diversity](#), Curry, along with late monarch expert Lincoln Brower, was one of the signatories of the petition to the US Fish and Wildlife Service to have monarch butterflies listed as endangered. I felt like we were hosting a conservation celebrity, but Tierra turned out to be down to earth and unassuming. Because she came during our peak season, I didn't have time to pester her with all of my questions about the significance of the Endangered Species Act and all of the controversy that the petition had caused in the world of monarch conservation. Until now!

Tierra continues to work with the Center for Biological Diversity, where she leads the Saving Life on Earth campaign to end extinction. She is currently working from home in Kentucky where she writes that she, “spies on birds and butterflies and daydreams about the ‘impossible cake’ at the JM Butterfly B&B”—a reference to a secret recipe my mother-in-law is loath to share.



**Tierra Curry in a room called Tree Top at JM Butterfly B&B.**

**Ellen Sharp:** How did you end up being the one of the names on the petition to US Fish and Wildlife asking for monarch butterflies to be put on the list of endangered species? Did you get any flak for taking on this very public role?

**Tierra Curry:** Part of my work as a conservation biologist at the Center for Biological Diversity is to secure protections for imperiled species that don't have adequate safeguards in place to prevent their decline. The most overarching way to accomplish this at the federal level is to petition the U.S. Fish and Wildlife Service to protect the plant or animal under the Endangered Species Act. I've successfully petitioned for hundreds of species since I started this work in 2007.

When I first started looking into the status of the monarch in 2013, I remember standing with a co-worker in her yard in Minnesota watching monarchs flying and saying to her, “There’s no way the monarch would qualify for protection, they are too widespread and common,” and she agreed, “Yeah, no way.” But then when I started investigating the monarch’s life cycle and all the threats it faces at each step of the way, I became convinced that we really could lose North American monarchs and their miraculous migrations, and that the most effective way to make sure that doesn’t happen is to get them listed as threatened under the ESA, which has prevented the extinction of 99% of the species under its protective umbrella.

The vulnerability of the monarchs when they are overwintering is what convinced me they are indeed threatened, because all the eggs are in one basket and the security of the basket is being undermined by climate change. Seven years ago when we filed the petition, there wasn’t a lot of attention on monarchs and climate change but even back then the few published papers said it could wipe out the migrations if we don’t act, and indeed we likely just saw the collapse of the western migration.

**ES:** Did you get any flak for taking on this very public role?

**TC:** I definitely took a lot of flak when I filed the petition with the Center for Food Safety, Xerces Society for Invertebrate Conservation, and Dr. Lincoln Brower. We heard that Monsanto was angry because we had broadcast the connection between monarch decline and herbicide use. Scientists were angry because they didn’t want to have to go through red tape to continue to study monarchs. Some researchers felt strongly, and still do, that voluntary mechanisms would be more effective at protecting monarchs than regulations. People who love rearing caterpillars were angry because they were afraid they wouldn’t be able to raise monarchs anymore, and there’s still a lot of misinformation that this will happen if the monarch gets listed. Having Lincoln Brower’s advice and support was priceless because his lifetime work to save the monarchs was so respected, and he played an active role defending the petition.

**ES:** So many people who work with, and lead, monarch conservation organizations, were very nervous about this petition. Many US Fish and Wildlife employees also seemed terrified about the prospect of having to implement protected status for monarchs. I’ve heard people say that listing the monarch as endangered could endanger the existence of the ESA and the existence of US Fish & Wildlife itself, because it would be too hard to enforce. What would you say to your fearful conservation colleagues?

**TC:** There’s a wide gap in public perception of how the ESA plays out and how the agency actually handles permitting. The strength of the ESA is usually in what it does, instead of what it says don’t do. The U.S. Fish and Wildlife Service has neither the capacity nor the inclination to micromanage harm to listed species. They don’t even comprehensively track the permits they grant to harm protected animals so there’s no cumulative measurement of, for example, how many endangered bats are killed by coal mines. In Florida they gave a developer permission to build a shopping center in the only habitat of an endemic butterfly. In Arizona they gave a copper mine permission to destroy the habitat of the only jaguar in the United States. Even if the monarch is listed, the agency is not going to comprehensively track take or stop projects that would harm monarch habitat. But the butterfly would get a recovery plan and ongoing funding,

and the agency could provide funding to states and to Mexico and Canada to help monarch recovery efforts.

**ES:** Can you give us some examples of successful ESA listings? Do you know of any cases where listing actually did more harm than good, and why?

**TC:** Around 50 species have been declared recovered under the Act. This doesn't sound like a lot, but when you consider the dire straits species are in before they actually get listed and the time it takes to redress the threats and turn the trajectory toward population growth, the vast majority of listed species are slowly moving towards recovery. Only 1% of listed species have gone extinct, and some of these were extinct before they were actually listed. Recently recovered species include the red-cockaded woodpecker, interior least tern, Kirtland's warbler, black-capped vireo, Steller sea lion, and brown pelican. I can't think of a species where listing did more harm than good. For really rare species, listing could theoretically increase poaching pressures, but the pressures were likely there before listing and at least the protection level would increase.

**ES:** In people's reactions to the ESA petition, I noticed a split between people who are mistrustful of big government and those who want more government oversight and regulation. I can see this split in my own household—I was rooting for the ESA, hoping it would save the species, while Joel was terrified of it and thought it would mean the end of butterfly tourism without really helping things. Of course, we grew up in very different subject positions in very different nation-states. I realize that for me, coming of age in the Deep South immediately after the Civil Rights movement gave me faith in the power of legal frameworks to change human behavior for the better. What experiences have been formative for you in giving you faith in decisive federal action?

**TC:** I grew up in the Appalachian Mountains of Kentucky where coal companies literally blow up mountains and push the toxic mining waste directly into streams, poisoning the air and water, and causing permanent and irreversible damage to wildlife and human communities. Because of corruption, the coal industry usually gets a free pass under the Clean Water Act, the Clean Air Act, and the Endangered Species Act. So I don't think federal regulation is a fix all. Tools are only as handy as the hands that are holding them. The times when endangered animals did get some protections at coal mines were when heroically motivated agency staff went to bat for them. The use and enforcement of environmental laws in the United States fluctuates drastically depending on the ruling political party, as we just saw clearly with the damage the Trump administration did to more than 100 environmental regulations. But ESA listing still affords species protections in multiple ways from requiring all federal agencies to avoid harming species in their funding and permitting decisions to making grant money available for projects to enhance habitats.

**ES:** I was excited to see that the Council for Environmental Cooperation (CEC) accepted a petition accusing the Mexican government of failing to honor international agreements and trade treaties to protect [the loggerhead turtle](#), and intrigued to see that the Center for Biological Diversity was one of the organizations behind this effort. Do you think that a similar submission

could be made for monarch butterflies and the protection of their overwintering grounds? If so, could their overwintering grounds in California be included in the submission?

**TC:** The Council for Environmental Cooperation (CEC) petition process became more meaningful when the new United States–Mexico–Canada Agreement (USMCA) came into effect in July 2020. In addition to the previous petition review process, which results in a factual record, the United States now has a duty to review any CEC findings and to independently monitor Mexico’s compliance with their own laws, which can result in a formal consultation and arbitration process. To initiate a process for monarchs like the petition for loggerheads, we would need to provide information on violations of laws that occurred after July 2020 when the new trade agreement went into effect. I suspect this would be challenging based on the limited availability of monitoring information, but in theory it’s certainly feasible. Given that the CEC logo is a monarch butterfly, the council should definitely have an interest in protecting the butterflies as they are the very symbol of international cooperation. For the overwintering grounds in California, which are severely threatened by development, listing under the federal ESA or the California Endangered Species Act would be the most expeditious path to protection.

**ES:** A lot of people pay attention to the plight of the monarch butterfly. What do you think is the best way to turn this enthusiasm into a more expansive interest in protecting biodiversity? What other species should we be paying attention to?

**TC:** I heard someone refer to the monarch as a gateway bug to caring about other species, and it’s true that this butterfly with its beauty, grace, and continental range is an ambassador for pollinators and for nature in general, even for migrating people. If we truly took comprehensive action to save the monarch, then we would be addressing some of the major factors that are pushing a million species to extinction globally including climate change, logging, sprawl, and ubiquitous pesticide use. In the United States the pesticides that are harming monarchs and other pollinators are also harming birds and freshwater animals. We are really at a tipping point where common widespread animal populations are plummeting, and the monarch is the compelling face of this story, highlighting the urgent need for us to change our exploitative relationship with the natural world. We can’t take backyard animals like butterflies, frogs, bats and bumblebees for granted anymore because we’re losing them. Many people don’t care about the frogs or bats, but they do care about the monarch.



**Tierra Curry**  
poses with a “Jurassic Butterfly” in the El Ranchito section of Cerro Pelon.