

How anti-GMO activists use monarch butterflies as ideological pawn

I bet the vaquita wishes it had the monarch butterfly's publicist.

What's a vaquita? Also known as the Gulf of California harbor porpoise, it's the rarest marine mammal in the world and listed on the World Wildlife Fund's Endangered Species list as "[critically endangered](#)". There are fewer than 100 vaquita left on the planet, yet you've probably never heard of the species. It's future is tentative at best—and it doesn't have a worldwide network of activists campaigning to rescue it.

Contrast this situation to the fate of the monarch butterfly, the focus of hundreds of environmental campaigns and even a meeting between the presidents of the United States, Mexico and Canada. While the monarch's overwintering numbers in Mexico are sharply lower than decades ago—a decline that began well before the introduction of GM crops—it's future is not in doubt; the vaquita is literally on its last fins.

Why is an organism that is not covered by the Endangered Species Act the focus of so much attention? For the most part, because the monarch butterfly has emerged as a convenient pawn in the anti-GMO game—it's more strategic tool than a potential victim.

GMO ties?

The oft-heard claim is that the herbicide glyphosate, the active ingredient in Roundup (but most glyphosate sold and used today is generic and not made by Monsanto), has destroyed the weed across the American Midwest. Let's be real: Milkweeds are not wonderful plants with bountiful benefits to humans, animals and insects. The genus *Asclepias* contain cardiac glycosides that are [poisonous](#) to humans but even more dangerous to grazing animals, particularly sheep, cattle and horses.

For decades farmers have targeted milkweed because, like all weeds, they are disruptive to farming. That's why the overall acreage of milkweed patches has gone down—all farmers, including organic ones, have tried to kill them. Glyphosate, developed decades ago and before the advent of GMOs, is particularly effective at doing so. It's a great weedkiller and far less toxic for humans and the environment than what it replaced (or what would replace it if extremists get their way and the herbicide is highly restricted), which is why all conventional farmers have embraced it.

Only more recently was it recognized that milkweed, while an anathema to farmers, has ecological importance as a home to the monarch. So, the current claims by anti-GMO campaigners that the plummeting monarch population — a 50-year trend — is a consequence of GMOs is clearly simplistic—and crosses over into dishonest.

There are other factors causing the shrinking of the butterfly population besides the use of effective milkweed killing herbicides. Destruction of overwintering ground in Mexico in favor of illegal logging, conversion of land to farming and the impacts of [global warming](#) are key factors—yet they often are never raised by those most critical of GMOs. Their focus, it seems, is not to help devise and institute a resuscitation strategy for the threatened arthropod but to use its precarious situation as a club, pinning

its decline on conventional American farmers and Monsanto.

Here is a myth exploder: The success of glyphosate, developed in the early 1970s, is not due to the success of GMOs. In fact, the opposite is true. [Glyphosate](#) was so successful as an herbicide that when researchers stumbled upon a bacteria that was resistant to it, the idea of inserting this gene into crop plants probably was born. It was widely seen (and for the most part has been) the Holy Grail of crop science. Glyphosate is safer and more effective than any available herbicides, then and now, and the input costs saved from not needing to hand-weed are extensive—one of the reasons why some aspects of organic farming are so inefficient. Glyphosate-resistant crops also facilitate no-till agriculture, which is less expensive and better for the environment than tilling, so it's hardly surprising that so many ecologically-conscious farmers have adopted it.

The problem, of course, is that glyphosate has collateral consequences. Where milkweed was a troublesome pest in cropland in the past, glyphosate has pretty much eradicated it. This is where the concern over the monarchs come in. Monarch butterflies only lay their eggs on milkweed, because their caterpillars only eat [milkweed](#). It was a great survival strategy when milkweed was ubiquitous, but milkweed (or weeds in general) and modern agriculture don't get along.

So, the solution to this problem seems simple. Institute mitigation strategies. Plant milkweed in areas where it wouldn't be a pest, providing [habitats](#) for the monarch. Farmers are business people and operating on such a slim profit margin that as much as they desire to do mitigation of the effects of farming on their own, we can't expect them to do it all on a shoestring.

The United States government recently pledged \$3.2 million to do just this, with \$1.2 million coming from the U.S. Fish and Wildlife Service. This money will create 200,000 acres of habitat, including near schools and around gardens. It will also provide grants to farmers to create habitat, something they're unlikely to do without some financial incentive.

Earlier this week, Monsanto [announced](#) it will match the initial \$1.2 million government pledge to the National Fish and Wildlife Foundation's Monarch Butterfly Conservation Fund. The St. Louis company also said it will provide \$2.4 million to match commitments from other federal agencies over the next three years.

The seed company also said it would give \$400,000 to the Iowa Monarch Conservation Consortium and other groups to help the butterfly. The consortium is a partnership established earlier this year with Iowa State University and state agencies, farmers, conservationists, and other groups,

So far, there are no reports than any advocacy groups have pledged any rescue funds. No money has been offered by the Organic Consumers Association even though organic farmers, like all farmers, have been targeting milkweed for decades.

Claude Gascon, an executive vice president at the National Fish and Wildlife Foundation, said the US government-Monsanto conservation fund will play a key role during the next few years in helping the monarch.

“In five years we won’t restore the numbers up to a billion, but our goal is to really shift the trajectory from a downward trajectory to something that is stable and increasing,” he said. “The monarch is perhaps the only insect that is charismatic, that everybody recognizes in the United States.”

The net of all this is that the public expects—really demands—that farmers produce as much food for us as possible, in the most environmentally sound way and for the lowest cost. Most farmers are doing that to the best of their ability. It’s time for the public, including some environmentalists who are long on rhetoric but short on philanthropy, to step up to the plate on behalf of the monarch. Actions speak louder than words.

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