

Plausible Negative Consequences of Listing the Monarch as an Endangered Species

By Rose Franklin

On August 26, 2014, a petition was filed with the U.S. Secretary of the Interior, through the United States Fish and Wildlife Service, to protect the monarch butterfly under the Endangered Species Act. The petitioners (The Center for Biological Diversity, Center for Food Safety, The Xerces Society, and Dr. Lincoln Brower) state that the North American monarch population has declined by more than 90% in the past two decades and may be threatened with eventual extinction.

I, like most butterfly enthusiasts, am highly concerned by the drastically reduced monarch numbers. But I wonder if adding the monarch to the Endangered Species List won't further threaten the monarch population. I wonder, too, if listing the monarch as a threatened species might, to a greater extent, deprive humans of its majestic beauty and serve to further increase the distance between mankind and nature.

Entomologists agree that the most significant reason for the plummeting drop in the monarch population is that milkweed is being lost at an alarming rate on agricultural grounds, where it once grew wild in abundance. Milkweed (*Asclepias*) is vital to the monarch, for it is the host plant for monarch larvae. Without milkweed to feed the caterpillars, the butterfly cannot complete its lifecycle and thus, the monarch population cannot survive.

Since 1996, when genetically-modified, Roundup-Ready crops were introduced, milkweed has been rapidly disappearing from farmland. Farmers are now able to plant seed without having to first till the soil, and then spray their fields with Roundup to control the weeds. The herbicide kills the weeds (including milkweed) but does not harm the crops. While only Roundup-Ready soybeans were available in 1996, today the list of genetically-modified crops includes soy, corn, canola, alfalfa, cotton, sorghum, wheat, and sugarbeets. Well over 90% of the corn and soy being planted today are Roundup-Ready varieties, and there appears to be a direct correlation between the use of Roundup-Ready crops and the destruction of milkweed in rural North America. And the scientific community agrees that the loss of milkweed has resulted in the alarmingly low monarch numbers.

Out of concern that an iconic species might become extinct, the Endangered Species Act was passed by Congress in 1973. The most serious threats to endangered animal species have traditionally been shooting, poisoning, and trapping. To address these concerns, Section 9 of the Endangered Species Act states that it would be unlawful for any person "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" the species in danger of extinction. Known as the "take clause," Section 9 makes it illegal for people to take the threatened species from the wild. The government extended the "take clause" to include the "taking of habitat which harbors, or could harbor, the endangered species."

If the monarch is added to the Endangered Species List, it will then be illegal for anyone to take a monarch from the wild, and if the Fish and Wildlife Service determines that milkweed is critical to the monarch's survival, it may be illegal to harm, wound, or kill a milkweed plant.

The petitioners say they recognize the valuable roles that scientific research, citizen monitoring and tagging, and classroom and in-home rearing of monarchs play in monarch conservation and hence request that upon Endangered Species Act listing, the Fish and Wildlife Service facilitate or waive permitting requirements for teachers and citizen scientists, so long as their rearing endeavors are limited to raising 10 or less monarchs per year.

How likely is it that the Fish and Wildlife Service would allow teachers and citizen scientists to rear monarchs in the home or in the school once the monarch is added to the list? Not very likely at all! Rarely, maybe never, has the Fish and Wildlife Service granted exceptions to the “take clause” and permitted the general public to take the listed animal from the wild and raise it in the home or in the school. If the monarch is indeed listed as a threatened species, it will likely be illegal for any U.S. citizen (except for university professors who are studying the insect) to harass, harm, pursue, wound, kill, trap, capture, or collect monarchs. It will almost certainly be illegal to collect any number of monarch eggs, caterpillars, pupae, or adults from the wild.

Some teachers and citizen scientists, rather than collecting monarch eggs and/or caterpillars from the wild, purchase them from commercial butterfly breeders, the industry that often provides adult monarchs for release at weddings, anniversaries, open houses, memorial services, and fund-raising events. The petitioners, however, ask that all commercial breeding of monarchs be prohibited. Why? Because they somehow concluded that commercial breeders were raising and releasing millions upon millions of monarchs per year, potentially interfering with scientific studies on the distribution and movement of wild monarchs which, the petitioners claim, are increasingly important in light of habitat loss and climate change. In reality, commercial butterfly breeders produce significantly less than 10% of the number of monarchs that the petitioners guessed they did, even if the petitioners’ “millions and millions” meant only two million. Nonetheless, if the monarch is added to the Endangered Species List, there will be no commercial breeders for teachers and citizen scientists to obtain their ten or less monarch eggs and/or caterpillars from, should they be unable to find them in the wild. And as I stated earlier, it is highly doubtful that the Fish and Wildlife Service would make an exception to the “take clause” and allow monarchs to be reared in the home or in the school anyway.

Personally, I would be saddened to think that citizen scientists and school teachers would be forbidden to raise monarchs, thus denying children the rewarding experience of observing the miraculous monarch metamorphosis first-hand. Watching a monarch caterpillar chewing on milkweed is like watching a child chew on an ear of buttered sweet corn. Seeing a caterpillar pupate is nothing less than amazing, and witnessing the emergence of a majestic monarch butterfly from its chrysalis is simply mystical.

I would also be saddened to think that brides would be deprived of large, beautiful, brightly colored monarchs on the most important day of their lives, and that those mourning the loss of a loved one might have to compromise for small, fast-flying, zig-zagging painted ladies instead of graceful, ballerina-like monarchs. Everyone knows and loves the monarch, and everyone wishes to have monarchs released at their special event. And monarch releases are an environmentally-friendly alternative to throwing rice and releasing balloons at weddings and other special events.

For many people, a butterfly release is their first close-up encounter with a live butterfly. In releasing monarchs, people, often for the first time, experience the amazing, relaxing, mesmerizing feeling that butterflies bring to humans. Many people leave the butterfly release with a goal of attracting monarchs to their gardens. Some newlyweds send a packet of milkweed seeds home with every guest. If monarch releases are banned by the Fish and Wildlife Service, all the people who have experienced the joy of a monarch butterfly release will know that others are being deprived of something quite spectacular, an experience that is beautiful and peaceful, and brings people a little closer to nature.

Because so many U.S. citizens are already aware of the fact that monarchs are dwindling in number because milkweed is rapidly disappearing from the agricultural landscape, many are eager to aid the monarch in its quest to multiply. Americans have, in the last few years, planted milkweed seeds and

plants by the tens of thousands. I know this to be true because I operate a perennial plant nursery and have watched milkweed sales skyrocket in recent years. And because the monarch has an enormous fan club, I have no doubt that milkweed sales will continue to rise in coming years, in my nursery, and in hundreds more across the nation. Milkweed might be vanishing from rural farmland, but it is popping up in home gardens, in city parks and state parks and national parks, along nature trails, and in botanical gardens. Within a few years, I suspect we will see that milkweed didn't disappear, but instead, was simply redistributed. And with a dramatic increase in the number of milkweed plants will come an increase in the number of monarchs, this assuming, of course, that droughts, floods, and violent storms don't take their toll on the population.

The monarch is no more at risk of extinction than any other butterfly. Those of us who garden for butterflies have watched the population of most butterfly species dwindle over the past few decades. And last year, the year that the monarch population was at a record low, so too were some other butterfly species at record lows.

It is widely accepted that (1) the loss of habitat, and (2) the overuse of insecticides and herbicides are likely the two factors that have contributed most to the diminishing butterfly population. Here in the northeast, millions of woodland butterfly larvae have likely been killed by aerial spraying that was intended to control the gypsy moth population. Here and elsewhere, insecticides aimed at controlling mosquitoes and other pestilent insects have likely wiped out thousands of butterflies. Butterflies were not the intended targets of the insecticidal spraying, but they have certainly suffered the consequences.

I think the monarch is fortunate in having an audience that is alert to its needs and is willing to aid it in its time of need. Other butterfly species are not so blessed. My opinion is that the monarch should not be listed as an Endangered Species. Listing it will not likely increase its numbers and might actually decrease the population. Planting more milkweed will almost certainly increase the population. Listing the monarch will likely make it illegal to raise monarchs in the home and in the classroom, illegal to release monarchs at weddings and other special events, and illegal to remove a monarch eggs, caterpillars, chrysalises, or adults from the wild for any purpose (including education and display). Likely, monarchs will have to be removed from butterfly houses and other such public displays too.

Instead of supporting the petition to list the monarch as an Endangered Species, let's all just plant more milkweed. I feel assured that will more quickly increase the monarch numbers.

If you oppose the monarch being protected under the Endangered Species act, I urge you to visit <http://www.regulations.gov/#!docketDetail;D=FWS-R3-ES-2014-0056> and let the Fish and Game Service know that you oppose the petition. They will be accepting comments now thru March 2, 2015.

If you oppose the monarch being protected under the Endangered Species Act, for one or more of the reasons I stated in my article, here are some suggestions for what you might post on the Regulations.gov web site (link above):

The disappearance of milkweed from the American landscape is the reason for the monarch's diminished numbers. Planting milkweed, and NOT protecting the monarch under the Endangered Species Act, is what will increase the monarch population.

Section 9 of the Endangered Species Act, the “take clause”, would make it illegal for monarchs to be taken from the wild and raised at school or in the home. I object to the monarch being protected under the Endangered Species Act.

Because it would be illegal to release monarchs at weddings, anniversaries, memorial services, and fund-raising events, I oppose the monarch being listed as a threatened species under the ESA (Endangered Species Act). Monarch releases are an important PR tool for the monarch, often exposing this magnificent insect to people for the first time. I do not want monarch releases to be banned.

I raise monarchs in the home, and I love raising monarchs. I don't want raising monarchs to be a crime. I oppose the docket to list the monarch under the ESA.

I'm a teacher who raises monarchs in the classroom. This educational activity helps children develop an appreciation for nature by allowing them to witness the spectacular metamorphosis of the monarch butterfly. I don't want monarch rearing to become a punishable act under the law. I object to the monarch being added to the Endangered Species List.

Monarch releases are environmentally friendly and bring people a little closer to nature. I don't want monarch butterfly releases to be banned. I stand opposed to having the monarch listed as an Endangered Species.

I oppose government control over the monarch. What the government needs to control, maybe ban, is the insecticides and herbicides which are likely responsible for killing butterflies, bees, and other insects.