

Where did the Milkweed Go? Denver Link

The monarch butterfly is one of the most beloved insects in America. Despite the commonly shared love, the butterfly has been in constant population decline for over fifty years. Many factors contribute to monarch butterflies abundance, which has created great debate for the cause of the population decline. Climate change, migrational success, and genetically modified crops are all supported claims for the ultimate source of monarch decline. Above all, modern agriculture, especially genetically modified crops, has the greatest influence on monarch population size while external factors like climate change and migration success contribute to the pattern. We, as environmentalists, need to create social change on the perspective of milkweed for effective conservation of the monarch butterfly.

Modern agriculture and the use of genetically modified crops has created a vicious landscape for monarchs without essential milkweed for reproduction. Monarchs have a complex life cycle starting with a migration from Mexico to the northern United States. The monarchs have three to four generations of reproduction as they progress north. Milkweed is an essential plant for monarch caterpillars to eat before turning into butterflies. However, recent studies have shown that areas within Iowa have seen a large decrease in milkweed density as genetically modified crops have grown in popularity. Genetically modified crops have increased the use of herbicide and has reduced the density of milkweed available for butterflies by 97% in Iowan fields. The reduction in milkweed has made the reproduction and migration of monarchs challenging. As milkweed is a vital plant for monarchs, the decrease in density of milkweed due to modern agriculture has hindered the success of the monarch.

There are many other factors that scientists have argued as the cause of the decline in the population. Some reports have shown that the monarch butterfly populations continue to grow as they move north in their migration, suggesting that the decline in the population happens in the fall migration from the northern United States to Mexico. It seems unclear what might be happening in the fall migration, but the article points to a possible decrease in nectar sources. However, if monarchs experienced food shortages during their fall migration, it would be expected that the butterflies would be lacking nutritional health upon arrival. Studies have shown that monarchs have shown consistent body fat levels upon arrival in Mexico and nectar might not be a large factor in the decline of the population.

Others have claimed that genetically modified crops couldn't be the cause because the population of monarchs has been in decline since the 1950's, long before the use of genetically modified crops. Although it seems like a fair argument, recent studies have shown the complexity behind the decline. Many factors, including climate change, contribute to the decline but in less significant ways. Climate change can increase the effect storms have on the migration patterns of the monarchs. Also, freezing rain patterns in the overwintering sites in Mexico can create significant population loss in a year. Although these are contributing factors to the decline, modern agricultural practices continue to have the biggest impact on monarch populations. Agriculture has significantly reduced the densities of the holy grail, also known as milkweed, to the monarch butterfly.

We must take action to protect the beloved monarch. We cannot change weather patterns for improved migration or overwintering, but we can increase milkweed coverage in the United States. We, as environmentalists, should protect the monarch by promoting the growth of milkweed in road ditches, buffer strips in agricultural fields, and land not impacted by agriculture. The increase in habitat for monarchs will help the reproduction of monarchs and help stabilize the population. Let us change the culture behind milkweed as we work alongside farmers. Milkweed is no longer a weed. It is the saving grace for the monarch butterfly.

Works Cited

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