## Monarch Population Decline

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Monarch butterflies are important parts of multiple ecosystems in North America. They provide pollination services for a multitude of crops and due to their similarities to other pollinators we know that if there is a decline in monarchs there will be a decline in other important pollinators. This is why it is so important to support and maintain the populations of monarch butterflies in any way that we can. The main cause of monarch decline has been heavily debated. Some experts believe that decline is due to reduction in milkweed by an increase in genetically modified crops and pesticide use while others believe that it could be habitat loss along their migration route. All monarch caterpillars require milkweed to feed on and develop so a decrease in milkweed could have large effects on monarch populations. The increased use of pesticides in fields, specifically glyphosate, can kill this milkweed that is essential to monarch survival. Much of monarch habitat is altered by humans and replaced with roadways, manicured lawns, and fields for commercial agriculture. Without these essential nesting sites and food sources monarch populations will decline. This is why the most important thing for students to do is help repopulate the lost milkweed and help prevent future losses of milkweed.

There are many ways that student groups could help to reintroduce milkweed and preserve what is left of it. It is necessary to raise awareness of the actions that cause losses in milkweed. A student group could help in doing this by providing informative resources such as pamphlets and brochures or host a tabling session to raise awareness for monarch habitat loss. These resources could provide information to help individuals protect the monarchs. It is important that people know what practices harm monarch populations. People can reduce their negative impact on monarch and milkweed populations by reducing pesticide use in their home

gardens, avoiding genetically engineered food, and plant native milkweed. While some may say that monarchs were already declining before the increase in pesticide and GMO use the monarch populations are far more complex than that. It is not a single factor that will cause decline and it has been proven that pesticides will harm milkweed. Decreasing use of pesticides and GMO's will only help monarch populations. Any student group trying to make an impact can do more than just urge individuals to make an impact on their own but can also organize groups to make an impact together. A student group could organize a large group of people who want to make an impact to go out and plant native milkweed in places that have experienced milkweed loss. It has been found that planting milkweed along roadways can have a major positive impact. Another impactful project that student groups could do is to build a monarch way station. These stations allow monarchs to lay their eggs in a safe place where they are to be protected. It is important for groups and individuals to take action in protecting monarchs as they are essential to many ecosystems and are valuable for their own beauty. The only way that we can save them is to take action now and these projects and actions are a good way to start.

## References:

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