

# Become a Monarch, Bee, and Wildlife Champion by Reducing or Eliminating Pesticides in your Landscape



**Pesticides** include insecticides, herbicides, fungicides, rodenticides or anything used to terminate or control what humans consider “pests”. Monarch butterflies, their caterpillars, bees and other wildlife can be killed or harmed directly or indirectly when we use pesticides, especially insecticides, in our landscapes. Even though we may have an intended target, pesticides, especially when incorrectly applied, can harm many other wildlife which are ever-present, carried to other locations by drift or leached into our soils and waterways, and pesticide residue can remain active for days, even weeks. Wildlife can also be harmed when they eat other wildlife poisoned by pesticides. Be aware: Some organic or natural pesticides can also harm wildlife.<sup>1</sup>

## Some Examples:

Certain mosquito adulticides can harm Monarchs and their caterpillars if they are sprayed on, and the residue on plants and soil from mosquito barriers can harm Monarchs for weeks after application<sup>2</sup>. Neonicotinoids or “*neonics*” for short, is a type of systemic insecticide widely used in the landscape industry to treat seeds, plants and cut flowers and is also found in many garden products. Systemic pesticides are absorbed by a plant’s tissues and Monarchs, bees and other insects are harmed by neonics when they eat leaves, pollen, or nectar from a plant or seed treated with neonics or during its application. Many birds, foxes, coyotes and other animals who eat rodents exposed to rodenticides such as rat poison<sup>3</sup> baits are also poisoned by this pesticide. Herbicides broadcasted on our landscapes such as lawns, and especially on agricultural land<sup>4</sup> eliminate many plants considered weeds by humans, but beneficial to wildlife, like milkweeds and common violets.<sup>5</sup>

## What can we do?

Pesticides may be necessary in some cases, but in a typical landscape they are often *overused or used incorrectly*, causing harm to the environment, wildlife, humans and pets. It is best to take alternative actions which are less harmful or more humane, tolerate some “pests” depending on the amount or type of damage, and to correctly identify which pests are actually harmful or beneficial *before using pesticides*. Sometimes the risks of using a

<sup>1</sup> <http://www.colostate.edu/Dept/CoopExt/4dmg/PHC/pstcid2.htm>

<sup>2</sup> <http://www.healthyalternativestopesticides.com/monarch/impacts-of-mosquito-spraying-on-monarch-butterfly/>

<sup>3</sup> <https://www.audubon.org/magazine/january-february-2013/poisons-used-kill-rodents-have-safer>

<sup>4</sup> <http://monarchjointventure.org/news-events/news/dwindling-numbers-for-an-iconic-insect-what-can-we-do>

<sup>5</sup> <http://goodnaturedlandscapes.com/why-cant-weed-be-friends-dandelions-violets-and-clover/>

pesticide outweighs the damage caused. These steps are part of the “Integrated Pest Management (IPM)” guidelines and helpful resources given below.

## Some Resources:

- Follow integrated pest management (IPM) *and* maintain your landscape organically.
  - [https://www3.epa.gov/pestwise/htmlpublications/ipm\\_fact\\_sheet.html](https://www3.epa.gov/pestwise/htmlpublications/ipm_fact_sheet.html)
  - <http://dph.illinois.gov/topics-services/environmental-health-protection/structural-pest-control/integrated-pest-management>
  - <http://www.nwf.org/How-to-Help/Garden-for-Wildlife/Gardening-Tips/Organic-Gardening.aspx>
- Learn more about the risk of pesticides on Monarchs and other wildlife
  - <http://monarchjointventure.org/threats/pesticides/>
  - <http://www.xerces.org/pesticides/>
  - <http://npic.orst.edu/envir/protwild.html>
- Know which seeds, plants and products contain neonicotinoids and avoid these completely. Encourage landscape companies and suppliers to avoid Neonics. If suppliers don't know if their products are treated, do not buy.
  - <http://www.xerces.org/wings-magazine/neonicotinoids-in-your-garden/>
  - <http://blog.nwf.org/2015/12/four-questions-about-neonicotinoid-pesticides/>
  - <http://www.xerces.org/wings-magazine/neonicotinoids-in-your-garden/>
- After following IPM, if you must use a pesticide, follow all directions and read the guidelines below. Proper timing is often important since some pests are controlled more easily at certain life cycles/stages, when *less pesticide is needed yet is more effective*. If hiring a professional, make sure they have a required pesticide license. Please note that some organic or natural pesticides can be harmful to wildlife so always do your homework.
  - <http://www.xerces.org/guidelines/pollinator-pesticide-risk-reduction/>
  - <https://www.agr.state.il.us/pesticides-uses-misuses/>
- Talk to your neighbors, cities, schools about pesticides. Never be brash, and have data ready to back up your statements. Change may be slow but the results are worth it. Many cities, schools, neighborhoods have already successfully made the change to reduce or eliminate pesticides.
  - <http://midwestpesticideaction.org/what-you-can-do/all-resources/>

## Conclusion

We all share this Earth and what we do in our landscapes impacts Monarchs, bees and other wildlife both locally and globally. Using pesticides can greatly disrupt the delicate web of life and impact populations of species important to us in so many ways. Since 95 percent of our land is privately owned, it's up to us to be a *champion for Monarchs, bees and other wildlife*.

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