

# WHERE ARE THE MONARCH BUTTERFLIES?



## What Has Caused the Monarch Butterflies to Decline?

People have noticed fewer monarchs in North America. What is causing this dramatic population decline?

### 1. Recent Weather Extremes

- The summer 2012 mid-continent drought and excessive heat was a key cause of the record low monarch population.
- In spring 2013 unusually cold temperatures across the mid-continent contributed to slow development of the new generation returning to the southern U.S. in March.

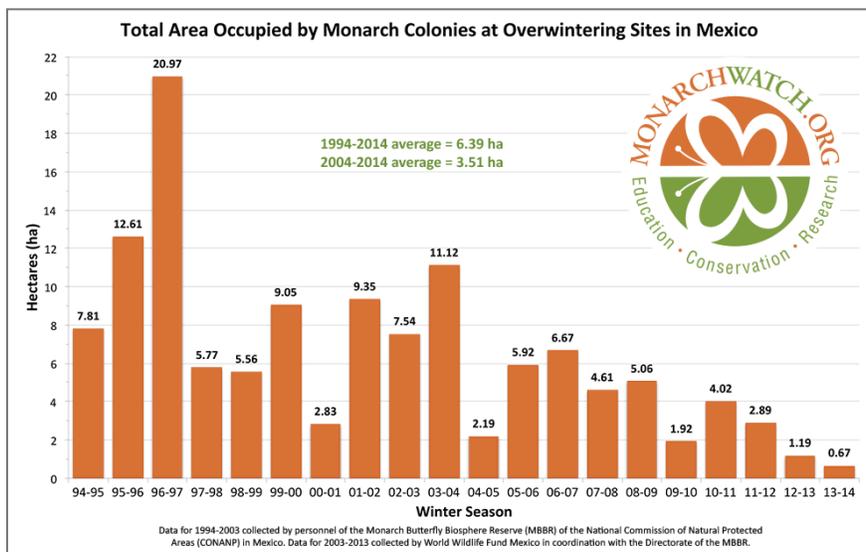
### 2. Agricultural Practices

- **Loss of Habitat** There has been a huge increase in corn and soybeans planted due to rising prices of these crops for bio-fuels. This resulted in a loss of monarchs' native North American habitat where milkweed and native plants grow.
- **Herbicides** Herbicides kill milkweed, which is the ONLY food of monarch caterpillars (monarch larvae) eat. Herbicides also kill native nectar sources needed by mature monarchs.

**3. Genetically Modified Crops** Midwestern farmers rely heavily on genetically modified corn and soybeans that are engineered to be resistant to herbicides. Farmers use herbicides to kill weeds and native plants, with little effect to crops, but much harm to monarchs and other beneficial insects.

**4. Dangers Where Monarchs Overwinter** Every October monarchs migrate to Mexico where there are only 11 to 14 known forested sites where monarchs overwinter. Each site consists of only a few acres but is populated by millions of monarchs. These areas provide the conditions necessary for monarchs to survive winters, but the following challenges are still present:

- **Deforestation** Illegal logging reduces the fir trees monarchs use for winter protection, allowing snow and rain to penetrate the fir forest and temperatures to drop, increasing the risk of freezing.
- **Population Concentration** The entire monarch population overwinters in such a small area, which makes the monarchs vulnerable to storms, drought, disease and fire.



## How Can I Help?

Create a natural habitat by planting a butterfly garden so monarchs can breed and eat. See “Recipe for a Butterfly Garden.”

Milford Garden Club ([www.themilfordgardenclub.org](http://www.themilfordgardenclub.org))