



Special Report

Monarch Butterfly Under Duress

Faltering under extreme weather conditions and vanishing habitats, the yearly winter migration of Monarch butterflies dwindled in December 2013, continuing what scientists said was an increasingly alarming decline.

FEWER OVERWINTERING MONARCHS

The Mexican government and the World Wildlife Fund said that the span of forest inhabited by the overwintering Monarchs shrank to a mere 1.65 acres, which was just 56% of last year's total, which was the previous record low. **This is the third straight year of steep decline.** At their peak in 1996, the Monarchs occupied nearly 45 acres of forest.



Monarchs migrate using an internal compass, which guides them each fall to a small cluster of mountains where ideal temperatures and humidity allow them to rest, clinging to trees by the millions until they begin their northward return each March.

SIZE OF MONARCH MIGRATION SHRINKING

The number of Monarchs surviving the 2500 mile journey has varied from year to year, but the decrease in size of the migration in the last ten years has been steep and

steady. The latest steep drop has been blamed on a two-year stretch of bad weather, which combined with the long term problem of habitat loss has been devastating to the population.

CHANGING WEATHER PATTERNS

In 2012, months of near-record heat sapped their endurance and skewed their migratory patterns in ways that limited their ability to reproduce. In 2013, unusual springtime cold in Texas delayed the butterflies northward migration, causing them to arrive late in areas where they would normally have bred week earlier.

NATIVE PLANTS DISAPPEARING

Monarchs lay their egg only on Milkweed plants and large areas of the plant have rapidly disappeared over the last decade. Growers have switched to crops that are genetically engineered to tolerate herbicides and the increased use of herbicides has killed much of the previously abundant Milkweed. As a result, the Monarchs must travel farther and use more energy to find places to lay their eggs. With their body fat and energy reserves depleted, the butterflies lay fewer eggs or die before they have a chance to reproduce. Milkweed is the sole food source for Monarch butterfly larvae and due to the widespread use of popular herbicides, it has nearly been eliminated from farm fields across the Midwest.

