MILKWEED: A NOXIOUS PLANT?

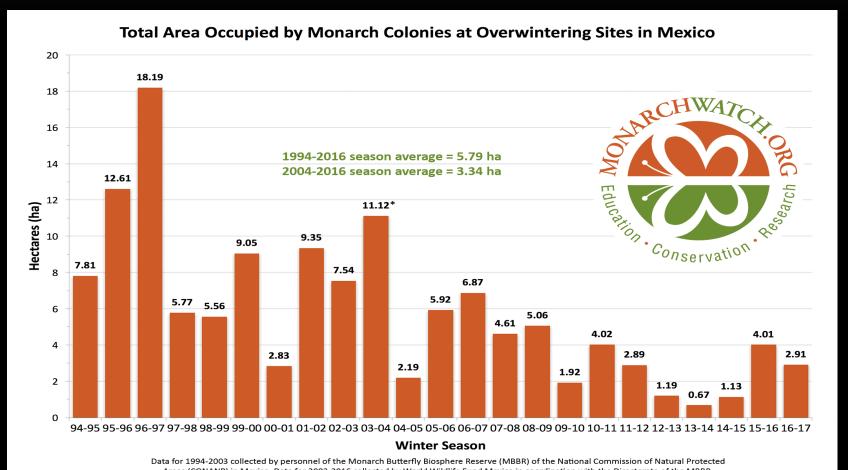


MONARCH BUTTERFLIES AND MILKWEED

WHAT HAS HAPPENED SINCE 1990?

Each fall monarch butterflies from the northern US and Canada migrate to the mountains of Mexico to spend the winter in a few small nature preserves. Their population is estimated by the area they occupy.

FROM **1994 TO 2014** THE NUMBER OF OVERWINTERING BUTTERFLIES IN MEXICO HAS DECLINED 94% (FROM APPROXIMATELY 909 MILLION TO 33 MILLION). THE FEAR IS THAT THE NUMBERS ARE SO LOW NOW THAT A NATURAL DISASTROUS EVENT (EXTREME WEATHER WITH ICE, SNOW, ETC) HAS THE CAPABILITY OF TOTALLY ELIMINATING THE SPECIES IN MEXICO.



Areas (CONANP) in Mexico. Data for 2003-2016 collected by World Wildlife Fund Mexico in coordination with the Directorate of the MBBR.

* Represents colony sizes measured in November of 2003 before the colonies consolidated. Measures obtained in January 2004 indicated the population was much smaller, possibly 8-9 hectares. CT

WHY HAS THE MONARCH POPULATION DECREASED SO MUCH? THERE ARE SEVERAL REASONS BUT THE MAIN ONE IS THE LOSS OF MILKWEED.

Milkweed is the only plant that monarch caterpillars can eat and milkweed has been disappearing over the last 20 years

Reasons for the decline of milkweed availability

Habitat Loss

Herbicide Use

Roadside Mowing

MILKWEED HABITAT LOSS

1. Cropland lost to development

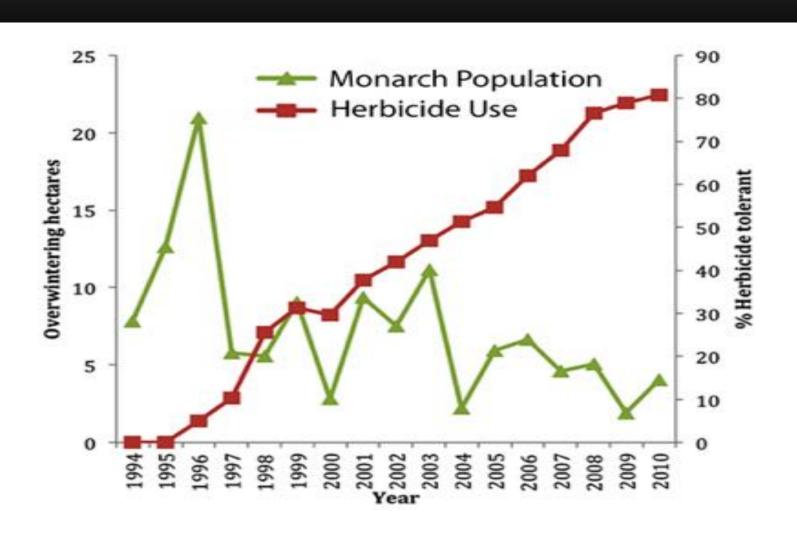


2. Farmers are planting to the very edges of their fields

HERBICIDE USE

In 1996 genetically modified soybean seeds were introduced, followed by corn and cotton. Presently nearly 100% of these crops are genetically modified. These crops can now withstand spraying of Round Up herbicides which kill all milkweed in the farm fields as well as the nectar plants that all of our bees, butterflies, and moths need to survive. These fields in the midwest were the sites of most of the milkweed in the past

THE EFFECT OF HERBICIDE USE ON MONARCHS



ROADSIDE MOWING

Close mowing of highway roadsides creates two problems for monarch butterflies. First, the milkweed will not be there for the eggs to be laid on and for the caterpillars to feed on. Second, nectar plants that all butterflies as well as bees depend on will be gone.



WHAT ARE CITIZENS DOING TO HELP THE MONARCH?

One thing is to **create monarch waystations** - which is just a fancy name for a garden that supplies milkweed for the caterpillars to eat, for the mother to lay her eggs on, and nectar plants to feed the butterflies. In **2005** a Monarch Waystation certification program was begun by Dr. Chip Taylor of Monarch Watch, out of the University of Kansas. By this time, Dr. Taylor realized that the monarchs were in huge trouble. Homeowners were going to have to replace the milkweed that was no longer to be found in the farm fields.

In **2008**, our family's Waystation was #1,898. There are currently more than 15,000 in the US; 750 in Ohio! My garden club of 100 members has created and is maintaining 3 Waystations in city parks. Also, the Northwest Library on Hard Road has basically become one very large Monarch Waystation.

WAYSTATIONS ARE INCREASING IN NUMBER

Monarch Waystation #1,898 Our Yard - 2008

Monarch Waystation #13,562 Linworth Road Community Park June, 2016





Welcome to

WORTHINGTON HILLS PARK

Columbus Recreation & Parks



HOME GARDENS

Many of us are raising monarchs in captivity to increase the numbers who survive. It is estimated that in the wild, less than 12% of caterpillars survive to become adult butterflies. Captive raising increases the survival to 80% or more. We are connected on Face Book. Two of the largest groups, "The Beautiful Monarch" a national group of over 7,000 members, and Ohio's "Monarch Maniacs" with nearly 700 members, provide a valuable forum for us who are actively working to save the Monarch. Having milkweed in our gardens is essential for egg collecting and for feeding the caterpillars.

GOVERNMENTAL SUPPORT FOR POLLINATORS

In **May of 2015** The National White House Pollinator Health Task Force released its report on what needs to be done to reduce honeybee decline, including requirements for each state to increase habitat for our pollinators.

Ohio's Department of Transportation made a New Years resolution in Dec of 2015 to save Ohio's Pollinators. They are taking action to address the 3 most important goals of the National **White House** Pollinator Health Task Force.



Those goals are to reduce honey bee colony collapse, to increase the numbers of wintering Monarchs to 225 million, occupying an area of approx 15 acres in Mexico by and to restore or enhance 7 MILLION ACRES OF LAND FOR POLLINATORS OVER THE NEXT FIVE YEARS THROUGH FEDERAL ACTIONS AND PUBLIC-PRIVATE PARTNERSHIPS. That means each state needs to consider restoration of about 145,000 acres. In Ohio, that means 1,658 acres dedicated to habitat in each of our 88 counties.



Ohio's Department of Transportation is now partnering with the Ohio Pollinator Habitat Initiative, comprised of multiple state agencies and volunteer organizations, including our Wild Ones chapters, Pheasants Forever, Dawes Arboretum, the Division of Wildlife, US Fish & Wildlife, the Ohio Dept. of Agriculture and Ohio Soil and Water.



ODOT is also considering mowing areas beyond the roadway ditch line **only once** in late fall. This will allow plants and insects as well as ground nesting birds to complete their growth cycle. This change will promote native habitat in addition to reducing mowing costs.

Ohio and many other states are planting pollen producing flowers (including milkweed) on the roadsides next to highways. This will benefit monarchs as well as bees, birds and other butterflies.



MILKWEED PLANTS





Butterfly Weed



Swamp Milkweed



Tropical Milkweed