

Rotary



Butterfly and Hummingbird Garden

Rotary Club of Ann Arbor North and Ann Arbor Parks Department

Kid's Environmental Challenge

1. Name the four life stages of the Monarch Butterfly:
 - a. Egg
 - b. Caterpillar
 - c. Chrysalis
 - d. Adult
2. Where does the Butterfly stay in the winter?
 - a. Mexico and hibernate in oyamel fir trees
 - b. Pacific Grove, California in eucalyptus trees
3. How many generations does it take for Monarchs to migrate to Michigan?
 - a. 3-5
4. How long to Monarchs live.
 - a. No More than 5 weeks for most
 - b. The overwintering generation up to 8 months
5. How many generations does it take for the Monarch to migrate to the overwintering site?
 - a. Zero! The last generation of the season flies 2500 miles!
6. What is the primary food plant of the Monarch? (there are three varieties that grow in this area)
 - a. Milkweed:
 - i. Common Milkweed (*Asclepias syriaca*)
 - ii. Butterfly Weed (*Asclepias tuberosa*)
 - iii. Swamp Milkweed (*Asclepias incarnata*)
7. Between 1990 and 2013, how much has the monarch population declined? 30%, 50% or 90%
 - a. 90%
8. What are the reasons for this decline?
 - a. Global Warming - Climate change alters the timing of migration and rainfall patterns in their forest habitat.
 - b. Habitat Loss - In the United States and Mexico.
 - c. Forest Fragmentation
 - d. Pesticides (the herbicide Glyphosate otherwise known as Roundup) - Chemicals kill their milkweed food.
9. What has led to the widespread use of RoundUp (Glyphostaes)
 - a. The creation of Roundup Resistant Corn and Soybean crops, otherwise known as GMOs – Genetically Modified Organisms
10. What can we do to help?
 - a. Choose non-GMO foods. None of the widely used ones are beneficial to environmental and human health.
 - b. More complete information is at: <http://www.responsibletechnology.org/>