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