



The Sustainability Trust

The Sustainability Trust is a global project supported by participating Rotary Clubs

Protection of the USA's Monarch Butterfly

The Monarch Sister Schools Program (MSSP)

Relevant Areas: USA East & West Coast States



Background:

The Monarch Sister Schools Program (MSSP) is an initiative to involve school children in relevant parts of North America in the protection and restoration of the habitat of the Monarch butterfly, including its threatened winter forest habitat in the highlands of central Mexico and its disappearing milkweed habitat along its migratory "flyway" from Mexico to Canada.

The Threat to the Monarch Butterfly

The Monarch's habitat is seriously threatened. MSSP believes the educational values of this project mean that it is appropriate to involve children (who are literally the Earth's heirs) to turn the situation around. It has been estimated that over 6,000 acres of Monarch milkweed habitat is vanishing every day due to urban sprawl and use of herbicides on farmlands. Half of Monarch's winter habitat has already been destroyed due to illegal logging and the destructive process continues largely unabated.

Migration:

Monarch butterflies are the only insect to migrate up to 2,500 miles to get out of the cold weather and hibernate. But not all of the butterflies migrate; only the fourth generation of monarchs can migrate each year because the first three generations die after about six weeks from escaping their cocoons. The fourth generation continues to live on for up to six to eight months so that they can migrate to a warmer climate, hibernate, and then start a new first generation in the spring time.

Flight-path:

Monarch butterflies cannot survive the cold winters of the northern United States so they migrate south and west each autumn to escape the cold weather. If the Monarch lives east of the Rocky Mountains, it will migrate to Mexico and hibernate in oyamel fir trees. If the Monarch lives west of the Rocky Mountains, it will hibernate in and around Pacific Grove, California in eucalyptus trees. Monarch butterflies use the very same trees each and every year when they migrate, which seems odd because they aren't the same butterflies that were there last year. These are the new fourth generation of monarch butterflies, so how do they know which trees are the right ones to hibernate in?

School Involvement:

The Monarch's intrinsic beauty, intriguing life cycle, and inspiring migration make the butterfly a truly awesome wonder of Nature. MSSP captures this compelling story and helps teachers to tap the natural curiosity of children and inspire their interest in science and nature. After years of pressure to "teach to the test", educators across the country are looking for ways to strike a better balance and inject more inspiration into the learning process.

The Monarch Sister Schools Program supports the following learning arenas:

1. **The Classroom** – During the fall and winter months, MSSP helps teachers use a series of proven lesson plans and integrate these into a school system's official science and math curriculum.
2. **The Monarch Garden** – The Monarch 'Garden of Discovery' (planted in the spring of the first year) becomes an outdoor classroom for science, math, and the arts, with the use of proven lesson plans.
3. **Web-based Resources** – The MSSP website is a rich resource for students and teachers with program materials and links to partner sites.
4. **The Sister Schools Network** – For schools opting to have a sister school, the Program provides tools for teachers and students to post information about their projects and communicate with their sister school in Mexico and other MSSP schools in the U.S.
5. **Eco-tours** – For teachers and students sufficiently motivated and financially able, educational eco-tours of the Monarch's winter sanctuaries in Mexico, including a visit to the Mexican sister school, arranged by MSSP. Reciprocal trips are also planned.

Planting a Monarch Garden:

The Program offers a series of professional development options for teachers over the course of the first school year, with activities culminating in the spring when the program helps you plant a Monarch Garden. MSSP works with you to keep costs manageable and

provide tools for related "fun-raisers", described in the Program *Resource Guide* provided to member schools.

Rotary Involvement:

The program is already supported by Rotary Club of Baltimore City (MD), Rotary Club of College Park (MD), and Rotary Club of Washington, DC. The Sustainability Trust encourages Rotarians to work towards creating an environment on planet Earth that can sustain all forms of life – both human and non-human, despite the changing climate we can see happening everywhere.

The MSSP project is also supported by the Environment Fellowship of Rotarians <http://envirotarians.org/> and has been embraced by The Sustainability Trust as an example of species protection in which Rotary Clubs can get involved through their local communities.

A Rotary Club Project:

Schools on the Monarch flight-path may be unaware of this project to help and protect the butterflies. Rotary Clubs can draw this to their attention. There is a cost involved in setting up a Monarch Garden, which is where Rotary Clubs can help their local school and community. Around \$1,000 may be needed to create a suitable transit garden under supervision of **Monarch Sister Schools Program**. There are excellent benefits from taking a project of this kind into schools, providing valuable education materials and demonstrating your Rotary Club's support for education and conservation.

Relevant Contacts and Websites:

- **Monarch Sister Schools Program** = <http://monarchsisterschools.org/>
- **Migration of the Monarch Butterfly** = <http://www.monarch-butterfly.com/monarch-butterflies-facts.html>
- **The Sustainability Trust** = www.TheSustainabilityTrust.org
- **And your local Rotary Club**

For more information, email info@thesustainabilitytrust.org