The area occupied by overwintering monarchs in the forests of central Mexico is measured each winter by researchers from World Wildlife Fund—Mexico. This measurement gives us the most accurate representation of the size of the eastern North American population because all of the monarchs are clustered together in a small geographic area (usually spread between 7-14 different sites). The ~170 MLMP sites that are monitored each summer give us a pretty good idea of how local breeding populations vary from one year to the next, but we need more data to determine relative monarch production values of different parts of the breeding range and different habitat types! Can we double the number of MLMP sites monitored in 2014? Let's try!

A few western monarchs make the longer journey to Mexico, but most travel to sites along the California coast. Hundreds of these sites can be occupied by monarchs each winter, though the number of monarchs at each site is much smaller than a typical Mexico overwintering site. To estimate the western population, volunteers aid researchers by counting butterflies at each site as a part of the Western Monarch Thanksgiving Count. While the estimated 2013-14 western overwintering population of 211,000 is an increase from the previous season, it is still well below peak numbers seen in the 1990s.

Due to the mild climate and potential for milkweed to grow year round in some parts of California (and other southern states), we’re looking for MLMP volunteers to monitor and report any breeding (presence of eggs and larvae) during the winter months. If you are seeing larvae during the winter, please report them to MLMP!
MLMP Spring Checklist

Spring is nearly here and it is time to start preparing for the upcoming MLMP monitoring season!

Here are a few things to remember:

☐ If you haven’t done so, make sure last year’s data have been entered online, and then mail hard copies.

☐ Make sure you have the necessary monitoring supplies. The MLMP monitoring kit contains an apron, clipboard, hand lens, life cycle cards, folding meter stick, rain gauge, thermometer, and a field guide (Milkweed, Monarchs, and More). To purchase any or all of these materials, visit: http://www.monarchlab.org/store/c-7-monitoring-materials.aspx

☐ Don’t miss milkweed emergence at your site! It is the first thing we ask during data entry, so make sure you keep an eye out for tiny milkweeds that start to poke through the ground and record the date the first one comes up!

☐ If others help monitor your site, communicate the monitoring plan or schedule with them. If you need some help monitoring, try to recruit a few others to help you out. Read the story below to be inspired by the collaborative efforts of MLMP volunteers in Kerrville TX.

☐ Need a refresher course on instar identification or MLMP protocols? Watch the online MLMP training videos: http://mlmp.org/Training/Videos.aspx

☐ If you feel confident, schedule an MLMP training event to teach others in your area how to monitor for monarchs and report to the MLMP.

☐ Enter your “Success Story” on the Monarch Joint Venture website and share your monarch story with others. Add your MLMP site(s) to the map: www.monarchjointventure.org.

☐ Monarch numbers will probably be low this year, but your data will be more valuable than ever. Please keep monitoring!

☐ Don’t forget to have fun!

The MLMP at Kerrville-Schreiner Park (Kerrville, TX)

Virginia de Wolf, Anne Cassidy, and Alexis Roberts shared the story of their MLMP site in Kerrville TX. We’d love to share your MLMP story!

The Butterfly Garden at Kerrville-Schreiner Park (KSP) was designed and installed in 2000 by the Friends of Kerrville-Schreiner State Park, and taken over by members of the local Texas Master Naturalist (TMN) volunteer program chapter after the Park was transferred to the city of Kerrville in 2004. The garden is currently maintained by a group of dedicated volunteers and native plant enthusiasts. In 2006 it was certified as a Monarch Waystation and in 2013 it was registered as a North American Butterfly Association (NABA) butterfly garden and habitat.

The Butterfly Garden is approximately 104’ x 104’ and a deer proof fence protects the Hill Country native plants that support many local butterflies, with an emphasis on monarchs. Nectar and larval plants have been donated by TMN members, the Kerrville Chapter of the Native Plant Society of Texas (NPSOT), local nurseries, and private citizens. In addition to the butterfly population, the garden draws a variety of birds, including hummingbirds.
**MLMP at the KSP, cont.**

The Butterfly Garden’s MLMP activities began in March 2007. The local TMN chapter sponsored a two-part MLMP training class taught by retired cardio-vascular surgeon and long-time MLMP volunteer Dr. Ridlon Kiphart. Kip leads the MLMP project at Cibolo Nature Center in Boerne, TX. As part of this class he helped a group of Kerrville-area volunteers start the MLMP at KSP’s Butterfly Garden. Over the past seven years many individuals, including the gardeners, have helped collect MLMP data. Virginia de Wolf, Anne Cassidy, and Alexis McRoberts have comprised the core group of MLMP volunteers.

**Virginia de Wolf** has led this project since 2007. Ginny sends out weekly reminders and summary reports of the past week’s data. She keeps track of and enters the data at the MLMP website. She loves learning about all of the butterfly species that visit the garden, especially monarchs, and about the importance of native plants. She assists Kip in the field work component of his training classes, participates in the annual NABA count at several locations in the area, volunteers at the local nature center, and participates in the annual Guadalupe River clean-up in river areas adjacent to KSP.

**Anne Cassidy** has been participating in MLMP since 2008. Anne takes over the leadership role when Ginny is on travel. She had her ranch certified as a Monarch Waystation as well as a National Wildlife Federation wildlife management area and participates in a number of nature activities, including monitoring blue bird boxes at The Hill Country State Natural Area in Bandera, Texas, and participating in NABA butterfly counts.

**Alexis McRoberts** started working with this group in 2009. She also takes on the leadership role when Ginny is not available. She cultivates nectar and larval plants in her backyard, tags monarchs, assists Kip in the field work component of his MLMP training classes, and with her husband participates in docent work for bat emergences at Old Tunnel State Park in Fredericksburg, Texas. Her work has given her confidence to give a program on monarchs to a local garden club and astound her young grandchildren with her insect knowledge.

**Other Garden Activities**

The individuals who volunteer at the Butterfly Garden have become a very strong community of friends. One of the delights about volunteering is seeing how the activities have grown in the past seven years. Below are a few examples:

**Kiosk:** In 2008-2009 a TMN member, Bob Tanner, built a kiosk for the Butterfly Garden. The materials were paid for by a grant from the Kerrville NPSOT chapter. Sandra Magee, another TMN member, uses the kiosk to highlight information about monarch conservation, display photos and information that help visitors identify butterflies, advocate for the use of native plants in the Butterfly Garden, share an educational brochure she created, and post notices of related events in the surrounding area.

**Butterfly walk and associated checklist:** In 2010 MLMP volunteer Cynthia Johnson initiated a weekly “butterfly walk,” which starts after our MLMP data collection activities are completed. For this walk participants identify and count the number of butterflies seen in the garden and surrounding area. At the end of each year Sandra Magee compiles the checklists from each walk and creates a summary comparing data collected since 2010.

**Workshop for children:** In the summer we give workshops for children who are attending KSP’s day camp. We have given classroom tutorials and also have led field trips during which the children can view butterflies up close in the garden.

**Winter study group:** Last but not least we want to mention our study group, which meets during the cold winter months (editor’s note from Minnesota—cold months in TEXAS???) when there is little we can do outside. At these study groups we discuss butterfly-related topics while enjoying warm beverages and each other’s company.

**Reader Feedback:** Please send suggestions or content for future e-newsletters! Email: info@mlmp.org