



MLMP Updates

An e-newsletter of the Monarch Larva Monitoring Project



Winter 2023

This winter's newsletter includes a reflection from MLMP Founder Dr. Karen Oberhauser on monarchs in the winter, an in memoriam piece for longtime MLMP volunteer and trainer Kip Kiphart, our 2023 workshop listing and information, a summary of 2022 MLMP data, an update to Activity 3: Estimating Monarch Survival, and some monitoring and data entry reminders.

Monarchs in Winter

By Karen Oberhauser, UW-Madison Arboretum

For most, but not all, of us, winter is a season without monarchs. But if you're lucky enough to live in a region that stays warm all year or travel with the monarchs from the north to the south, you can still see them, either hanging out in trees in their wintering sites in California or Mexico, or breeding in areas along the Gulf Coast (and sometimes farther inland).

Our colleagues in Mexico and California have sent news of overwintering monarchs. The Xerces Society is still waiting for final numbers from their annual [Thanksgiving Count monitoring](#) period, but early tallies suggest numbers that haven't been seen since 2000, with over 300,000 butterflies being reported so far. This is an amazing comeback from the record low numbers (under 2000) in 2020. The team from World Wildlife Fund-Mexico and the Monarch Butterfly Biosphere Reserve have completed their first rounds of measurements, with data to be released later in the year. Estela Romero reported dense, but small colonies in her regular [December Journey North update](#), which includes stunning photos of monarchs clustered on oyamel fir trees.

Those of us in northern regions can't monitor monarchs or work directly to preserve their winter habitat. But every overwintering butterfly in Mexico and California has come from a site like those we monitor, and what we do to understand the summer part of their annual cycle and preserve their breeding habitat is key to the continuation of this cycle.

Multiple recent studies (see especially Zylstra et al. 2021 and 2022 summarized in the research reviews described on page 5) have shown associations between peak summer population size and area occupied in Mexico. Interestingly, the biggest drivers of summer numbers seem to be changing over time, with available breeding habitat associated with monarch numbers before about 2005, and climate taking over as the key driver since then (climate was also important before 2005). This makes sense when we consider that so many monarchs came from milkweed in corn and soybean fields before the advent of genetically-modified herbicide tolerant crops; as these new crop genotypes took over fields from about 1998-2005, that habitat was lost. Since then, breeding habitat availability hasn't really changed much. We are restoring and improving habitat, but we are also still losing it to development and other land conversion. As John Pleasants (2017) noted, the amount of habitat available creates a ceiling for monarch numbers, and weather conditions determine if that ceiling is reached.

So, while we're thinking about monarchs in their winter homes, let's think about what we can do for them when they return north next spring. Let's try to raise the habitat ceiling! There are lots of great ideas for how to do that on the [Monarch Joint Venture](#) website; a good start might be thinking about how you can increase the size or quality of your MLMP site.

In Memoriam: Kip Kiphart

By Karen Oberhauser, UW-Madison Arboretum

In summer 2002, I received a phone call out of the blue from Ridlon “Kip” Kiphart, a recently retired cardio-vascular surgeon from Boerne TX. Kip had been introduced to monarchs and the MLMP by my friend and MLMP volunteer Mary Kennedy. He began monitoring monarchs at Cibolo Nature Center (CNC) in the spring of 2002 and was interested in becoming an official trainer. That call was the beginning of a long and wonderful friendship, mostly through emails and phone calls, but including memorable meetings at events at Cibolo, Selah Ranch in the Texas Hill Country, San Luis Obispo CA, a Texas Master Naturalist Meeting, and the 2012 monarch meeting in Minneapolis MN.



Kip’s passion for monarchs began when his son, working for a native plant nursery in Texas, introduced several plants to Kip’s front yard. Kip got hooked on the native foliage, but also the butterflies that came to nectar. He quickly learned to distinguish monarchs, viceroys, and queens, taking pictures and immersing himself in butterfly biology and ecology. After our first phone call, and even though our trainer-the-trainer program hadn’t officially started, Kip set up a training for fall 2002. He subsequently conducted dozens of other workshops for volunteers from CNC and Master Naturalists throughout Texas, including the popular semi-annual “MLMP @ CNC Back Porch Review” and at Texas Master Naturalist annual meetings. Thanks to Kip and the dozens of volunteers he trained, [monitoring at Cibolo has taken place from 2002-2022](#), and will keep going into the future. Many of the dots on the [Texas MLMP map](#) are the direct result of Kip’s powers of persuasion and enthusiasm.

In 2008 Kip received the Presidential Volunteer Service Award from the President’s Council on Service and Participation for volunteering 5000 hours for the TMN program. By 2016, he had logged 15,000 volunteer hours, and by 2018, 20,000 hours! Volunteering for Kip was a full time job.

Kip moved from Texas to Florida in January 2020 to be near his son. We continued to correspond, with his last message to me being “You always make me smile.:-)”. And the same was true for me; a communication from Kip always made me smile.

After Kip’s death on November 14, 2022, at the age of 91, I heard from many people with memories of Kip. The day after he died, CNC MLMP volunteer Linda Plevak shared the following: “My husband and I monitor at Cibolo and we were trained by Kip. He will always be my Monarch mentor and a true Monarch champion... My husband saw a beautiful male Monarch butterfly in Boerne today. I am pretty sure it was Kip stopping by on his way to Mexico.”

MLMP Training Workshops

Become a community scientist with the Monarch Larva Monitoring Project (MLMP)! The MLMP team from the Monarch Joint Venture and the UW-Madison Arboretum co-lead these virtual one-day trainings on how to collect data in your own backyard, nearby park, or virtually any green space with milkweed, that contributes to our knowledge about the monarch population. Participants learn about monarch biology, monitoring procedures, and data entry protocols, and are able to ask monarch biologists their questions about monarchs and monitoring.

These sessions will be relevant for both newcomers and individuals who are already participating in the MLMP or another monarch citizen science project. The four-hour training will be conducted in two parts with a one-hour break between them. For individuals seeking financial assistance, please reach out to MLMP Coordinator Julia Whidden at info@mlmp.org.

Check out the workshop listing on the following page.

2023 Virtual Workshops

Western States — Saturday, February 4

- 11:00—4:00 CST
- For states west of the Rocky Mountains including, WA, OR, CA, ID, NV, AZ, MT, WY, Western CO and Western NM

Southern States — Saturday, February 25

- 10:00—3:00 CST
- For states east of the Rocky Mountains AND south of approximately 40°N, including TX, LA, MS, AL, FL, GA, OK, AR, KA, MO, TN, SC, NC, VA, WV, KY, MD Southern OH, Southern IN, Southern IL, NM, Eastern NM, Eastern CO

Northern States — Saturday, April 29

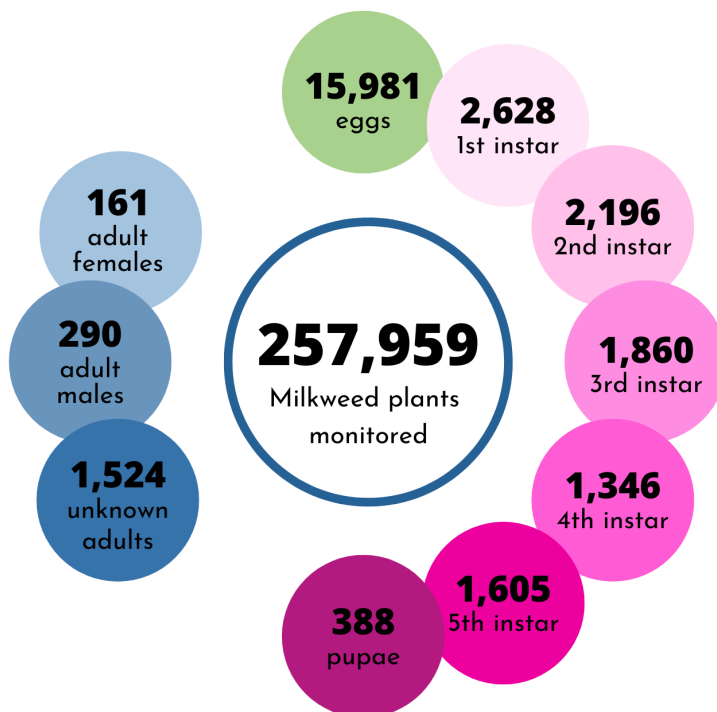
- 10:00—3:00 CST
- For states east of the Rocky mountains and north of approximately 40°N, Including ME, VT, NH, DE, NY, NJ, MA, PA, MI, WI, MN, IA, ND, SD, Northern IL, Northern IN, Northern OH

To register, head to the links above or the workshop links on MLMP’s homepage at www.mlmp.org and contact Julia Whidden at info@mlmp.org with any questions.

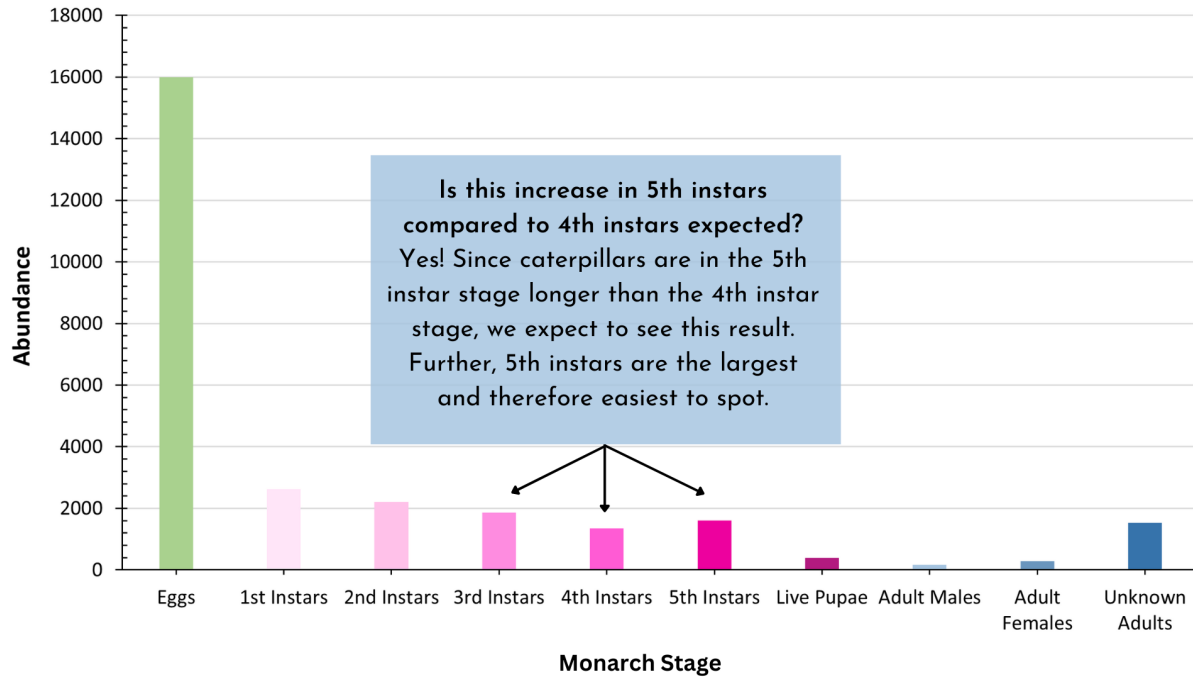
2022 Monitoring by the Numbers

Now that 2022 has come to a close, we’ve been able to summarize the incredible data collected by our dedicated citizen scientists. Take a look at the figures below to see the highlights, including **257,959 milkweed plants monitored and 424 sites actively reported from!** Cheers to the state of Illinois, which had the most number of sites at 117.

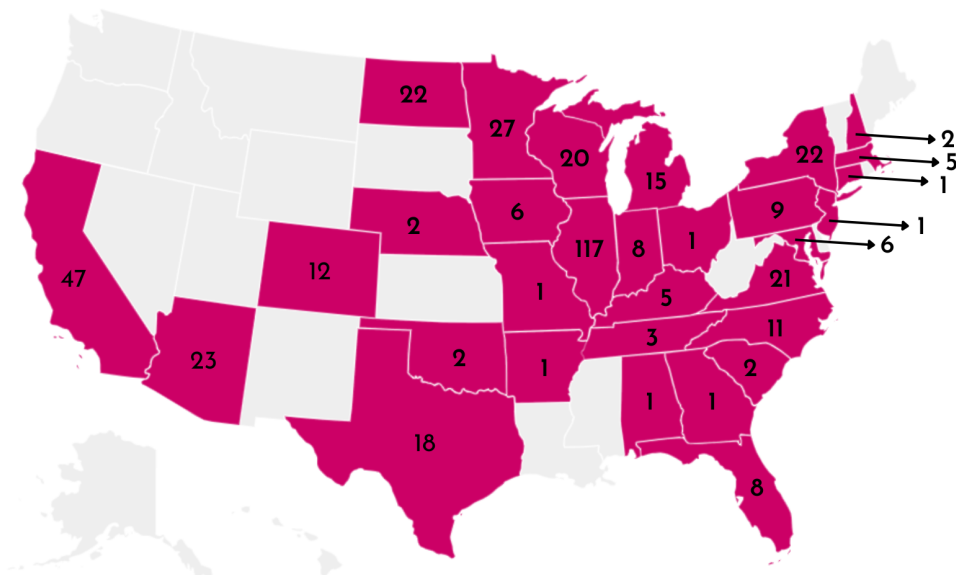
MLMP Activity 1 Data: 2022 Summary



MLMP Activity 1 Data: 2022 Summary



MLMP Site Locations



424
Sites

31
States

+ Puerto Rico
+ 1 Canadian Province
+ 2 New Zealander Regions

Reviews of Monarch Research

A key goal of the MLMP is research—helping us understand as much as possible about monarchs in order to best conserve them. The Monarch Joint Venture Monarch publishes an annual Research Review; short summaries of papers written about monarchs. The 2022 version is almost ready to upload, but you can read the 2020 and 2021 versions [here](#). Even if you don't have time to read the entire documents, you can read over the general takeaways at the beginning of each document. Another great resource is the [MonarchNet Library](#), which contains links to almost 1000 peer-reviewed papers on monarch biology. If you click on the box for "Monitoring Data Used", you can see papers that used MLMP data.

Activity Updates

For activity 3, Estimating Monarch Survival, we will no longer be accepting or processing tachinid flies (photo right) because the samples sent in previously have revealed the diversity and distribution of tachinid parasitoid species. We thank all volunteers that have mailed us flies since the project began for their significant contribution to our understanding of monarch parasitoids. Survival data can still be collected and reported to the MLMP data portal for this project.



MLMP will be making some other changes to our activities in the coming months that we'll be sure to share via our newsletter, social media, and trainings. Stay tuned!

Important Reminders

Rearing Monarchs in California Requires a Permit

California is the only US state that requires a collecting permit for invertebrates. This includes any type of collection such as using them for scientific research or teaching, or collecting them to rear and release. More information on the California permit can be found on the CDFW website. Currently, MLMP does not have a blanket permit for our California volunteers, so we ask that you do not rear monarchs for our survival study. All other MLMP activities are allowed and encouraged in California, and we welcome your participation!

Updates to Activity #1C Data Sheet

In response to recurring data collection and data entry errors, we updated the [Activity #1C data sheet](#) and instructions to simplify data entry into our portal. The data sheet now includes an example.

Data Entry Help

This year, we're offering new opportunities for MLMP citizen scientists to get help with entering their data into our data portal. If you're having trouble, our first recommendation is to check out the [Activity 1C data entry help video](#) on our website under 'Get Started' and 'Online Training'.

If you're still having trouble, please reach out to our MLMP Coordinator Julia Whidden at info@mlmp.org with specific questions.

You can support MLMP in many ways!

Please consider supporting our collective conservation efforts with a donation that supports training, materials, and maintenance of the data you collect. You can make a financial contribution today [here](#).

Have a story from your site or art to share? We'd love to hear from you!

info@mlmp.org | www.mlmp.org

Julia Whidden | UW-Madison Arboretum | 1207 Seminole Hwy | Madison, WI 53711