February, 2018 Issue 19



Upcoming Events

 The WI Summit for Natural Resources Volunteers is March 22-24. Find out more and register: http://wiatri.net/cbm/Conference/2018/



Photo: Prairie Blazing Star, Wendy Caldwell

The Monarch Joint Venture 2003 Upper Buford Circle 135 Skok Hall St. Paul, MN 55108

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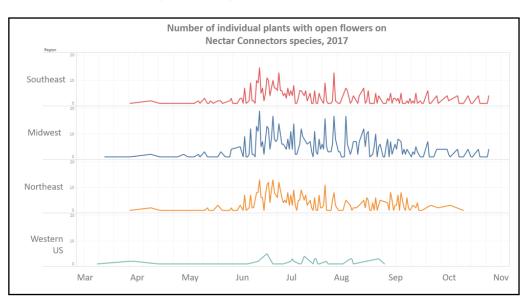
Nectar Connectors: First year results of Nature's Notebook campaign

Nature's Notebook is a program that empowers both scientists and non-scientists to collect data on plant and animal phenology. The information gathered with Nature's Notebook can be used to inform decision-making at local, national, and global scales. Last year, the citizen science program launched a new campaign, **Nectar Connectors**, to better understand the flowering timing of nectar sources for monarchs and other pollinators.

Participants observed the flowering phenophases of nectar plants, with a focus on <u>52 species</u> identified as important nectar sources. Reports were submitted for sites as small as a backyard garden and as large as a nearby park. The campaign recommended submitting observations 2-4 times per week over the summer and fall while plants are blooming.

In its first year, "206 observers reported on Nectar Connectors species at 135 sites" (Nature's Notebook). The top three species reported include common milkweed (*Asclepias syriaca*), New England Aster (*Symphyotrichum novae-angliae*), and butterfly milkweed (*Asclepias tuberosa*).

The chart shows the number of individual plants with open flowers by region. Generally, the bloom times follow a similar pattern with peaks in June and August.



The Nectar Connectors reports show that nectar sources were generally available for monarchs along their migration routes. This campaign is starting to understand how nectar sources are responding to changes in seasonal climate. The data gathered from observations will help determine whether or not sufficient food sources are available for monarchs and other pollinators. <u>Visit their website</u> for more information on Nectar Connectors.

Nature's Notebook. (2018). Nectar Connectors.

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Featured Citizen Scientist: Cathy Downs

We spoke with Cathy Downs, an avid monarch citizen scientist and educator based in Texas to learn more about her experiences.

MonarchNet: How did you get engaged in Monarch Citizen Science?

Cathy Downs: I was a new Texas Master Naturalist in 2005, having just moved to Texas in 2004. I was already engaging in Citizen Science with the Christmas Bird Counts and the NABA July 4th butterfly counts. I attended a workshop at the Texas MN State Conference that Dr. Kip Kiphart gave on monarchs, and learned about the citizen science programs for monarchs. I was hooked! I began in 2006 by learning about tagging butterflies at the Kerrville Schreiner Park Butterfly Theater with a great naturalist in the Hill Country, Tom Collins. We also had a Monarch Larval Monitoring group there. I continued attending Kip's workshops and lectures to learn as much as I could about monarchs and monitoring. I began helping him with workshops and monitoring at the Cibolo Nature Center in Boerne. We also hosted several MLMP workshops at the garden.



MonarchNet: What have you learned about your environment and/or community by participating in and teaching citizen science?

Downs: I have learned that our native plants are very adaptable to our weather extremes. We experience both extreme drought and extreme flooding, yet native milkweeds continue to emerge and provide the resources necessary to sustain the spring migration. There are still hardy nectar plants that will bloom in the fall to provide fall migration resources even in the direst conditions. If we can educate about the benefit of these native plants, we can help maintain a stable monarch population. By teaching citizen science, I have also learned that there is a real concern for good land stewardship, land ethics, and values in the community. Many urban and suburban residents have banded together to form community gardens to assure that sustainable green spaces survive and thrive for monarchs and other pollinators. Lastly, I have learned that volunteer turnover can be very high. A monitoring group has to be prepared for these turnovers by rotating your team during the month and sending out buddy teams, as it's more fun to share the experience, to be confident of that 1st instar, and to ensure safety in the field.



Cathy Downs

MonarchNet: What is your most memorable experience out in the field monitoring?

Downs: Gosh, how do you choose just one? Have I even had my most memorable experience yet? My first monarch ovipositing, my first surviving 5th instar and chrysalis, tagging in a cloud of 200 nectaring monarchs? I've been monitoring and tagging for 12 years now and every experience is memorable in some new way. My most satisfying experiences are watching someone new at monitoring have their most memorable experience now!

MonarchNet: What have been some challenges you have had to overcome and what did you learn from them?

Downs: One of my greatest challenges has been debunking milkweed myths with private land owners and school yard gardens. Through personal outreach, interpretation and applying trusted research, I was able to share the truth. I worked in the schools with teachers, superintendents and principals as well as parent-teacher associations. On private lands, as a result of the Pollinator Strategy mandates, we were able to depend on trusted stakeholders like Texas Parks and Wildlife and the Natural Resource Conservation Service, allowing us to break through some of the "gates" to these properties. A further challenge is that we still lack the speakers to help people on a one-to-one basis. We are currently training monarch presenters in Texas in hopes that we will be able to offer a selection of speakers for each region of the state. Finally, much of the western and southern Texas landscape remains unmonitored.

MonarchNet: What inspires you to continue doing this work?

Downs: The children, the migration and the preservation of the landscape are a constant source of inspiration. I'm a great advocate of children in nature and have taught over 30,000 children the Monarchs in the Classroom curriculum exercises. Monarchs are a wonderful teacher of inquiry based science, of wonder and of responsibility. If we can teach our children to value the balance of nature and their part in it, perhaps there is hope. Citizen Science education has been a meaningful and personal growth experience in my life. I have met some amazing and learned people in my travels, visited places I would never have seen otherwise, and shared in opportunities that never would have been offered to me under other circumstances. It's a holistic exercise and a wonderful way to share in the real science of saving the monarch migration.

Thank you Cathy for your amazing work, and for inspiring future generations to do monarch conservation and citizen science!

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Creating Habitat One Mile at a Time



Every year thousands of cyclists cross the state of Iowa in the RAGBRAI, a large-scale bike ride. For the past four years, Milkweed Matters has collaborated with participants to distribute common milkweed (Asclepias syriaca) along the routes. The organization holds educational seedball events across the state, where attendees learn all kinds of things about monarchs: from current population status to breeding and feeding, and how they can help. In 2017 alone, Milkweed Matters held over 80 events, with 4,500 attendees, and rolled over 60,000 seedballs. With about 4 seeds per ball, Milkweed Matters helped facilitate the distribution of almost a quarter million seeds that year! Riders are instructed to toss the seedballs from their bike while riding into areas of the roadside that will not be sprayed or mowed. This July will mark their fifth year, and with a route of over 400 miles, they hope to provide even more roadside habitat for monarchs! For more information visit https://milkweedmatters.org/.

The 2018 Monarch Conservation Webinar Series schedule has been released. On the 4th Tuesday of each month, the Monarch Joint Venture and U.S. Fish and Wildlife Service will host a webinar on a new monarch conservation topic with the expertise and experience from the MJV partnership. Visit monarchjointventure.org/news-events for more information on each topic and registration information!

The Monarch Joint Venture is excited to release the Monarch Conservation Efforts Map! People across North America are progressing monarch conservation every day. This new tool will help highlight those efforts and connect local conservation partners and friends. This project originated with the Emerging Wildlife Conservation Leaders, whose monarch team helped establish the map and then transitioned it to the MJV for long-term keeping. Submit your effort today!





Share your ideas!

Are you are a butterfly citizen scientist with a story, photos, or artwork to share? Would you like to nominate a volunteer or program for recognition? Write to us at *mjvassistant@umn.edu* with your ideas.