August 2011

Monarch Monitors in the News

Citizen scientists are in the news studying monarchs and other animals. Read about how citizens are monitoring bats, birds, and butterflies in Madison WI. This article in the Isthmus includes a story about MLMP volunteer Eric Johnson- Monarchs in The Isthmus. Another article, Young Scientists Take Flight in Monarch Study, from Duluth News Tribune tells a story of a group of kids researching butterflies in Rice Lake Park, MN. The group is a 4-H club that works with a leader from University of Minnesota Extension. They observe monarchs and gather data for 6 weeks in the summer and are constantly learning new things about monarchs and their environment.

Save the date! June 21-23, 2012

Monarch Biology and Conservation Meeting

We invite your attendance at a 2.5 meeting at the University of Minnesota’s Landscape Arboretum. This meeting will be an opportunity for monarch biologists, agency land managers, monarch conservationists, citizen scientists, and others interested in monarch biology and conservation to share information on monarch population trends, new findings in monarch biology, and successful monarch conservation efforts. It will include speaking and poster sessions, field trips, workshops, and plenty of time for informal sharing and networking.

This 5th international conference on monarch biology and conservation (following meetings in 1981, 1986, 1997 and 2001 in Morelos, Mexico; Los Angeles California; Michoacan, Mexico; and Lawrence Kansas) is being planned and sponsored by the Monarch Joint Venture and the MonarchLab at the University of Minnesota. More details are forthcoming! For information, please contact Karen Oberhauser (oberh001@umn.edu).

Left:
Fawns in a Field  by Samantha Russell

We are always interested in seeing photos from your monitoring season!
Submit your photos here!

Below:
Moth (Cycnia inopinatus) on Milkweed  by Kip Kiphart
Exciting Findings

Black Bear and Den
Most people don’t black bears and monarch butterflies, but Diane Rock found her monitoring site inhabited by this bear near Niagara, Wisconsin. She spotted the bear last year around May 20 but continued to monitor her site. This year, she found the den as pictured on the left. She decided that it may be too dangerous to risk upsetting the bear near the den so she no longer monitors this particular site.

Get ready for the fall migration!

After a strong 2011 showing at MLMP sites in the Upper Midwest, we’re getting reports from many observers that they’re seeing more monarchs than ever. This message, received only a few days ago from an observer in Elk River Minnesota, is typical: "I just wanted to report than I'm seeing monarch butterflies in greater numbers than I've ever seen in my 34 years living in Elk River. I don't know if it means anything but it is unusual to see this many."

Journey North observers have started to report roosting sites in central Minnesota and southern Wisconsin (see Journey North), and we’ve received reports of breeding monarchs starting to move south. We heard again from Megan York-Harris in southern Missouri, whose photos of Asclepias tuberosa plants overloaded with monarch caterpillars and eggs in May were published in our June newsletter. Megan found an egg on one of these plants on August 16th.

This is a complicated time for monarchs, with a mixture of individuals in diapause (a non-reproductive state in which their gonads will not develop fully until sometime in the future) and individuals breeding. While most of the monarchs migrating south at this time of the year are in diapause, not all of them are. MLMP observers in the central and southern US begin to see monarch adults, eggs and larvae in late summer after not seeing them for most of the summer. We assume that these adults have flown from the north, but are not in diapause. It makes evolutionary sense that they would fly south to lay eggs, since an egg laid in late August in at Megan’s site in Missouri is probably more likely to develop and migrate to Mexico than one laid in Minnesota, where a hard freeze in early September is not that uncommon.

There is variation in monarch populations in individual responses to environmental cues. So, in any group of monarchs, even if they’ve been exposed to exactly the same conditions, there may be some individuals in diapause and some that are reproductive. It’s possible to find monarchs mating in Mexico in December, and at roosting sites in the central US in October. These individuals may have eclosed earlier and flown south in a reproductive condition, or emerged in this reproductive condition at a time when other monarchs were emerging in diapause. It is also possible that they had been exposed to some environmental cue – perhaps milkweed in great condition – that triggered diapause development. We simply have no way of knowing, but that’s what makes monarchs so interesting!
Volunteer Spotlight

Sue Payant  
Marquette, Michigan

Sue has been monitoring with MLMP for 12 years. She began raising monarchs on her own before finding the opportunity online to become an MLMP volunteer. The site that Sue monitors is located in the middle of a working railroad yard that transports iron ore pellets. The patch is bordered by a forest and a bog and is only about 15 feet from the railroad tracks. For years Sue had no troubles accessing her site, but new regulations have forced her to change her monitoring style. Today Sue is required to wear a hard hat, protective sunglasses, and a bright orange reflective vest while she is monitoring. From time to time she must remind workers not to dump iron ore pellets on or near her milkweed patch, but over the years she has developed a working relationship with them.

Having the opportunity to relax and observe her site in solitude is what keeps Sue monitoring each year. “It always amazes me that the deer will walk right out into the middle of the milkweed patch and watch me as I gather data” says Sue. A few years back she encountered problems with her vision, but corrective surgery helped her to see details so that she could continue monitoring. As Sue says, “My infatuation with monarchs is alive and well.”

While she was working as a speech therapist for a Head Start Program, Sue held workshops to show teachers how to incorporate butterfly rearing into their curriculum. She has also taught week long summer camps at the MooseWood Nature Center about the life cycle of monarchs.

Concept of the Month

Biological Conservation

Active management to ensure the survival of the maximum diversity of species, and the maintenance of genetic variety within species. Biological conservation also implies the maintenance of biosphere functions such as biogeochemical cycling, and embraces the concept of long-term sustained resource use or sustained yield from the biosphere, which may conflict with species conservation in some circumstances.

Monarch Fun Fact

Adult monarchs in summer generations live from 2-5 weeks; those that emerge in late summer and early fall can live up to 8-9 months to survive the trip to and from their overwintering sites in Mexico.

Reader Feedback

If there is anything you would like to share in the next e-Newsletter, let us know. Please email us with any interesting findings or unique events that you would like to share. We would love feedback and suggestions for things you would like to read about. Email MLMP Updates

If you have other questions about monarchs, Ask The Expert

Contact Us

Questions or comments? Contact info@monarchlab.org or call 612-624-8706

Visit our website at www.mlmp.org or www.monarchlab.org