



Western Monarch Monitoring Workshop

North American monarch butterflies need your help! In partnership with the Monarch Joint Venture, The University of Minnesota Monarch Lab presents a two-day monarch monitoring workshop focusing on western monarch populations and citizen science monitoring.

The workshop will cover basic monarch biology and the monarch annual cycle, and will introduce monarch citizen science projects, including the Monarch Larva Monitoring Project (MLMP), Project Monarch Health, and the Southwest Monarch Study. Through these citizen science programs, volunteers collect valuable data about monarchs and their habitats which help to inform monarch conservation efforts. At this workshop you will engage in hands-on activities, including visiting a milkweed site to learn MLMP protocols, sampling adult monarchs for *Ophryocystis elektroscirrha* (a protozoan parasite commonly known as OE) using Monarch Health procedures, tagging adult butterflies, guided by the Southwest Monarch Study.

Instructors include members of Dr. Karen Oberhauser's lab, and Gail Morris of the Southwest Monarch Study. Anyone with an interest in monitoring monarchs is encouraged to attend!

DATE AND TIME: Friday, June 6th, 1:00 p.m. -5:00 p.m. and Saturday June 7th, 9 a.m.-4:30 p.m.
(please plan on attending both days of the workshop)

LOCATION: River Fork Ranch (TNC), 381 Genoa Lane, Minden, NV 89423 (near the historic town of Genoa in the Carson Valley)

COST: Free (recommended \$20 donation for lunches and snacks)

RSVP: The registration form can be found at <http://monarchjointventure.org/news-events/events/> The workshop is limited to 25 participants. Please RSVP by May 1, 2014.

INSTRUCTORS: Karen Oberhauser (University of Minnesota) and lab (Kelly Nail, Carl Stenoien, Sarada Sangameswaran), Gail Morris (Southwest Monarch Study).

Questions? Please contact Sarada Sangameswaran at ssangame@umn.edu or (612) 625 8304 with questions or to register for the workshop. Please include Nevada Workshop in the subject line.



Staff Biographies:

Dr. Karen Oberhauser has been studying monarchs since 1984, and is a professor in the Department of Fisheries, Wildlife and Conservation Biology at the University of Minnesota. She has been active in promoting monarch citizen science projects, and is the co-creator of a national citizen science project, the Monarch Larva Monitoring Project.

Gail Morris coordinates the Southwest Monarch Study, and is a Conservation Specialist for Monarch Watch in Arizona and the Western Region. She monitors and trains volunteers for the Monarch Larva Monitoring Project and Monarch Health, and works with local and state agencies to create monarch friendly habitat.

Kelly Nail is a PhD student at the Monarch Lab. She is interested in the effects of climate change on the migration patterns of animals, in particular monarch migration. She has also been involved in citizen science projects, including the Driven to Discover program through the University of Minnesota Extension.

Carl Stenoien is a PhD student at the Monarch Lab, where he is studying interactions of butterfly pupae and parasitoid wasps. Carl focuses on how and why some parasitoids have evolved to tolerate toxic butterfly hosts, and the ecological and evolutionary consequences of these adaptations for the hosts and parasitoid populations.

Sarada Sangameswaran is a staff member of the Monarch Lab. She coordinates the citizen science newsletter for the monarch lab. For more information, or to subscribe, go to:

<http://monarchjointventure.org/news-events/get-updates>