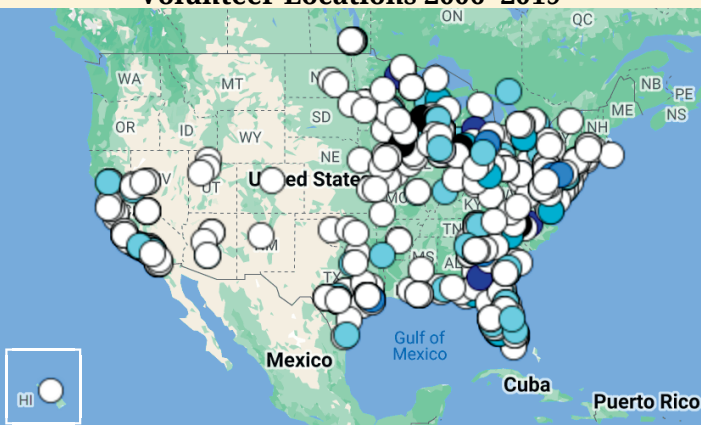


# Volunteers

**Volunteers are essential** to Project Monarch Health and other large-scale research projects on migratory animals. Project Monarch Health participants span all ages and skills including families, retirees, K-12 students, and nature centers. Volunteers get a free data kit and mail data from monarchs in their area to scientists to expand understanding about the parasite OE in monarch butterflies.

**Volunteer Locations 2006 -2019**



**Map Legend**

- White dot: 1-2 years of participation
- Blue dot: 3-10 years of participation (darker blue indicates more years)
- Black dot: 11-12 years of participation

## GET IN TOUCH WITH US!

**Visit our website**  
monarchparasites.org

**Email**  
monarchhealth@gmail.com

**Phone**  
(706) 542-3485

**Instagram**  
Project Monarch Health

**Facebook**  
Monarch Health

**Youtube**  
Project Monarch Health

**Mailing**  
Dr. Sonia Altizer Odum  
School of Ecology  
University of Georgia  
Athens, GA 30602

# Scientific publications based on Project Monarch Health data:

- Majewska, A.A., Satterfield, D.A., Harrison, R.B., Altizer, S. and Hepinstall-Cymerman, J., 2019. Urbanization predicts infection risk by a protozoan parasite in non-migratory populations of monarch butterflies from the southern coastal US and Hawaii. *Landscape Ecology*, 34, pp.649-661.
- Satterfield, D.A., Villablanca, F.X., Maerz, J.C. and Altizer, S., 2016. Migratory monarchs wintering in California experience low infection risk compared to monarchs breeding year-round on non-native milkweed. *Integrative and Comparative Biology*, 56(2), pp.343-352.
- Altizer, S., Hobson, K.A., Davis, A.K., De Roode, J.C. and Wassenaar, L.L., 2015. Do healthy monarchs migrate farther? Tracking natal origins of parasitized vs. uninfected monarch butterflies overwintering in Mexico. *PloS one*, 10(11), p.e0141371.
- Satterfield, D.A., Maerz, J.C. and Altizer, S., 2015. Loss of migratory behaviour increases infection risk for a butterfly host. *Proceedings of the Royal Society B: Biological Sciences*, 282(1801), p.20141734.
- Bartel, R.A., Oberhauser, K.S., De Roode, J.C. and Altizer, S.M., 2011. Monarch butterfly migration and parasite transmission in eastern North America. *Ecology*, 92(2), pp.342-351.



## WE NEED YOUR HELP!

Website



Donate



Project Monarch Health



Odum School of Ecology  
UNIVERSITY OF GEORGIA



# Project Monarch Health



A community science project to monitor the health of wild monarch butterflies



[www.monarchparasites.org](http://www.monarchparasites.org)



# TESTING FOR PARASITES

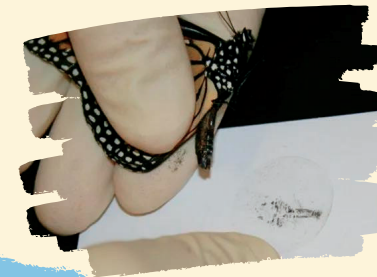
## IN 3 STEPS

Request a free sampling kit at [monarchhealth@gmail.com](mailto:monarchhealth@gmail.com)



1. Hold the butterfly with the wings shut.

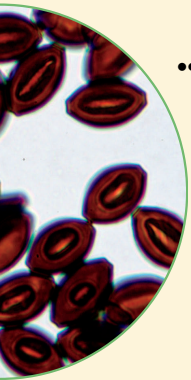
2. To sample for parasite spores, tape the underside of the monarch's abdomen with a clear sticker.



3. Place the sticker onto an index card. Note date, sex, and site on the datasheet. Mail it to us for analysis.

**This Monarch may appear healthy...**

...but it could be infected with *Ophryocystis elektroscirrha* (OE), a parasite that infects monarch butterflies.



Monarchs infected with OE can have millions of parasite spores (called oocysts, left) on the outside of their bodies.

Infected monarchs fly less well and live shorter than healthy monarchs. In severe cases, they become stuck in the chrysalis. Caterpillars become infected when they eat a milkweed leaf or egg contaminated with parasite spores.

WORKING TOGETHER, volunteers and scientists monitor changes in monarch disease over time and identify factors that affect butterfly health.

**VOLUNTEERS:**  
• Collect parasite data by sampling wild monarchs • Send samples to the University of Georgia for analysis • Ask questions and share observations with scientists • Spread the word!

**SCIENTISTS**  
• Analyze samples • Share data with each volunteer and produce an annual report • Write scientific papers using volunteer data to advance ecological knowledge and monarch conservation



This collaboration has led to important discoveries, such as how long-distance migration helps to lower parasite infection and keep monarchs healthy.

We will inspect your samples for parasites at the University of Georgia and share the results with you!

