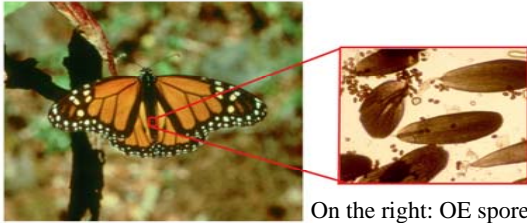
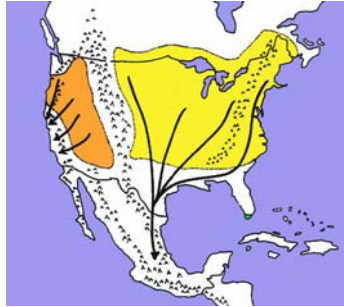


# BUT, they could be sick with *Ophryocystis elektroscirrha* (OE), a parasite that infects monarch butterflies.



On the right: OE spores shown relative to abdominal scales of an adult butterfly.

From eastern North America, monarch butterflies migrate between Mexico and their breeding grounds each spring and fall. Monarch populations in places such as South Florida and Hawaii, however, breed year round and do not migrate.



*What implications does the monarch migratory behavior have on the occurrence of OE?*

**MonarchHealth is a project in which volunteers sample wild monarch butterflies to help track the spread of this parasite in North America.**

Volunteers might find it easiest to rear monarch caterpillars until they become adult butterflies to sample for parasites. However, if you are quick enough to catch a wild butterfly, this is also an option for sampling.

## Parasite Sampling: It's as easy as 1-2-3!

The sampling techniques are not cumbersome or tiring. We will provide you with a research kit with all the materials you will need.



1

Holding the butterfly is easy: pinch between thumb and forefinger.



2

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



3

Last, you press the tape onto an index card and send it back to us for analysis.

**We tell you if your butterflies had parasites.**

## HELP US LEARN MORE

Collection of data from different sites will help scientists answer this question and learn more about parasite spread in monarchs.

### Volunteers:

- Collect parasite data all over the United States.
- Send to lab at the University of Georgia for microscopic analysis.

### Scientists:

- Analyze parasite samples.
- Post data on MonarchHealth website.
- Write scientific papers using the data from citizen science sampling.

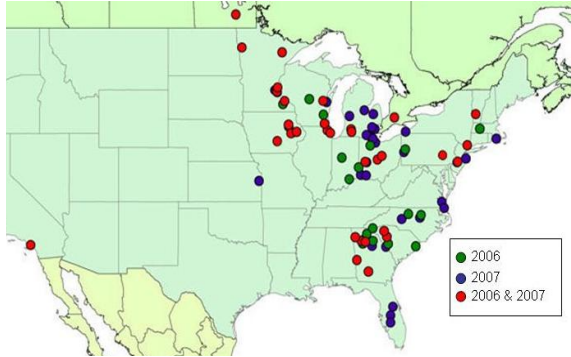
**YOU ARE CONTRIBUTING NOT ONLY TO MONARCH BIOLOGY, BUT ALSO TO THE BROAD AREA OF SCIENCE!**

E-mail us at [monarch@uga.edu](mailto:monarch@uga.edu) for more info on how to participate!



## A Collaborative Research Project Aimed To Educate and Engage Citizen Scientists

.....



Locations of our 2006-2007 volunteers are spread across more than 21 states and Canadian provinces.

- Volunteers are the key to Project *MonarchHealth*! We need both new participants and recurrent volunteers.
- Participants can be people of all ages and skills including families, senior citizens, classrooms, organizations, nature centers, or anyone with an interest in monarchs, disease, or ecology.
- Citizen scientists receive special research kits and detailed instructions to collect parasites.
- Sampling can be done at any site with wild monarch butterflies or from raised caterpillars.
- Data collected by participants are sent to monarch scientists to aid in understanding more about the parasite OE in monarch butterflies.
- This is an ongoing study—we need your continued help to assemble a long-term data set on monarchs and their parasites.



For more information contact  
*MonarchHealth* project coordinators at  
Email: [monarch@uga.edu](mailto:monarch@uga.edu)  
Mail: Altizer Lab  
Odum School of Ecology  
University of Georgia  
Athens, GA 30602  
Telephone: (706) 542-3485  
Web URL: [www.monarchparasites.org](http://www.monarchparasites.org)

***MonarchHealth:***  
An exciting research project  
for your nature center,  
organization, classroom,  
family, or you!



**These monarchs  
may look healthy...**