

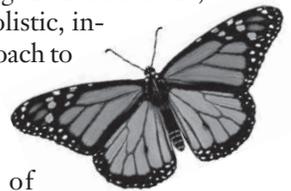


# Butterflies without Borders

by Barbara Payne, MAG State Coordinator

Across Georgia, magic is afoot. Many of our students are anticipating a royal visit. The royal procession will begin in March from Mexico's Sierra Madre mountains as *Danaus plexippus*, the monarch butterfly, soars as high as 11,000 feet for arrival in Georgia one sunny day in April.

Tracking, understanding, and supporting this winged odyssey is the mission of Monarchs Across Georgia (MAG), a statewide environmental education program. A collaboration of organizations, teachers, students, businesses, and communities, MAG's goals are to study the migration of monarch butterflies and to restore and create butterfly habitat across the state. Students participate enthusiastically in this engaging program as learners, conservationists, and scientists.



*"This program has made a huge impression on my class."*

—Charla Brewster,  
Darlington Lower School, Third Grade

MAG began last year when Dr. Karen Oberhauser, scientist and author of *Monarchs in the Classroom* (MIC), trained the first group of Georgia educators. The monarch butterfly presents the perfect educational opportunity, serving as an umbrella organism for ecological understanding and stewardship of all Georgia butterflies. MIC brings this opportunity to life with an interdisciplinary, hands-on curriculum

that involves students, teachers, parents, and communities. Led by EEA Board member Anne Shenk, this first group of educators set out to create Monarchs Across Georgia.

Now you can join this international odyssey! EEA-sponsored educator workshops provide all of the information and skills you need to explore monarchs with your students. Participants receive the MIC curriculum, monarch caterpillar field guides, and milkweed plants or seeds to attract monarchs to their site. Workshop participants acquire a variety of skills including techniques for raising monarch butterflies and propagating milkweed plants in the classroom. Other topics include tagging, using web sites for tracking butterfly migration and data entry, and service learning.

Educators learn to facilitate activities in a curriculum where students model the scientific method. This approach integrates real-life experiences into core subjects. Classrooms are mobilized for teamwork in rearing monarchs. Raising a butterfly from egg to adult offers an integrated problem solving experience. The problem becomes more complex as students learn that milkweed, the sole host plant for the monarch, is in jeopardy as a result of habitat destruction. The monarch's plight, brought close to home, becomes a model for exploring the consequences of and potential solutions for habitat destruction. Milkweed propagation and restoration become a hands-on lesson

in ecological science and restoration, and the entire community can become involved.

Through MAG, students may become a part of a larger scientific enterprise. Large-scale monarch studies can be tracked through Monarch Lab [www.monarchlab.umn.edu](http://www.monarchlab.umn.edu), Journey North [www.learner.org/jnorth](http://www.learner.org/jnorth), and through Monarch Watch [www.monarchwatch.org](http://www.monarchwatch.org). Students can communicate internationally with classrooms via email regarding monarch research and tracking. For educators, MAG provides a holistic, interdisciplinary approach to learning that begins at your back door and leads across the whole of North America.

Royalty is waiting to visit you too! If you are interested in entertaining Georgia's royal guests, you are invited to become involved with MAG. For more information, contact Barbara Payne, MAG Coordinator, at 706-866-6644, [monarchs@alltel.net](mailto:monarchs@alltel.net); Anne Shenk, The State Botanical Garden, [ashenk@arches.uga.edu](mailto:ashenk@arches.uga.edu); or Mary Terry, Davidson-Arabia Mountain Nature Preserve, [MJTerry@co.dekalb.ga.us](mailto:MJTerry@co.dekalb.ga.us).

## News Flash!

*Mexican Winter Storm Kills 80% of Monarch Population.*

*Visit [www.monarchwatch.org/news/021102.html](http://www.monarchwatch.org/news/021102.html).*

# Georgia EE Providers: Region 2



*Editor's Note: With publication of The Georgia Environmental Education Teacher Resource Guide, EEA and The Link continue to share with our members and readers a sampling of EE providers. In this issue, we highlight Davidson-Arabia Mountain Nature Preserve, 3787 Klondike Road, Lithonia GA 30038*

In South DeKalb County, tucked within Metro-Atlanta's growing sprawl, there is a natural ecosystem unlike any other in the world. On a wide expanse of sun-baked granite, tiny pools of soil provide habitat for some of nature's most unique and beautiful plant specimens. You never know what you will experience when you visit Davidson-Arabia Mountain Nature Preserve, but if you look carefully, what you find is certain to take your breath away.

Sometimes referred to as "Stone Mountain's little sister," Davidson-Arabia Mountain is actually about a million years *older* than Stone Mountain. Instead of receiving the public attention and commercialization of the larger granite outcrop, Davison-Arabia was donated as a park in 1972. This protected the property from certain destruction as a granite quarry but for the next 20 years it was vandalized and over-used by off-road vehicles. In 1992, the park was designated as an official Nature Preserve. Soon thereafter, Mary Terry became the first Interpretive Park Ranger and accepted the responsibility of protecting, maintaining, and educating visitors about this unique ecosystem.

The Preserve currently offers public tours, school programs, Scout programs, and teacher workshops, and an extraordinary experience. The educational opportunities have grown along with the size of the Preserve. The Arabia Mountain Heritage Alliance, founded in 1999, has added 1,500 acres to the 500-acre Preserve, and negotiations are underway to add additional property. To learn more about events at Davidson-Arabia Nature Preserve, contact Mary Terry at 770-484-3060 or visit the website at [www.arabiaalliance.org](http://www.arabiaalliance.org)



photo by Cingie M. Turner

*Is it Mars? No, it's a vernal pool at sunrise on Davidson-Arabia Mountain.*



Robert Michael Pyle has been called "America's butterfly guru." In his *Handbook for Butterfly Watching*, he describes what he re-learns about himself while watching butterflies:

"There is serenity to be found in butterflies . . . My own approach to peace calls for personal responsibility to be peaceable. I believe that no one filled with the love of nature can become very interested in violence. . . . Butterflies offer serenity to anyone willing to seek it. And in that way, they offer a broader promise of peace in a world more reverential of nature than ours."

\*Inspired by Stephen R. Covey's *The 7 Habits of Highly Effective People*. Share your ideas for renewal in this regular feature!

## EEA Spotlight Mary Terry

EEA board member Mary Terry spent hours as a child roaming and exploring her 200-acre family farm in North Carolina. She believes this freedom, and her mother's love of plants and nature, were the primary influences that lead her to choose a career studying wild-life. Mary's face lights up when she recalls the first time she and her mother watched a Monarch butterfly emerge from its chrysalis.



Mary raised moths and butterflies while working for the North Carolina State Museum of Natural Sciences back in 1989. Even after many years of close observation, she is still fascinated by the adaptations and life cycle of these compelling and mysterious creatures. So in 2000, she leapt at the opportunity to help found Monarchs Across Georgia (MAG), a new program designed to help Georgia teachers raise Monarch butterflies in their classrooms.

Based on the national Monarchs in the Classroom curriculum, MAG provides teachers with the proper training, supplies and study materials to help students grow milkweed and observe the butterfly's life cycle. Along with upcoming workshops, Mary and the other board members are developing a facilitator training guide and resource boxes that will be available for loan. Thanks to these efforts, children all across the state will experience the magic of metamorphosis first hand.

# EE Model Schools to be Selected in April—applications due in March

Deron Davis, *Environmental Education Services*

Teachers, have you dreamed of increasing your students' achievement through integrating environmental learning into all facets of the curriculum? Your dream can come true if your school is selected as one of ten education partnerships through the innovative program "Closing the Gap in Georgia's Achievement: Using the Environment as an Integrating Context for Learning (EIC)." This program, launched by the Georgia Department of Education, will help improve achievement in K-12 Georgia schools.

Developed by Dr. Gerald Lieberman and the State Education and Environment Roundtable (SEER), EIC is based on scientific evidence from 40 schools that students learn more effectively within an environment-based context.

Ten education partnerships will be selected to participate in 2002. Each partnership consists of a school (4 teachers and 1 administrator) and a community partner (1 representative). Community partners include non-formal educators, community groups, and others. If you are a teacher and are interested in getting a school involved, please download an application form from the web sites that follow.

## Benefits of Participating in EIC

- 1.** An individualized school improvement process that includes tools and methods to improve student performance and enrich the school experience.
- 2.** Established relationships with community experts and resources.
- 3.** Professional development training by the State Education and Environment Roundtable, stipend reimbursement and four Staff Development Units for four teachers, one administrator and one community partner to attend the 5-day summer leadership institute (\$100/person/day, \$3,000 total). Travel, lodging and some meals provided.
- 4.** Reimbursement for substitutes or salaries for team members to participate in five full-day planning meetings (\$100 per school team member, five meetings, \$3,000 total).
- 5.** Reimbursement to teachers, administrators and community partners to present one day at the Closing the Gap Leadership Institute (June, 2003) (\$100/person, \$600 total).
- 6.** Ongoing Support by the EIC Coordinators. Visit [www.eealliance.org](http://www.eealliance.org) or [www.EEInGEORGIA.org](http://www.EEInGEORGIA.org) for an application. To learn more about the national EIC program, visit [www.seer.org](http://www.seer.org)

## The Georgia Project for Excellence in Environmental Education

by Richard E. Osorio, *Project Coordinator*

The Georgia Project for Excellence in EE is a collaborative project aimed at designing, implementing, and evaluating professional standards, competencies, and continuing education opportunities in EE. The project goal is to provide environmental educators with the advantages of professional training in EE as well as the added value of professional certification. The first two of six course topics being offered are Environmental Literacy and Foundations of EE.

- Learn state-of-the-art educational theory and techniques
- Increase your expertise in instructional design
- Learn how to adapt EE activities for age-appropriateness
- Increase your core knowledge of EE and your skill in delivering EE
- Increase your professional qualifications and standing in EE
- Be on the forefront of state and national efforts to increase professionalism in EE
- Work toward your professional certification in EE

Courses will be offered the week of July 8 in Atlanta and the week of July 15 in Bainbridge. One course is \$65; Two courses are \$120. Visit the EEA website at [www.eealliance.org](http://www.eealliance.org) or visit [www.EEInGEORGIA.org](http://www.EEInGEORGIA.org), or contact Richard Osorio at [rosorio@uga.edu](mailto:rosorio@uga.edu) or 706-542-8905.

## NEWS, NOTES, AND UP-COMING EVENTS

### New EE Web Site for Georgia!

A new EE Web Site is up. Visit it at [www.EEInGEORGIA.org](http://www.EEInGEORGIA.org) to access or contribute to the EE lesson plans database, search the EE resource directory, review the EE calendar of events, discover the latest EE news, find facts about Georgia's environment, and more!

### New *Natural Inquirer* Available

The newest *Natural Inquirer*, focusing on tropical forests, will be available in March. The *Natural Inquirer* is a science education resource for middle and early high school teachers and students. Copies are free. Visit the *Natural Inquirer* website [www.naturalinquirer.usda.gov](http://www.naturalinquirer.usda.gov).

### It's Time for Spring Cleaning!

Give your community a spring cleaning this year and join the Great American Cleanup! During April, communities all across Georgia will sponsor clean up activities. Check out the information at [www.keepgeorgiabeautiful.org](http://www.keepgeorgiabeautiful.org).

### Keep Georgia Beautiful calendar:

March 6: Keep Georgia Beautiful Awards Luncheon. June 7: Waste in Place Workshop, Savannah. For more information visit their website at [www.keepgeorgiabeautiful.org](http://www.keepgeorgiabeautiful.org).

### Train-the-Trainer Workshop

ZPG Population Education Program facilitator training will be offered June 29-30 in Tampa, FL. Application deadline is April 30. Space is limited, register early. Contact Nick Boutis at 1-800-767-1956 or [nick@zpg.org](mailto:nick@zpg.org). Web site: [www.populationeducation.org](http://www.populationeducation.org).

### Congratulations!

Chattahoochee High School is proud to announce the receipt of a \$240,000 grant from the Georgia Community Development Fund. The grant will be used to replace a retention pond on the school's campus with the Active Riparian Commensal Habitat (ARCH), a wetland habitat designed to remove pollutants from non-point source water runoff. For more information visit the Chattahoochee High School web site at [www.fultonschools.org/school/chattahoochee/](http://www.fultonschools.org/school/chattahoochee/).

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EEA is a self-governed, non-profit organization that promotes communication and education among professionals in the field of environmental education in Georgia. EEA is an affiliate of the North American Association for Environmental Education.

**Time to renew your EEA membership?  
Check your mailing label for your membership expiration date.**



### EEA MEMBERSHIP FORM

*Become a Member Today!*

Fill out this form and mail it along with a check to Elachee Nature Science Center at the address above. Checks should be made out to EE Alliance

#### MEMBERSHIP BENEFITS:

**Quarterly Newsletter** – Provides educational resources, legislative updates, notice of workshops and events, grant opportunities, and much more.

**Annual Spring Conference and Fall Retreat** – Held at different sites throughout Georgia with guest speakers, workshops and field trips. A great opportunity to meet people and share.

**Sharing and Exchanging Exhibits** – The opportunity to find out and exchange exhibits from member organizations.

**The Georgia Environmental Education Teacher Resource Guide** – 132 pages of environmental education resources and learning opportunities in Georgia.

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail address \_\_\_\_\_

- Membership Category:  Individual \$15  
 Organizational\* \$50  
 Corporate\* \$100

*\*Please Note: organizations and businesses can list up to five representatives to receive EEA mailings and information.*

Please check the category of your affiliation so that we may serve you better:

- Community Outreach       Private and/or Non-profit  
 Government Agency       Business and Industry  
 Environmental Education Center  
 Formal Post Secondary Education  
 Formal Education, Pre-K through 6  
 Formal Education, 7 through 12

### Newsletter Committee

Vicki Seastrom, National Wildlife Federation & Barbara McDonald, U.S. Forest Service, *Managing Editors*

Anne Shenk, State Botanical Garden of Georgia, *Contributing Editor*

Paul McClendon, Chattahoochee Nature Center & Eric Lindberg, Rome-Floyd Planning Department, *Contributing Writers*

Kristen Smith, *Production Artist*

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Issue	Deadline
Winter .....	Conference Newsletter
Spring .....	January 15
Summer .....	April 15
Fall .....	July 15

E-mail articles to: Vicki Seastrom, seastrom@nwf.org, (404) 876-2602, ext. 223 or to Barbara McDonald, barmac@bigfoot.com, (706) 559-4224.

### More Monarch Resources

#### Monarch Butterfly Thematic Resource Unit

[www.midgefrazel.net/monarchtheme.html](http://www.midgefrazel.net/monarchtheme.html)  
Excellent clearinghouse of resources for teachers using monarchs in their classrooms.

#### Monarch Butterfly Sanctuary Foundation [www.mbsf.org](http://www.mbsf.org)

The mission of MBSF is to provide financial and scientific support for preserving the natural balance and diversity of the Oyamel Fir forests that are the overwintering grounds of eastern North American Monarch butterflies.

**A Field Guide to Monarch Caterpillars**, Karen Oberhauser, University of Minnesota, Department of Ecology, Evolution and Behavior. 1987 Upper Buford Circle, St. Paul, MN 55108. 1997.

**Chasing Monarchs: Migrating with the Butterflies of Passage**, Robert Michael Pyle. Houghton Mifflin Company, Boston, Massachusetts. 1999. 307 pages, hard cover.