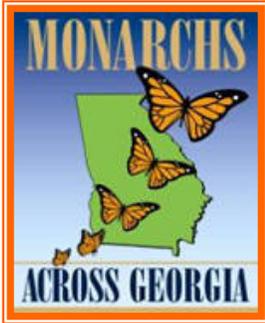


# Monarchs Across Georgia Newsletter

Summer 2005  
Volume 1, Issue 3

An Initiative of the Environmental Education Alliance of Georgia  
[www.eealliance.org](http://www.eealliance.org)



## Tag! You're it!

The Monarch is the long-distance champion of butterfly migration, performing the longest migration of any insect in the world that we know. Each fall many millions of Monarchs, sometimes 250 million or more, empty out of the United States and southern Canada, east of the Rocky Mountains, and journey south to overwintering roosts in the mountain fir forests west of Mexico City.

However, scientists actually know very little about their migration. Many assume that at least some of Georgia's Monarchs fly southward to the Gulf coast, then westward to Mexico. Many other Monarchs from the southeastern states might also fly into Florida, where Monarchs are active all winter. It is speculated that these Florida Monarchs do not return northward, but their children do.

To learn more about Monarch migrations, Monarch Watch ([www.monarchwatch.org](http://www.monarchwatch.org)) enlists the help of volunteers, especially school classes. Founded in 1991 and supported by grants from the National Science Foundation, Monarch Watch has become a national effort. It is based at the University of Kansas and directed by entomologist Orley R. "Chip" Taylor.

Monarch Watch volunteers capture and tag Monarchs, who then also keep an eye out for Monarchs that have been tagged by others. This is a great project, even for younger students. In fact, Georgia students have placed hundreds of tags on migrating butterflies through the years! Tagging is easy, it does not harm the butterflies in any way, and it is an outstanding project for

integrating science with math, geography, and other subject areas.

During 2004, approximately 45,000 butterflies were tagged, the majority of them by school classes. Only 209 of these tagged butterflies have been recovered, but even this small number of recoveries has provided valuable information on the movement of the butterflies.

One probable reason there are so few recoveries is that there are not enough southern schools participating, where the recoveries would probably be made. Therefore, here's a great project in which Georgia schools can contribute to real scientific research while addressing the inquiry goals and science process skills of our state's performance standards.

*To tag Monarchs you need to order a tagging kit from Monarch Watch (a butterfly net is also nice to have). Directions for applying the tag may be found at [www.monarchwatch.org](http://www.monarchwatch.org) or you may contact MAG for the nearest tagging workshop.*

*Each tag has a serial number that lets scientists know where the butterfly was tagged. When the tags are later found they can compare the information in order to gain a better understanding of the Monarchs' migrations.*

*Since 1996 12 Monarchs that have been tagged in Georgia have been recovered!*



## Upcoming Events

- **Oct. 14, 2005 Deadline**  
Journey North's 10<sup>th</sup> Annual Symbolic Monarch Migration. Students create paper butterflies that will migrate to Mexico. Need info? Visit [www.learner.org/jnorth/sm](http://www.learner.org/jnorth/sm)
- **Oct. 14, 2005**  
Outdoor Classroom Symposium, Frey Elementary School, Cobb County. Need info? Visit [www.eealliance.org](http://www.eealliance.org).
- **Feb. 25 – March 4 2006**  
Looking for a chance of a lifetime? Why not visit the Monarch's overwintering site in Mexico with MAG! PLUs available. For details visit [www.monarchsacrossga.org](http://www.monarchsacrossga.org)
- **March 17 – 19, 2006**  
Annual EEA Conference at Simpsonwood Conference Center on the Chattahoochee River in Norcross - Submit a presentation proposal today! Deadline Sept 30. Visit [www.eealliance.org](http://www.eealliance.org).

## Our Mission

To engage schools and families in learning experiences involving monarchs and other native butterflies. The MAG program promotes stewardship of the natural environment through multi-disciplinary exploration and scientific investigation.



## Milkweed Look-alike: Dogbane (*Apocynum spp.*)

If you want to the help with the Milkweed Atlas Project be careful, as there is a milkweed look-alike growing in riparian areas.

Thin reddish stems arise in spindly clusters to three feet tall. When cut or broken, the stems ooze a milky juice, similar to plants in the Milkweed Family. Leaves arise either opposite or in a whorled pattern, meaning three or more leaves arise from the same node. Leaves are variably sized and are lance- or egg-shaped with entire margins (meaning the leaf's edges are smooth, not notched or toothed). The leaves are smooth above and have downy white hairs on the undersides. Leaves lowest on the branches may not have stems. Tiny white bell-shaped flowers, one-quarter inch across, are borne in clusters at the top or along short, side stems. The plant bears fruit of slender pods with many silky-haired seeds.

## MAG's Milkweed Atlas Project Needs Your Help!



Got milkweed? Report it! Did you know there are 22 species of milkweed native to Georgia? For a picture and description of each species visit [www.monarchsacrossga.org](http://www.monarchsacrossga.org).

Historical data documents milkweed growing widely across the state, but what is the status of milkweed species today? As part of its habitat restoration efforts, Monarchs Across Georgia needs your help in documenting which species of milkweed are currently growing in the state and where they are located.

What's so special about milkweed? It is the only HOST plant of the Monarch butterfly. (A host plant is used by the adult female butterfly as a place to lay her eggs. When the larva or caterpillar emerges, the plant serves as its food source.) Milkweed is critical to the life cycle of the Monarch butterfly.

Become a citizen scientist! You can help by reporting milkweed anytime during the year when you observe it growing (usually during the months of April – October). Both mail-in and online submission forms are now available on the Monarchs Across Georgia website at [www.monarchsacrossga.org](http://www.monarchsacrossga.org).

Thank you for your help with this project. We encourage you to plant milkweed and other host plants in your pollinator garden.

Here are 3 of the 22 species found in GA:



Swamp Milkweed (*Asclepias incarnata*)

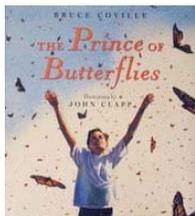


Purple Milkweed (*Asclepias purpurascens*)



Whorled Milkweed (*Asclepias verticillata*)

## Monarch and Other Butterfly Resources



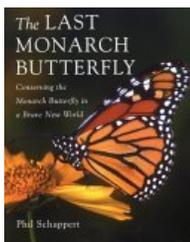
### *The Prince of Butterflies*

ISBN: 0152014543

Author: Bruce Coville

Winner "Best Illustrated Book" 2002

A fictional book about a child who helps a group of migrating monarch butterflies find their way after they became lost when their meadow becomes a mini-mall. The boy leads them to a field they recognize and they continue on their journey. Years later, the same boy, now elderly, finds himself surrounded by migrating monarchs who help him find a new path as well.



### *The Last Monarch Butterfly*

ISBN: 1552979695

Author: Phil Schappert

While a plethora of books, articles, and papers have been written about Monarch butterfly migration and the need to protect this endangered phenomenon, most of them have focused on the overwintering roost sites and have virtually ignored what might be going on in the breeding range. Through a gorgeously illustrated book the author's central thesis is that you can't save one without the other.

## Resources

### *The Prince of Butterflies*

<http://www.johnclapp.com/teachers.htm>

Extremely interesting detailed description on how the illustrator created the artwork for the book, plus printable bookmarks, a *Prince of Butterflies* word search, and opportunity to purchase the artwork and the book.

### *Monarch Watch*

<http://www.monarchwatch.org/>

Monarch Watch is an educational outreach program based at the University of Kansas that engages citizen scientists in large-scale research projects. The program gets children of all ages involved in science. The site also focuses on biology, ecology, conservation, gardening, and lesson plans. Also, they are the organization to order your **monarch tags** from each fall.

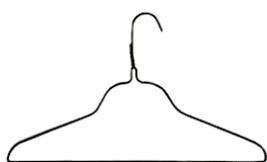
## Activity: Make an Inexpensive Butterfly Sweep Net

### Materials:

- Plastic coated wire hanger
- Wooden dowel (5/8" by 36")
- Duct tape
- 5-gallon nylon paint strainer (purchased from home improvement store)
- Needle and thread

### Procedures:

1. Bend the bottom part of the coat hanger into a square or circle.
2. Attach the paint strainer to the formed square or circle. Whip stitch the mesh fabric of the paint strainer to the hanger.
3. Straighten the hanging part of the hanger and connect it and the strainer to the dowel using duct tape.



Monarchs in the Classroom recommends the following to capture wary butterflies:

- It's best to locate butterflies feeding on flowers or while they are on the roosts late in the day or early in the morning.
- Approach butterflies slowly (from behind if possible) as sudden movement will startle them into flight.
- Sweep the net forward quickly and flip the end of the net bag over the net handle after you catch a butterfly to prevent them from flying back out of the net. You want the butterfly in the deep end of the net.
- Gently flatten the net bag so the wings of the butterfly are closed over its back (thorax) and place your thumb and forefinger over the leading edge of the wings (from outside of net).
- Next, with the thumb and forefinger of your other hand, reach into the net and firmly grasp the thorax or all four wings.
- Carefully remove the butterfly.
- If you wish to store your butterfly (to transport or hold for later examination), you can use a paper or glassine envelope.
- If you need to store the butterfly for more than a few hours (i.e. overnight or up to 2 days), place the envelope in a plastic box or zip lock bag in the refrigerator. It will be fine!

Please Help Support Monarchs by Purchasing MAG Merchandise



Monarch Metamorphosis T-shirt  
w/ MAG Logo on sleeve  
Sizes: Adult Sm – XXL  
Price: \$15.00

Canvas bag totes with the same design are also available for \$20.00 each.



MAG “got milkweed?” Bumper Sticker  
Price: One for \$3.00 or two for \$5.00

To order any of these items please visit <http://monarchsacrossga.org/MAGshirts&bags.htm> or contact Susan Meyers at [smmeyers@bellsouth.net](mailto:smmeyers@bellsouth.net).

We're on the Web!  
[www.monarchsacrossga.org](http://www.monarchsacrossga.org)

Contact Us

Please feel free to forward this issue to friends and associates. Anyone can subscribe to this free quarterly newsletter by emailing: [kgarland@gaconservancy.org](mailto:kgarland@gaconservancy.org)

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✂ Each issue we will spotlight a butterfly found in Georgia. Cut along this line to create your own Georgia butterfly field guide.

Egg



Caterpillar



Pupa



**GULF FRITILLARY (AGRAULIS VANILLAE)**

Fast Facts

- Adult wingspan is 2.5 to 4.0 inches (6.3 to 8.5 cm)
- Its hindwings below are covered with numerous silvery, mercury-like patches that distinguish this butterfly from the monarch.
- Host plants: Various species of passion-vine (*Passiflora spp.*)
- Preferred habitat includes pastures, open fields, second-growth forest and edges, and urban gardens.
- Young caterpillars make a ball of leaf bits, dung, and silk, which hangs off the leaf on which they are feeding. The dangling mass of caterpillar “debris” may distract predators.
- As fall approaches, adults begin a mass southward migration eventually arriving in the warm confines of south Florida to overwinter.

Adult



Notes: