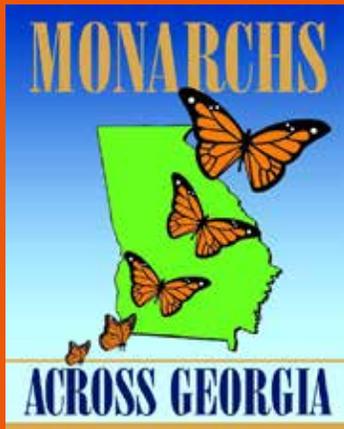


# The Chrysalis

Emerging News from Monarchs Across Georgia

A Committee of the Environmental Education Alliance of Georgia



## Eastern Monarch Population Numbers Drop 27%

Originally published by the [Monarch Joint Venture](#) on February 16, 2017

This year's measurement of the eastern monarch overwintering population showed a 27% decrease compared to last year, occupying 2.91 hectares of forest in Mexico's transvolcanic mountains during the winter of 2016-17. It is likely that an [extreme and unusual winter storm](#) contributed to this decrease. This March storm struck the overwintering colonies just as monarchs were beginning to depart on their journey north.

Events such as last year's "St. Patrick's Day Storm" are a strong reminder that we must increase efforts to restore and maintain monarch breeding and migration habitat to support a rebounding population that is buffered against such threats.

While the size of the monarch overwintering population has always shown year to year fluctuation, the long term trend shows an overall decline in the population. Modeling efforts suggest that reaching and maintaining a minimum population size that occupies 6 hectares of overwintering area would greatly reduce the risk of losing the monarch migration. In order to reach this ambitious goal, scientists project that an additional 1.6 billion milkweed stems are needed on the landscape, in addition to highly diverse nectar resources.

### Upcoming Events

#### Monarchs Across Georgia

##### Plant Sale

Saturday, May 13  
Cobb County Water Quality Lab  
662 S. Cobb Drive  
Marietta, GA

#### "Flight of the Butterflies"

##### Film Showing

Saturday, June 17  
Midtown Art Cinema  
931 Monroe Drive NE  
Atlanta, GA

#### [National Pollinator Week](#)

June 19-25

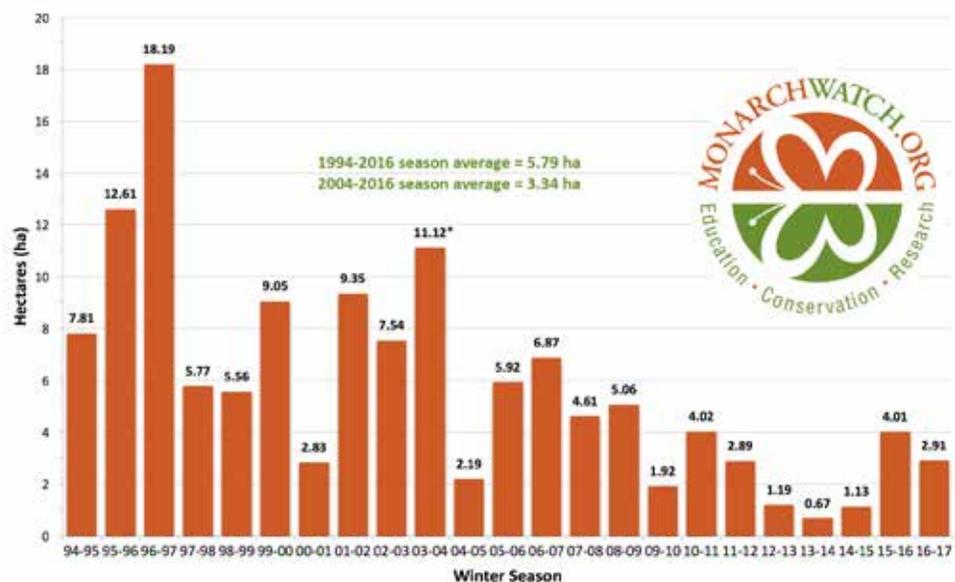
#### Monarchs Across Georgia

##### "Pollinator Symposium"

Saturday, September 23  
Monastery of the Holy Spirit  
Conyers, GA

For more information about these events or to register, please visit [www.eealliance.org/mag-events](http://www.eealliance.org/mag-events).

Total Area Occupied by Monarch Colonies at Overwintering Sites in Mexico



Data for 1994-2003 collected by personnel of the Monarch Butterfly Biosphere Reserve (MBBR) of the National Commission of Natural Protected Areas (CONANP) in Mexico. Data for 2003-2016 collected by World Wildlife Fund Mexico in coordination with the Directorate of the MBBR. \* Represents colony sizes measured in November of 2003 before the colonies consolidated. Measures obtained in January 2004 indicated the population was much smaller, possibly 8-9 hectares. CT

The eastern monarch population is measured by the area they occupy in hectares (1 hectare is 2.47 acres, or about the size of a baseball field), rather than by counting individual monarchs. Experts explain this process in a [2015 MJV news update](#). View this chart at [MonarchWatch.org](http://MonarchWatch.org).

Continued on page 2

*Monarch Population... Continued from cover*

There is reason for hope, despite a decrease from last year. The mortality caused by the March storm was confirmed by dismal reports of monarchs throughout the breeding range in the spring and summer. However, with abundant and available habitat and good weather conditions, monarchs demonstrated their ability to quickly produce large numbers of individuals. Reports of late season monarchs from citizen science programs suggest that conditions were good to support monarch production late in the season in 2016.

The monarch's decline has inspired action and attention from all walks of life, with an unprecedented interest in their plight. Two recent studies confirm the need for engaging all sectors in helping to reach sustainable monarch numbers. One showed that overwintering monarchs in Mexico come from all areas of the eastern breeding range (Flockhart et al. 2017). The other showed that a conservation strategy that includes the entire monarch habitat range (breeding, migratory, and overwintering areas) is more likely to achieve a steady, growing population rate than strategy that focuses on conserving only one region (Oberhauser et al. 2016).

You can help by planting milkweed and nectar resources, joining a monarch citizen science project, educating your community and elected officials, or by contributing to conservation in other ways. Each of us has a role to play, but as the "T.E.A.M." saying goes, together everyone achieves more.

Read the original article [here](#). ♦



*Danaus plexippus* on *Asclepias syriaca* (common milkweed). Photo credit: Rob Routledge, Sault College, [Bugwood.org](#)

## 2016 Monarchs Across Georgia Service Award

Jackie Sherry

Dunwoody Nature Center

At the 2017 Southeastern Environmental Education Alliance Conference, MAG awarded Jackie Sherry of the Dunwoody Nature Center with the 2016 Monarchs Across Georgia Service Award. Jackie is the consummate steward of the monarch butterfly. She leads Dunwoody Nature Center's [Milkweed Project](#), which is a grassroots effort to raise awareness and educate the public about the plight of the monarch, and delivers monarch education programs to local schools.

Jackie's outreach efforts include teaching at thirteen different schools, installing ten milkweed-focused pollinator gardens at elementary schools, and reaching more than 1,200 students through her outreach programs. Jackie's [Milkweed in the Classroom](#) curriculum reaches a wide variety of children in the first through third grades and includes teaching and providing milkweed seeds, grow racks, and garden plantings at the schools - all at no cost to the schools that register for the program!

The certificate that was presented to Jackie Sherry as the recipient of the 2016 MAG Service Award is from the [Monarch Butterfly Fund](#), as a donation was made to the Fund in the name of our award recipient.



## National Pollinator Week Activity from MAG



IN DECEMBER 2016, Monarchs Across Georgia partnered with the Georgia Piedmont Chapter of the North American Butterfly Association to present a butterfly and pollinator program for the third grade students at Whitlow Elementary in Cumming, Georgia. Students watched a video entitled "A Ghost in the Making: Searching for the Rusty-patched Bumble Bee," used map and math skills to analyze the monarch migration route, role-played as migrating monarchs posed with actual situations, challenged their knowledge of habitat in a Mix-Up game, and created a "Pollinator Conservation" booklet about what they can do to conserve pollinators, specifically listing nectar plant species, butterfly host plants, and best practices.

In celebration of the 2017 National Pollinator Week, June 19-25, Monarchs Across Georgia would like to share this "Pollinator Conservation" activity with you. On our [Resource webpage](#), you will find a template for the booklet, the answers, a short PowerPoint presentation with notes, and the two reference sources students need to answer questions.

National Pollinator Week is a time to celebrate pollinators and spread the word about what you can do to protect them! Find National Pollinator Week events and resources at the [Pollinator Partnership](#).

## Monarchs Across Georgia presents the 2017 Pollinator Symposium

Saturday, September 23, 2017  
Monastery of the Holy Spirit, Conyers

**M**onarchs Across Georgia is hosting a Pollinator Symposium, September 23, 2017, at the Monastery of the Holy Spirit in Conyers, GA. The \$75 cost will include lunch and a one year membership in the Environmental Educational Alliance of Georgia. Participants will take part in four presenter sessions, nature walks around the grounds of the monastery, and a demonstration of monarch tagging and testing for the OE parasite. Exhibitors will be on site with information. The Monastery's Abbey Garden Center will have pollinator plants, including native milkweeds, for sale.

### Presenter Sessions:

**Monarch Butterfly:** **Sonia Altizer** graduated from Duke University with a B.S. in Biology and the University of Minnesota with a Ph.D. in Ecology. She is currently a professor with the Odum School of Ecology, University of Georgia. Her research interests include population ecology; ecology and evolution of infectious diseases; evolution of host resistance and parasite virulence; monarch butterfly ecology and evolution; anthropogenic change; and infectious disease emergence. Sonia will be presenting on the population ecology and general status of the monarch butterfly as well as infectious diseases of the monarch butterfly.

**Native Bees:** Ecologist **Nancy Adamson** is the East Region Pollinator Conservation Specialist for the Xerces Society for Invertebrate Conservation and the US Department of Agriculture Natural Resources Conservation Service in Greensboro, NC. She promotes habitat restoration that benefits pollinators and other beneficial insects on farm lands and in community and home landscapes. She loves sharing her passion for native plants and all the wildlife they support. She studied native bees, native plants, and native grasses for ecological (habitat) restoration. She has long been involved in inventorying, collecting seed, and propagating native plants for habitat restoration. Join us to learn about common native bees we can support by protecting and planting pollinator habitat. In Georgia, we have more than 500 native species and a few introduced species in addition to the European honey bee. Bumble bees, mason bees, mining or digger bees, sunflower bees, carpenter bees, hibiscus bees, and leafcutter bees are all groups you can easily recognize when you slow down and take a look. Nancy's program will highlight nesting habits to help you in supporting these diverse native pollinators.

*Continued on page 9*

## Regional climate on the breeding grounds predicts variation in the natal origin of monarch butterflies overwintering in Mexico over 38 years

D. T. TYLER FLOCKHART, LINCOLN P. BROWER, M. ISABEL RAMIREZ, KEITH A. HOBSON, LEONARD I. WASSENAAR, SONIA ALTIZER and D. RYAN NORRIS

Global Change Biology, January 2017

Photo Credit: Steven Katovich, USDA Forest Service, [Bugwood.org](http://Bugwood.org)

Addressing population declines of migratory insects requires linking populations across different portions of the annual cycle and understanding the effects of variation in weather and climate on productivity, recruitment, and patterns of long-distance movement. We used stable H and C isotopes and geospatial modeling to estimate the natal origin of monarch butterflies (*Danaus plexippus*) in eastern North America using over 1000 monarchs collected over almost four decades at Mexican overwintering colonies. Multinomial regression was used to ascertain which climate-related factors best-predicted temporal variation in natal origin across six breeding regions. The region producing the largest proportion of overwintering monarchs was the US Midwest (mean annual proportion = 0.38; 95% CI: 0.36–0.41) followed by the north-central (0.17; 0.14–0.18), northeast (0.15; 0.11–0.16), northwest (0.12; 0.12–0.16), southwest (0.11; 0.08–0.12), and southeast (0.08; 0.07–0.11) regions. There was no evidence of directional shifts in the relative contributions of different natal regions over time, which suggests these regions are comprising the same relative proportion of the overwintering population in recent years as in the mid-1970s. Instead, interannual variation in the proportion of monarchs from each region covaried with climate, as measured by the Southern Oscillation Index and regional-specific daily maximum temperature and precipitation, which together likely dictate larval development rates and food plant condition. Our results provide the first robust long-term analysis of predictors of the natal origins of monarchs overwintering in Mexico. Conservation efforts on the breeding grounds focused on the Midwest region will likely have the greatest benefit to eastern North American migratory monarchs, but the population will likely remain sensitive to regional and stochastic weather patterns...

### Results

The predicted origins of overwintering monarch butterflies varied annually for each of the natal regions, but showed no long-term directional shifts. Considering annual-specific variables first, the best model to explain probability of natal origin region included only the Southern Oscillation Index (SOI) variable, which suggested monarch natal origins vary

over time based on global weather oscillations. Models that considered the introduction of GMO crops, year, or the null model were not supported, indicating that the data do not indicate any long-term shift in the natal origins over almost four decades nor a shift in the geographic representation of monarchs wintering in Mexico that correlates with the conversion to GMO. Carrying SOI through, the best model that considered region-specific variables included mean maximum temperature and precipitation...

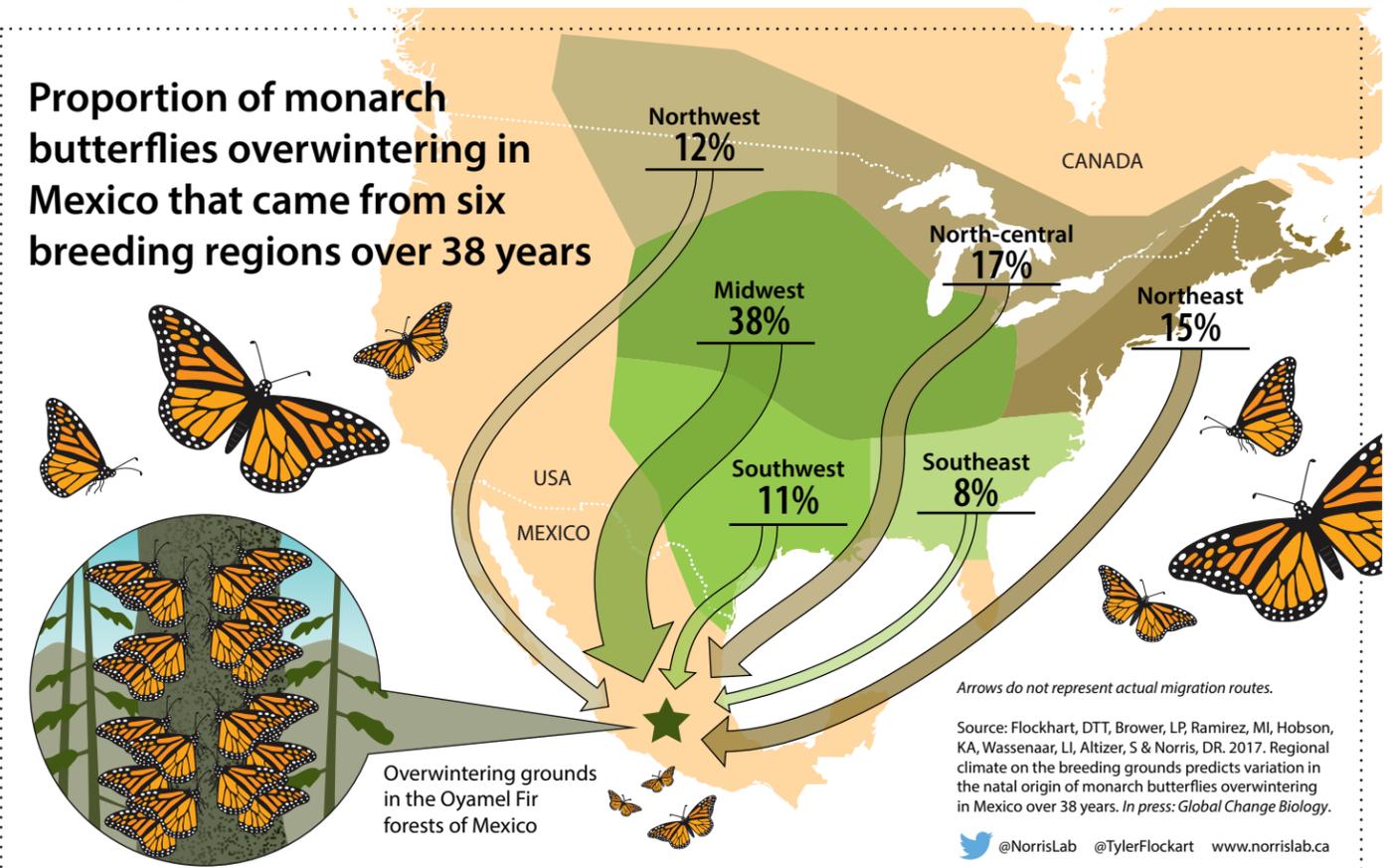
Bootstrapping (the model) showed that the region of highest probability for natal origins of monarchs in Mexico was the US Midwest (mean = 38%; 95% CI: 36–41), followed by the north-central (17%; 14–18), northeast (15%; 11–16), northwest (12%; 12–16), southwest (11%; 8–12), and southeast (8%; 7–11). Although the US Midwest produced the greatest percentage of monarchs relative to the other regions, there were only two years (1988 and 1996) for which the fraction of monarchs originating from the Midwest exceeded 50%. Surprisingly, for some years (e.g., 1980, 1981, and 1983), the majority of overwintering monarch butterflies originated from the northeast breeding region and, in one year (1976), the southwest region. Overall, fewer butterflies originated from the eastern portion of the breeding range (northeast and southeast regions; mean annual percentage = 25%; range 12–53%) compared to the western portion (Midwest, northcentral, northwest, southwest regions) of the breeding range (mean annual percentage = 75%; range 48–88%).

The marginal effects of SOI showed that the probability that an overwintering butterfly was born in the Midwest, southeast, and southwest increased with the SOI, whereas the probability that an overwintering butterfly was born in the northeast and northwest region declined. Even after accounting for the effects of SOI, regional-specific temperature and precipitation also influenced the distribution of natal origins. In the northeast, north-central, northwest, and southwest regions, an increase in daily maximum temperature resulted in an increase in the probability of monarchs being born in that region and decreased the



probability of monarchs being born in the other two regions. By contrast, an increase in daily maximum temperature in the southeast decreased the probability of monarchs being born in the southeast and increased the probability of monarchs being born in other regions. Changes in temperature within the US Midwest had little influence on the probability of origin from other regions. For most regions, an increase in precipitation had similar effects as increasing temperature. For instance, an increase in precipitation in the north-central and northeast regions increased the probability of natal origins from those regions and decreased the probability of natal origins from all other regions. In contrast, an increase in precipitation in the northwest and Midwest decreased the probability of monarchs being born in these regions and increased the probability of monarchs being born in all other regions.

## Proportion of monarch butterflies overwintering in Mexico that came from six breeding regions over 38 years



### Discussion

Our results affirmed, from data spanning almost four decades, that migratory monarchs overwintering in Mexico originated from a wide geographic distribution, and that the proportional contributions of different regions vary among years. Perhaps the most significant finding is the absence of any directional shift in the proportions of butterflies originating from the six areas over almost four decades. A relatively high proportion of overwintering butterflies were born in the US Midwest but, in all but two years (1988 and 1996), constituted less than half of all overwintering butterflies...

Effective conservation of migratory animals relies on making informed optimal investment strategies across the annual cycle to enhance population viability (Martin et al., 2007; Sheehy et al., 2010; Iwamura et al., 2014). Our findings indicate that the US Midwest region has produced the highest proportion of the monarchs collected in Mexico over the past four decades, and a simplistic implication might be that restoration efforts should focus primarily on this particular region. However, this disregards variation caused by land-use changes across North America and annual weather patterns and climate (Wang et al., 2016) that could change the distribution and abundance of both monarchs and their host plants (Batalden et al., 2007; Lemoine, 2015) in the next century. Buffering population responses to the dynamics of environmental conditions, therefore, suggests hedge betting conservation efforts to reduce the risk of extinction by maintaining vigilance across the entire breeding range rather than limiting efforts to only one particular region.

Permission to reprint with graphic provided by Sonia Altizer. Click [here](#) to read this paper in its entirety.

Flockhart DTT, LP Brower, MI Ramirez, KA Hobson, LI Wassenaar, S Altizer, DR Norris. 2017. Regional climate on the breeding grounds predicts variation in the natal origin of monarch butterflies overwintering in Mexico over 38 years. Global Change Biology, doi: 10.1111/gcb.13589



## An Historic Day: Protection for the Rusty Patched Bumble Bee

First bee in the continental United States to become an endangered species

Originally published by the [The Xerces Society](#) on March 21, 2017

A rusty patched bumble bee (*Bombus affinis*) on Culver's root. Photo credit: Susan Day, [UW-Madison Arboretum](#)

Today, protection of the rusty patched bumble bee under the Endangered Species Act takes effect, making this the first bee in the continental United States to be federally protected. This historic moment comes as a result of a listing petition filed by the Xerces Society for Invertebrate Conservation. Steps can now be taken to work toward the recovery of this species, which previously was common from Minnesota to the Atlantic.

"We are thrilled to see one of North America's most endangered species receive the protection it needs," said Sarina Jepsen, director of endangered species at the Xerces Society. "Now that the Fish and Wildlife Service has listed the rusty patched bumble bee as endangered, it stands a chance of surviving the many threats it faces - from the use of neonicotinoid pesticides to diseases."

This is the culmination of work completed by the Xerces Society, numerous colleagues in the scientific community, our partners at Natural Resources Defense Council, and the U.S. Fish and Wildlife Service to help protect a critically imperiled animal. Now that the rusty patched bumble bee is listed as an endangered species, the U.S. Fish and Wildlife Service has the authority to develop and implement a recovery plan for this species, which has the potential to have a positive effect on suitable habitat throughout much of the eastern United States.



Queen *Bombus affinis*. This specimen is from the National Collection at the Smithsonian and was collected in Racine, Wisconsin in 1965. Photo credit: [USGS Bee Inventory and Monitoring Lab](#)



*Bombus affinis* on *Dalea purpurea* (purple prairie clover) at Pheasant Branch Conservancy. ©Christy Stewart

"While this listing clearly supports the rusty patched bumble bee, the entire suite of pollinators that share its habitat, and which are so critical to natural ecosystems and agriculture, will also benefit," said Rich Hatfield, senior conservation biologist at the Xerces Society. "This is a positive step towards the conservation of this species, and we now have to roll up our sleeves to begin the actual on-the-ground conservation that will help it move toward recovery."

## Southeast

(Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia)

PLANT		BLOOM PERIOD AND COLOR							
Common name	Scientific name	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Wild azalea	<i>Rhododendron canescens</i>	Pink							
Spotted beebalm	<i>Monarda punctata</i>			Yellow					
Sundial lupine	<i>Lupinus perennis</i>			Blue					
Swamp rose	<i>Rosa palustris</i>			Pink					
Butterflyweed	<i>Asclepias tuberosa</i>			Orange					
Common buttonbrush	<i>Cephalanthus occidentalis</i>				Yellow				
Field thistle	<i>Cirsium discolor</i>				Pink				
Narrowleaf mountain mint	<i>Pycnanthemum tenuifolium</i>				Yellow				
Tall blazing star	<i>Liatris aspera</i>						Purple		
Great blue lobelia	<i>Lobelia siphilitica</i>						Blue		

The above graphic contains a list of native plants to the Southeast that are highly attractive to bumble bees and which together provide bloom throughout the entire flight season and offer a variety of colors. From "[Conserving Bumble Bees: Guidelines for Creating and Managing Habitat for America's Declining Pollinators](#)," a publication of The Xerces Society.

The effort to protect the rusty patched bumble bee has been long, and the task has been helped along by numerous people. In particular, the Xerces Society is grateful for the many individuals who participated in citizen science projects, initially via Project Bumble Bee and since 2013 through [Bumble Bee Watch](#). Observations from citizen scientists had a critical role in understanding the rusty patched bumble bee's current distribution. Special thanks go to photographer Clay Bolt and filmmaker Neil Losin of Day's Edge Productions, who produced the award-winning film, [A Ghost in the Making](#).

The overwhelming scientific and public support, including the more than 128,000 people that signed a petition urging endangered species protection, for this species has been incredibly heartening. Few disappearing species have engendered this level of support for protection. Because of this collective effort the rusty patched bumble bee now has a chance - and that is something we can all celebrate.

Read this press release online at [The Xerces Society website](#).

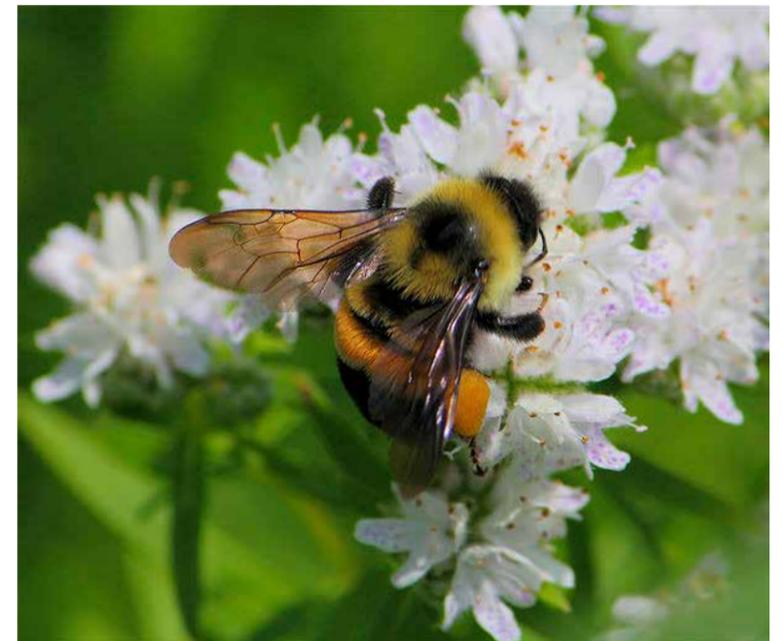


Photo credit: [Dan Mullen, license](#)

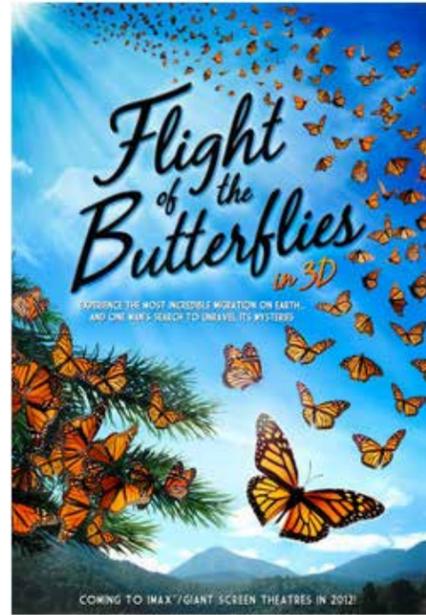
## “Flight of the Butterflies” Film Showing

*It is a natural history epic. It is a detective story. Join hundreds of millions of real butterflies on an amazing journey to a remote and secret hideaway, and one scientist's 40-year search to unravel the mystery – where do they go each fall? Experience the **Flight of the Butterflies!***

**Saturday, June 17, 2017**  
**11am to 12:15pm**  
**Midtown Art Cinema**  
**931 Monroe Drive NE, Atlanta, GA 30808**

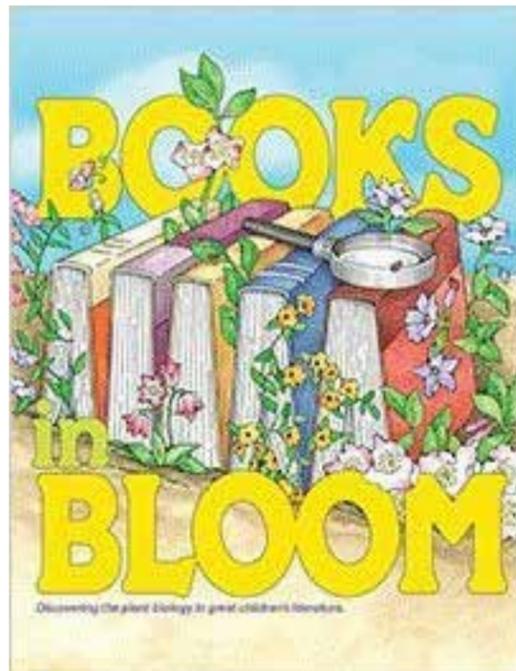
Join Monarchs Across Georgia in celebration of National Pollinator Week with the showing of this amazing film! Your price of admission is a donation to the Environmental Education Alliance of Georgia. Please go to the [MAG Events page](#) to reserve your seat and/or make your donation so that we can track and record the number of people attending. Seating is limited.

Native milkweeds will be for sale in the theater foyer after the showing.



## Mexico Book Project Update

The 2016 Monarchs Across Georgia Mexico Book Project was very successful. This year, we were able to set up a PayPal account to send the money, making it much easier. This method allows MAG to spend money just on materials and not on the actual transfer of money. Over \$1,000 was donated by individuals and organizations to buy books, games, and educational materials for the students in the states of Michoacán and Mexico that reside near the overwintering monarch colonies. Our “librarian,” Estela Romero Vásquez, did an amazing job purchasing and delivering books to the schools during October through February. We are very thankful for Estela’s help. Without her support, this project would not be possible. Estela shops for all of the educational materials by driving considerable distances to find exactly what will serve the children best in their curriculum. She then donates her personal time and transportation to travel many miles to deliver the materials and talk with the students about how important the monarch is to their local area.



### Recommended Resource

#### **Books in Bloom** **Discovering the Plant Biology in** **Great Children's Literature**

Books in Bloom, by Valerie Bang-Jensen & Mark Lubkowitz, invites children to learn about science while experiencing a great story. Each chapter features a popular children's book that's perfect for families, classrooms, after-school programs, and anyone who gardens with children. PreK-5.

#### **Includes:**

- Reference icons clearly identify appropriate grade levels
- Compact lesson ideas, hands-on activities, and full lesson plans
- Related titles for alternative reading levels
- Connections to Common Core State Standards and Next Generation Science Standards

[Amazon.com](http://Amazon.com)

## Monarch Haven at the Friends School of Atlanta

**Monarchs have found a friend** at the Friends School of Atlanta, located in Decatur. Four years after beginning a monarch friendly garden, the haven has been certified as a [Monarch Waystation](#), providing all the elements that a monarch needs from egg to adult. The garden is also registered with the [Rosalynn Carter Butterfly Trail](#), a worldwide list of butterfly friendly gardens.

Elementary science teacher Joanna Gerber became aware of the plight of the monarchs and decided to develop the school garden with monarchs in mind. The garden was also her culminating project for her [Advanced Training for Environmental Education in Georgia](#) certification. “That first year, nothing happened until the milkweed grew,” she said. “But the next year, the adult monarchs came, and the kids got to hold and study them. A lot of eggs were laid, and we brought them from our garden into the classroom. We then had caterpillars and watched the entire cycle. It was a beautiful experience that got the whole school pretty excited.” Last year marked the fourth year of the project. Forty monarchs were reared, tagged, and released.

Gerber noted, “Our vision is to be involved with organizations around the country and internationally that have partnered with [Monarch Watch](#), a group started by scientists to track the insects.”



*Pollinator Symposium... Continued from page 3*

**Hummingbirds:** **Kim Bailey** has a M.S. in Curriculum and Instruction – Science Education. An environmental educator for over 20 years, Kim has enjoyed a wide range of experiences including teaching middle school life science, leading wilderness adventure trips, conducting ecology outreach programs, directing outdoor education programs, and training teachers and naturalists. After 14 years coordinating a statewide environmental educational program for the Georgia Department of Natural Resources, she fulfilled her longtime dream of launching Milkweed Meadows Farm in Fruitland, NC. She now enjoys growing milkweed, wildflowers, fruits, and vegetables; producing open-pollinated seeds for Sow True Seed; keeping bees; and raising butterflies. Kim also works for the Captain Planet Foundation as their Curriculum Editor. Kim will present facts and feats of hummingbirds and how to attract them.

**Gardening for Pollinators:** **Karen Giovengo** is the EcoScapes program manager with UGA Marine Extension and Georgia Sea Grant. She provides education, outreach, technical assistance, and research support regarding natural resource-based sustainable land use practices in Georgia. Keren will provide a brief overview of the diversity of pollinators in Georgia, challenges they face, and basic habitat requirements that need to be addressed in pollinator gardens. She will emphasize sustainable best management practices and tools that gardeners can implement to achieve these habitat requirements.

**Registration information will soon be posted on the [EEA website](#).**

### Call for Committee Volunteers

ARE YOU INTERESTED in volunteering with the Monarchs Across Georgia (MAG) committee?

If so, please email [mag@eealliance.org](mailto:mag@eealliance.org) and let us know what volunteer opportunities interest you.

#### **Here are many ways that we could use your help!**

- Write newsletter articles
- Become a MAG workshop facilitator & co-facilitate workshops
- Review grant applications
- Become part of our Speakers Bureau
- Post information on our web pages
- Help with an event (children's craft or answering questions)
- Become an active committee member and coordinate a project, such as...
  - Grant Administration
  - Newsletter Editor
  - Mexico Book Project
  - Plant Sales
  - Pollinator Habitat Certification
  - Volunteer Coordination

## Pollinator Habitat Certification

**D**o you enjoy watching and studying caterpillars on their host plants; searching for chrysalides hidden from predators; observing butterflies and hummingbirds flitting from flower to flower? Does your schoolyard, workplace or backyard have bushes, trees and flowers that provide host plants, nectar and protection for butterflies, bees, hummingbirds and other pollinators? Is there a source of water/puddling areas for thirsty butterflies? Are there places for them to roost at night? If so, you might want to look into registering your backyard/schoolyard/workplace habitat with **Monarchs Across Georgia's Pollinator Habitat Program**. No garden is too big or too small!

For more details and to download the form, visit the [Pollinator Habitat Certification webpage](#).

*Congratulations to the latest gardens to be certified!*

**Karen Borg, Fayetteville**

**Savannah Area Council of Garden Clubs, Inc.**

**Botanical Garden, Savannah**

**Gay Martin, Senoia**

**Diana Scarbrough, Brooks**

**Lori Overson, Fayetteville**

**Linda Ellis, Peachtree City**

**Ellen Schneider, Peachtree City**

**Eleanor Sanderson, Fayetteville**

**Wylde Center - Sugar Creek Garden and Herb Farm,  
Decatur**

**Marie Seigler, Fayetteville**

**Madelyn Lee, Peachtree City**

**Teri Nye, Atlanta**

**Karen Oberhauser, Roseville, MN**

**Edgewood Community Learning Garden, Decatur**

**Michael and Katie Pigott, Snellville**

**Lanier High School Environmental Club, Sugar Hill**

**Jo Adang, Roswell**

**Robinson Elementary School, Dawsonville**

**Barbara Buckley, Fayetteville**

## Save the Date! Monarchs in the Classroom Facilitator Training

**October 31 – November 1  
Cobb County Water Quality Lab  
662 S Cobb Dr, Marietta, GA 30060**

Are you a certified Monarchs in the Classroom educator who is looking to take your monarch teaching to the next level? Save the date for our upcoming Monarchs in the Classroom Facilitator Training! Certified facilitators are qualified to teach Monarchs in the Classroom educator workshops, allowing you to lead workshops for your teacher colleagues and/or at the schools that you serve.

More information about this workshop will be posted to the [MAG Events page](#) soon.



*Monarchs Across Georgia workshop held at the State Botanical Garden of Georgia in Athens in April 2016.*

## Monarchs Across Georgia Plant Sale

**Featuring native milkweeds!**

**Saturday, May 13, 2017**

**10am - 5pm**

**Cobb County Water System**

**Wildlife and Rain Garden**

**662 S Cobb Dr, Marietta, GA 30060**

This garden is one of the seven featured on the annual ["Through the Garden Gate"](#) tour sponsored by the Master Gardener Volunteers of Cobb County. Although this plant sale is open to the public, we encourage you to purchase tickets and enjoy the tour. (\$20 in advance, \$25 day of the tour).