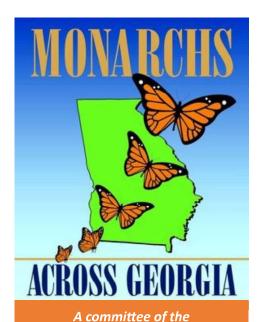
The Chrysalis Emerging news from Monarchs Across Georgia

Our mission is to inspire caretakers of the natural environment through monarch and pollinator education



ENVIRONMENTAL EDUCATION ALLIANCE

Upcoming Events

Native Plant Sale

Sept. 30, 2023, 9 am – 1 pm Davidson-Arabia Mountain Nature Preserve 3787 Klondike Rd, Stonecrest, GA

EEA Volunteer/Instructor/Facilitator Training & Collaboratory

Oct. 9, 2023

Kendeda Building, Georgia Tech Registration opens September 1

Symbolic Migration

Postmark deadline Oct. 20, 2023

Outdoor Learning Symposium

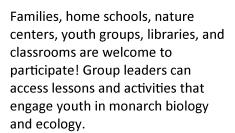
Nov. 7, 2023 Ford Elementary School—Acworth, GA

EEA Annual Conference

Feb. 29, 2023 – March 3, 2024 Jekyll Island, GA Lodging reservations open now Conference registration & presentation RFP open September 1

Symbolic Monarch Migration Celebrates 28 Years!

The annual migration of millions of monarchs across North America is among the world's most spectacular natural events. Facing declines in both their eastern and western populations, countries across North America are cooperating to protect this fragile species. Through the Symbolic Monarch Migration project, youth can become active participants in monarch conservation.



Participants create Ambassador* and life-sized monarch butterflies out of paper that are shipped to Mexico. These symbolic butterflies are delivered to youth who attend schools near the Monarch Butterfly Biosphere Reserve (MBBR) in central Mexico along with an environmental lesson. Each Ambassador becomes a gift to the youth who receives it.

United by the monarch butterfly, youth in Mexico, the United States, and Canada celebrate and pledge to protect monarchs and their extraordinary migration.



A monarch Ambassador from the Symbolic Monarch Migration project.

Complete details on participating are in the **LEADER PACKET** for the 2023-24 Symbolic Monarch Migration season. The postmark deadline is October 20, 2023. To cover the costs of this important educational project, participants must buy a \$15 "Passenger Ticket" for each Ambassador Butterfly folder submitted. The funds will support visits to deliver the butterflies and provide conservation education to schools in Mexico. Purchases can be made through our secure website with credit/debit cards (Discover, MasterCard, or Visa) or by mailing a check (U.S. banks only).

*New this year, we have added Ambassador Templates that you can print, color, and glue to a letter-sized folder. Five templates are available. Directions for using the templates are included in the Ambassador Templates Google Folder link above.

See, "Migration," on page 3

A Beginner's Guide to Gardening for Moths

By Sharon Mammoser, naturalist and photographer

Did you know that moths outnumber butterflies 10 to one? Worldwide there are 160,000 species of moths and about 17,500 species of butterflies. Both insects belong to the order Lepidoptera which means "scaled wings," because their wings are covered with thousands of tiny, overlapping scales, like shingles on a roof. These scales are the powder-like substance that rubs off on your fingers after you touch a butterfly or moth.

After their egg and caterpillar phases, both butterflies and moths go through a metamorphosis, drastically changing the way they look. Most moths are nocturnal, have hairier bodies and antennae that are thread-like or feathery. Butterflies have clubtipped or knobbed antennae. Many moths and butterflies visit flowers for nectar, and both inadvertently pollinate those flowers, but the hairier bodies of moths make them much more efficient pollinators.

More people are learning the importance of making small changes, like planting milkweed, welcoming bats, and turning off outdoor lights at night, in order to create wildlife sanctuaries and be better guardians of their yards. The tide is turning and this includes rolling out the red carpet for moths.

It used to be that yards and gardens were all about looking nice with no thought to the animals who share our outdoor spaces. But these days, with books like *Bringing Nature Home* by Doug Tallamy and *Gardening for Moths,* by Jim McCormac and Chelsea Gottfried, change is coming, one yard at a time.

However, if you do any gardening research online you will find lots of articles about how to eliminate moths and caterpillars from your



Rosy maple moth. Photo by Sharon Mammoser.

yard and garden. Holes in your leaves? Caterpillars on your flowers? Frass (caterpillar poop) raining down from the treetops? Article after article will tell you how to get rid of moths. You can also easily find plenty of movies, books, and popular shows, like *Silence of the Lambs*, portraying moths as harbingers of doom. Sadly, moths do not have a very positive reputation.



Imperial moth. Photo by Sharon Mammoser.

But they should, especially if you like birds because without moths and their caterpillars, we would not have birds, bats, and many other species of animals. Moths and their caterpillars are essential to a healthy, functioning ecosystem.

Do you want to see a beautiful creature? Care to be fascinated? Then

just look at some photos of moths, as the colors, sizes, shapes, and overall diversity are staggering! There are moths with fake eyes, moths with perfect camouflage hiding secret colors under their forewings, moths that mimic wasps and hummingbirds, moths with long tails meant to outsmart bats, moths that sleep in flowers, moths with long proboscises that can reach deep into the nectary of flowers, and moths with antennae so perfect you would swear they were feathers.

There are yellow and pink moths, delicate green moths, and moths with intricate designs that look handpainted. The biggest moth in North America—the Cecropia—has a wingspan of 5-7 inches! The largest member of Lepidoptera is not a butterfly, but a moth. And guess what? Of the 160,000 species of moths, only one the common clothes moth caterpillar (Tineola bisselliella) eats fabric. And yes, in large numbers, some moth caterpillars can defoliate a forest, but those are largely non-native moths that have few or zero natural predators.

See, "Moths," on page 10

Migration

Continued from page 1

If you have any questions, email symbolicmigration@eealliance.org.

The Symbolic Monarch Migration project is a partnership project between Journey North (a program of the University of Wisconsin-Madison Arboretum) and Monarchs Across Georgia (a committee of the nonprofit organization, the **Environmental Education** Alliance). Journey North manages the interactive Symbolic Monarch Migration Participant Maps and hosts educational materials on its website. Monarchs Across **Georgia** administers the project including coordinating the exchange of symbolic butterflies



among 2,000+ classrooms in three countries, engaging a contract worker to provide lessons and deliver materials in Mexico, and raising funds for the project's continuation.

Consider donating to the <u>Symbolic</u> <u>Monarch Migration</u> and/or <u>Mexico</u> <u>Book Project.</u>

Pollinator Habitat Certification

Do you enjoy seeing caterpillars on their host plants, how about searching for hidden chrysalides, or maybe just watching butterflies and hummingbirds flit from flower to flower?

Does your schoolyard, workplace, or backyard have bushes, trees, and/or flowers that provide host plants, nectar, and protection for pollinators? Is there a source of water or puddling areas for thirsty butterflies? Are there any places for them to roost at night?

If you answered yes to many or most of these questions, consider registering your habitat with MAG's <u>Pollinator Habitat Program</u>. No garden is too big or too small! Certified pollinator habitats that have been maintained for a minimum of three years from their certification date are eligible to be nominated for our <u>Pollinator Habitat Award</u>.

Congratulations to MAG's latest certified gardens:

- Catherine and Bates Lovett—Savannah
- Elaina Behounek—Macon
- Laurie Jackson—Toccoa
- Jill Gorman—Gainesville
- E.M.B.A.R.C. Community Youth Farm—Lithonia
- Huntley Hills Elementary and Montessori School—Chamblee

Call for Committee Volunteers

IF YOU ARE INTERESTED in volunteering with the Monarchs Across Georgia (MAG) committee, please email mag@eealliance.org and let us know what volunteer opportunities interest you.

Here are some of the many ways you could help:

- Write newsletter articles
- Become a MAG workshop facilitator and co-facilitate workshops
- Review grant applications
- Become part of our speakers bureau
- Post information on our web pages
- Gather news for our Facebook page
- Help with an event (such as a children's craft or answering questions)
- Become an active committee member and coordinate or work on a project, such as...
 - Grant administration
 - Newsletter editor
 - Symbolic Migration
 - Mexico Book Project
 - Plant sales
 - Pollinator habitat certification
 - Volunteer coordination
 - E-blast/email list

RECOMMENDED RESOURCES

Grandma Lisa's Humming, Buzzing, Chirping Garden

Written by: Lisa Doseff
Illustrated by: Duncan Robertson

Join Grandma Lisa as she enlists the enthusiastic help of her grandchildren in transforming her yard into an attractive garden for wildlife.

Along the way, she explains why planting native species is important and allays the children's fear of insects by lovingly showing them how these critters are so essential to our world. The family revels in working together, adding plants and other elements to the garden necessary to support a variety of wildlife.

As the yard begins to teem with animals, the children are simply enthralled and delighted by the sights, sounds, and mere presence of nature found in Grandma Lisa's garden!



2021 Moonbeam Award Winner for Environmental Issues—Bronze

If you are looking for inspiration to create a wildlife habitat of your own, or simply looking to spark a love of nature in youngsters, this book is for you.

Told in rhyme, children will enjoy learning about important concepts such as host plants, compost, food webs, and so much more. The brilliant and lively illustrations are not only intriguing but fun and instructive.

But be prepared... you just may find yourself pulling on your garden gloves, picking up a shovel, and heading outdoors to bring nature into the little piece of the planet where you live.

About the Author: Lisa Doseff is a Lancaster National Wildlife
Federation Habitat Steward, former
Virginia Master Gardener, and
homeschool mom. She co-founded a
neighborhood garden club focused
on creating beautiful pollinator
gardens using native plants. Above
all, she's a grandmother who wants
to see her grandchildren inherit a
thriving, ecologically sound world.

Suggested Reading Age: 6-9 **Publication Date:** July 27, 2021

The Garden Next Door

Written by: Collin Pine
Illustrated by: Tiffany Everett

Bored and hot on a lazy summer day, three young children watch as birds, bees, and butterflies zoom past them, over their fence, and into their neighbor's mysterious yard.

But why are there no birds or bugs in their yard? Why does the neighbor's yard glow with fireflies at night, while their yard is dark?

Well, the kids are determined to find out ... and maybe make some changes to bring a little nature to their backyard.

About the Author: Collin Pine's passion for gardening is rooted in west-

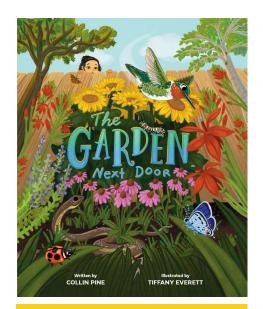
ern Pennsylvania, where his childhood summers were spent putting tomatoes into colanders and raspberries directly into his mouth. His love of nature led him to get a degree in environmental science, before serving as a Peace Corps volunteer in Cameroon.

Today, Collin lives in Oakland with his husband and their pet banana slug. When he isn't writing, Collin is probably either tending to his plants, bonding with the backyard birds, or baking zucchini bread.

Suggested Grade Level: 1-2

Pages: 32

Publication Date: Nov. 1, 2022



Submission Deadline: Feb. 1, 2024

Apply Now for the MAG Awards

It's that time again! Do you know someone who goes above and beyond to create habitat for pollinators? Or someone or someplace ardent about monarch conservation? If so, honor the individual or facility by nominating them for the MAG Service Award or the Pollinator Habitat Award!

The MAG Service Award recognizes significant contributions to monarch education, conservation, and/or habitat restoration in the state of Georgia. Two service awards are available: one for an individual engaged in formal or non-formal education and an-

other to recognize a facility. Both awards measure the active impact the nominee has had on monarch education and general pollination.

The Pollinator Habitat Award recognizes a MAG-certified pollinator habitat that goes above and beyond the minimal certification criteria and has been established for at least three years.

Links to the <u>award applications and</u> <u>scoring rubrics</u> are on the awards page. The submission deadline is Feb. 1, 2024. Only one nomination per person or facility, please!

The Great Southeast Pollinator Census

By Becky Griffin, Project Coordinator

We did it! Thousands of participants from three states braved the heat to participate in the Great Southeast Pollinator Census. I hope you all took a moment to acknowledge that this weekend, you made a difference.

There were events across North Carolina, South Carolina, and Georgia. Some of you counted in your home gardens with your families and others met with their garden groups, neighborhoods, and social groups. Master Gardeners volunteered overtime! You gathered in public gardens and at Extension offices.

Some counted for their fifth year and others counted for the first time. Schools celebrated *Pollinator Friday* and entire classes learned to love pollinators thanks to dedicated educators. We did this together!

For those who have not uploaded their counts yet, please do so! Every



count is important. The website portal will remain open for several weeks to give you plenty of time.

To recap the two special days, check out photos on social media. The Southeast Pollinator Census Facebook page and the Instagram tag @SoutheastPollinators are full of beautiful photos from excited participants. South Carolina, North Carolina, and Georgia protecting pollinators one count at a time!

Monarchs Across Georgia is a proud project partner of The Great Southeast Pollinator Census.

Jill Gorman Receives 2022 Friend of MAG Award

The recognition, "Friend of Monarchs Across Georgia (MAG)," was developed by the Steering Committee to honor someone who has gone above and beyond in helping us accomplish the mission, "to inspire caretakers of the natural environment through monarch and pollinator education."

Jill Gorman was named a Friend of MAG at the June Pollinator Symposium. Every spring, she hosts Jill's Butterfly Garden Workshop & Native Plant Giveaway, requesting donations from the participants. This year, she raised \$3,250 and donated to the local elementary school's butterfly garden and \$2,500 to MAG!

"I am a cardiac anesthetist, which means that I provide anesthesia for patients undergoing surgery, including those having open heart surgery," said Jill. "It can be a stressful job at times, so gardening is my escape. I love spending time in the greenhouse starting seeds."

Jill says she hasn't had any formal training in gardening or pollinators, but has learned everything from books and online. "The biggest thing I've learned is that if you convince someone to garden for butterflies, you're also supporting the bees, wasps, and all other insects... actually even all other wildlife," she said.

"It's much easier to convince someone to plant something for butterflies, rather than convincing them to support wasps. I've been amazed by the insect life that is attracted by planting the right native plants."

MAG Debuts Online Pollinator Habitat Certification Process

By Trecia E. Neal, Green Gardens Education & Designs, Wild Roots Native Nursery

After two years of development, Monarchs Across Georgia (MAG) has unveiled its first online application for pollinator habitat certification.

After the MAG Steering Committee formed in January 2001, its members began planning workshops, looking for funding, and developing strategies to implement the certification program statewide.

Since then, MAG has trained teachers to implement monarch education using state educational standards, developed a workshop facilitator program and manual, funded grants to develop pollinator habitats, published *The Chrysalis* newsletter, created a Map Asclepias Project to obtain data on milkweed distribution throughout Georgia, held butterfly symposiums, and created the "My Monarch Coloring Book."

In 2005, the Pollinator Habitat Certification program was started to highlight the importance of pollinators across North America. Eligible applicants receive a certificate suitable for framing and can also purchase a weather-resistant aluminum sign to install in their garden.

In summer 2023, MAG unveiled new versions of its garden sign and certificate designed by Lexie Delestrez, that feature monarchs, native bees, the ruby-throated hummingbird, and a selection of native flowers (see image at right).

Since 2005, MAG has certified 345 gardens from all across Georgia, as well as habitats in Florida, Kansas, Maryland, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, and Virginia.



Weather-resistant aluminum sign for MAG -certified pollinator habitats.

Certification requirements include two native milkweed species (three plants of each species), as well as a minimum of four flowering plant species in each growing season (spring, summer, and fall). At least three of these flowering plants must be Lepidoptera host plants, in addition to the milkweed (*Asclepias spp.*). At least one beneficial woody tree or shrub species and at least one native grass or sedge species must also be included.

Applicants should also provide a fresh source of water for pollinators and spaces or places for native bees to raise young and find shelter. You will also be asked to think critically about the use of pesticides and herbicides in these habitats and to have a plan in place to remove any invasive species. A minimum of five conservation practices should be

documented and four photos of your habitat are required.

Once your application is received, it will be reviewed by a committee member and if all the required elements are present, your certificate and/or sign will be mailed to you.

The cost is \$15 to certify your habitat and receive a certificate. To add a sign to the certification, the total cost is \$40.

If your pollinator habitat is already certified with MAG, you can order a replacement sign for \$25.

We invite you to submit your application for Pollinator Habitat Certification today and join the hundreds of citizens who are providing support for our pollinators.

Spotlights... for your pollinator garden

American Lady (Vanessa virginiensis)

What's in a name? In the case of this brush-footed butterfly, the common name of *Vanessa virginiensis* (*Drury*) has been known by several aliases including American lady, American painted lady, and painted beauty. The preferred common name is American lady.

The American lady occurs from southern Canada throughout the U.S. and southward to northern South America and is seen occasionally in Europe, Hawaii, and the larger Caribbean islands.

The wing spread of adults is 1.75 to 2.40 inches. The upper surface of the wings is orange brown with black margins. The front wings have white spots on the outer third. The lower side of the front wings has a bright pink area. Part of the forewing margin is concave. The lower side of the hind wing has a characteristic cobweb pattern and two large eye spots near the margin.

Adults and larvae are found in a variety of habitats including uplands, sandhills, flatwoods, lawns, and weedy areas. Yellow-green eggs are laid on the upper surface of the leaves of the host plants. The larvae are yellow with transverse black bands, dorsal white spots, and numerous, red-based blackbranched spines Larvae make nests at the tops of host plants by silking together leaves and debris at the tips of the flower stalks where they hide during the daytime and come out at night and on overcast days to feed. The chrysalis is molted gray or yellow -green.

Host plants include those in the sunflower family everlasting



Above: Giant ironweed (Vernonia gigantea). Right: American lady (Vanessa virginiensis).

(Gnaphalium obtusifolium), pearly everlasting (Anaphalis margaritacea), plantain-leaved pussy toes (Antennaria plantaginifolia), wormwood (Artemisia), ironweed (Vernonia), and burdock (Arctium). Adults prefer floral nectar but also feed on sap, fermenting fruit, and mud.

Resources

https://entnemdept.ufl.edu/ creatures/bfly/american lady.htm https:// www.butterfliesandmoths.org/ species/Vanessa-virginiensis

Giant Ironweed (Vernonia gigantea)

Giant ironweed or tall ironweed, Vernonia gigantea, is a member of the aster family and native to the southeast and the central U.S. and central Canada. It is found in prairies, grasslands, floodplains, woodlands, along roadsides, and near stream banks or forest edges. It prefers moist areas but is very adaptable.

This perennial herb can grow from three to five and even up to 10



feet tall on erect stems so it is easy to spot the bright, composite, purple flowers. The dense, fluffy disks bloom in the summer into fall.

Leaves are alternate, 10 to 30 centimeters (4 to 12 inches) long, and 2 to 4 centimeters (0.75 to 1.5 inches) wide. The leaves have serrated margins, and are smooth on top, usually dark green, and smooth to hairy white beneath.

While butterflies and native bees are attracted to this pollinator plant, most small mammals and livestock avoid it due to its bitter-tasting foliage.

The common name refers to the toughness of the stem. The genus name honors English botanist William Vernon, who performed fieldwork in North America. At least six additional species are found in the east; some were once used for treating stomach ailments.

Resources

https://www.wildflower.org/plants/ result.php?id_plant=vegi

https://plants.ces.ncsu.edu/plants/ vernonia-gigantea/

https://www.fs.usda.gov/wildflowers/plant-of-the-week/vernonia_gigantea.shtml

MAG 2023 Pollinator Symposium: Creating Landscapes for Beauty, Biodiversity & Ecological Benefits

Thank you to all who participated in MAG's biennial Pollinator Symposium June 24 at the Wimberly Center for Community Development in Winder, GA. Highlights of the event for our 87 registrants were:

- The presentation "Creating Buzzworthy Gardens: Best Landscape Design, Implementation, and Management Strategies for High-Performing Gardens" by our keynote speaker, Anne Spafford, MLA, and professor of landscape design in the Department of Horticultural Science at North Carolina State University.
- The unveiling of our updated Pollinator Habitat Certification program and new signage, recognizing the designer, Lexie Delestrez, a recent high school graduate who is bound for The Savannah College of Art and Design.
- The recognition of Jill Gorman, our Friend of Monarchs Across Georgia award recipient, for her generosity and dedication to the propagation and distribution of native host and nectar plants.

Participants were able to choose from nine concurrent sessions [Native Plant Propagation, MAG Pollinator Habitat Certification Program, The Georgia Green Landscape Stewards Program, Pollinator Ambassador Program, Creating Native Bee Nesting Boxes, The Great Southeast Pollinator Census, Mimicry and Mayhem (Hoverflies), Connect to Protect & Pollinator Plants of the Year Pro-







Left: Pollinator Habitat Certification session. Right top: Dr. Bodie talks propagation. Right bottom: Dr. Clem shares his knowledge of hoverflies.

grams, and Cooking with Herbs Pollinator-Style] to delve deeper into their topics of interest.

Thank you to our presenters Dr. Bodie Pennisi, Trecia Neal, Jessica Warren, Kasey Bozeman, Becky Griffin, Dr. C. Scott Clem, Heather Alley, and Chef Troy Luke.

Our Plant Sale and Store, which featured educational materials provided the opportunities to create or enhance habitats, gain additional knowledge, and support Monarchs Across Georgia's efforts to inspire caretakers of the natural environment.

A special thank you to our amazing volunteers who helped coordinate the event and make it run smoothly from set-up to clean-up. Kudos to Mary Beth Cary, Susan Meyers, Deanna Graycheck, Sharon McCullough, Trecia Neal, Jennifer McLaurin, Jen McCoy, Deb Clark, Donna Gast, dr. deb rosenstein, Karan Wood, Connie Vogel-Brown, and Carrie Lindblad.

Mexico Book Project Promotes Literacy and Inspires Conservation Among Mexican School Children

As I sit down to work on this fall's newsletter, my son is beside me working on a butterfly book, cataloging the species of butterflies we have found in our garden this summer. The garden is abounded with fritillaries and swallowtails but we are still awaiting the arrival of the first monarch.

At this moment, I am reminded once again of the importance of education, especially for children, in our conservation efforts of monarch butterflies. Education is at the heart of Monarchs Across Georgia's (MAG) mission as it seeks to inspire the next generation of caretakers of the natural world, not only in Georgia but in schools that surround the monarchs' overwintering sanctuaries in Mexico.

Now in its 19th year, the Mexico Book Project has been raising funds to donate books to these schools in order to promote literacy and enhance lessons about the conservation of monarch butterflies and their habitat. Alongside the Symbolic Monarch Migration project, it is truly a unique program that connects students and teachers across Mexico, the U.S., and Canada—the three nations that this migratory insect calls home.

In 2022, MAG raised \$650, which allowed for the distribution of more than 40 books, but we are hoping to exceed that number this year! Please consider donating to the Mexico Book Project to further our joint efforts to generate awareness



Students at an elementary school in Mexico with books donated through the Mexico Book Project.

and understanding across cultures through the study of monarch butterflies. You can donate funds to the Mexico Book Project via the online form by credit card (Discover, MasterCard or Visa) or check.

MAG Receives Grant from Monarch Butterfly Fund

The Monarch Butterfly Fund (MBF) awarded Monarchs Across Georgia (MAG) a \$2,500 grant for its Beyond the Mexico Book Project IV proposal.

This is the fourth MBF Small Grant that MAG has received since 2020 in support of the environmental education work carried out by Estela Romero in Mexico through the Symbolic Monarch Migration project.

The funds allow MAG to purchase specific books to supplement lessons. La Vida del Agua: El recurso natural más importante de la Tierra and ¡Sin agua, nada es posible: Todo sobre la materia más importante del mundo! are the titles that will complement the lesson on water this season, along with an exquisite poster on the Alolotes y Achoques de Mexico (see image). At least 40 classrooms will receive a lesson and books, with vis-



its beginning in November and continuing through February 2024.

Over the past three years of grant funding from MBF, MAG has

reached 119 classrooms with 182 books, impacting over 3,000 students in Mexico! Thank you to the MBF Board for its continued support of the Mexico Book Project!

Moths

Continued from page 2

Gardening for moths is a natural step to take for anyone who loves the outdoors and wants to make a difference. Just like gardening for butterflies and welcoming pollinators, gardening for moths should be on your radar. Gardening for moths requires you to look at your yard a little differently and be willing to accept some nibbled leaves.

But you, the homeowner, will become a facilitator of biodiversity, a hero for the underdogs, rather than a stringent gatekeeper only allowing in a select few. When you intentionally put things in your yard that attract and support moths and their caterpillars, many, many other animals benefit. And you benefit too because your yard will be a lot more interesting and busier with wildlife—large and small. Thankfully, it is not difficult to find flowers, trees, shrubs, and other plants that add beauty and support a diversity of wildlife, including moths.

So, are you convinced about the value of gardening for moths? This guide to gardening for butterflies is a great resource to get you started as all these points also apply to moths. Many plants have evolved side by side with moths, and like a butterfly caterpillar cannot just feed on anything green, the same is true of many moth caterpillars. Knowing which plants the caterpillars require—called the host plants—is the first step in creating a suitable habitat that supports great diversity.

And just like butterflies need nectar sources, so do most moths (some adult moths don't have mouthparts and don't feed; they live only a short time). There are many flowers that are especially attractive to moths. Some even open as the sun sets, excluding our diurnal pollinators in fa-



Luna moth. Photo by Sharon Mammoser.

vor of moths. How about adding a moon garden to your yard? You can do this by choosing white and light-colored flowers, fragrant flowers, and even flowers like primrose that open just after sunset.

Learn more about National Moth Week, which takes place the last week of July every year and participate in events near you.

Below are just a few host plants for moth caterpillars to get you started, all suggestions are from the book, *Gardening for Moths*, by Jim McCormac and Chelsea Gottfried.

Host Plants for Moths

St. John's Wort Family

Scientific name: Clusiaceae

Type: Shrub

Height: Varies by species
Potential moths: More than 18
different kinds, including black
arches (*Melanchra assimilis*), common pug (*Eupithecia miserulata*),
red-fringed emerald (*Nemoria bistriaria*) and wavy-lined emerald
(*Synchlora aerata*)

There are about 20 species of St. John's Wort in North America. Most have showy yellow flowers that attract a variety of insects and have a long bloom time.

Violets

Scientific name: Violaceae

Type: Wildflower

Potential moths: Caterpillars of more than 10 species of moth, including the giant leopard moth (*Hypercompe scribonia*), venerable dart (*Agrotis venerabilis*), and large yellow underwing (*Noctua pronuba*)

With about 77 different species to be found in North America (900 worldwide), there are many to choose from and all are not violet-colored. Violets can also be white and yellow.

Highbush Blueberry and Deerberry

Scientific name: Vaccinium corymbosum and Vaccinium stamineum

Type: Fruit shrub

Potential moths: More than 40 different moth caterpillars will potentially

See, "Moth Host Plants," on page 11

Moth Host Plants

Continued from page 10

feed on the leaves of members of the Heath family, such as high bush blueberry and deerberry, including the apple sphinx (Sphinx gordius) azalea sphinx (Darapsa choerilus), decorated owlet (Pangrapta decoralis), Harris's three-spot (Harrisimemna trisignata) and graceful underwing (Catocala gracilis)

Common Serviceberry

Type: Understory tree
Potential moths: More than 25
moth species feed on the leaves of
this early-blooming tree, including
the blinded sphinx (Paonias excaecatus), charming underwing
(Catocala blandula), pale beauty
(Campaea perlata) and small-eyed
sphinx (Paonias myops). As a bo-

nus, this tree is also the host plant

for our beautiful red-spotted pur-

ple butterfly (Limenitis arthemis).

Scientific name: Amelanchier arbor

Blooming in early spring with a profusion of white flowers, this tree offers something of interest in all seasons. The berries ripen in early summer and feed many birds, including cedar waxwings and bluebirds.

Ninebark

Scientific name: Physocarpus

opulifolius Type: Shrub

Potential moths: More than 15

species of moths

Ninebark is a great alternative to the very invasive and non-native burning bush (*Euonymus alatus*). It makes a great foundation shrub, with gorgeous white flowers that bloom in spring and attract many moths, pollinators, and other wildlife.

Evening Primrose Family

Scientific name: Onagraceae

Type: Wildflowers

Potential moths: Potential moths include the primrose moth (*Schinia florida*), nessus sphinx (*Amphion floridensis*), and white-lined sphinx (*Hyles lineata*)

Most in this family have fascinating flowers that open at dusk and then close again in the morning, thus eliminating diurnal pollinators like butterflies and bees. Many moths are attracted to the fragrance and light-colored blooms of primrose.

Buttonbush

Scientific name: Cephalanthus occi-

dentalis
Type: Shrub

Potential moths: More than 10 moths, including the Harris's three-spot (Harrisimemna trisignata), promethea moth (Callosamia promethea) and beautiful woodnymph (Eudryas grata)

This shrub is often found naturally at the edges of lakes, ponds, rivers, or other wetlands, with its roots in the water. However, when grown in your yard or garden it does not have to be in a wet spot. It creates dense stands with profuse, gumball-shaped white flowers that are an absolute pollinator magnet. Buttonbush is a great shrub as a foundation plant and can replace the non-native and invasive butterfly bush (*Buddleja davidii*).

Nectar Plants for a Moon Garden

What is a moon garden, you ask? A moon garden is just what it sounds like—a collection of plants that bloom at night or are white or light -colored and "shine" in the moonlight, attracting moths. Moon gardens offer a sensory experience,

appealing to other senses besides sight. There are many possibilities!

Choose white or light-colored flowers or foliage that will stand out in the moonlight and group them together. Heavily scented flowers are great here, too, so your other senses can be involved.

- Plants with silver or light foliage including silver artemisia (Artemisia schmidtiana) or lamb's ear (Stachys byzantina)
- Annuals include moonflower (Ipomoea alba), woodland tobacco (Nicotiana tabacum), and night phlox (Zaluzianskya capensis)
- Perennials include phlox, (such as Phlox subulata), foxglove
 (Digitalis), climbing hydrangea (a twining vine: Hydrangea anomala),
 Tina James Magic Evening Primrose
 (Oenothera glazioviana), gardenias
 (Gardenia jasminoides), jasmine,
 and joneysuckle (Lonicera spp.) and shasta daisy (Leucanthemum x superbum)
- Shrubs include hummingbird clethra (Clethra alnifolia), Little Henry itea (Itea virginica), dwarf fothergilla (Fothergilla gardenii), bottlebrush buckeye (Aesculus parviflora) and various Hydrangeas such as silverleaf hydrangea (Hydrangea radiata) and non-native, but not invasive, glossy abelia (Abelia x grandifolia)
- Trees include angel's trumpet (Brugmansia spp., and mock orange (Philadelphus lewisii amazing fragrance, as well)

There are of course lots more great plants that will help moths and their caterpillars. You can find a full guide in *Gardening for Moths* by Jim McCormac and Chelsea Gottfried.

Good luck! You will surely be amazed at the beauty and diversity of moths!