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To inspire understanding, appreciation, and conservation of plants and to advance a sustainable relationship between people and nature.
Dear Members and Friends,

Welcome to this first issue of the Conservation Gardener, the North Carolina Botanical Garden’s new magazine for members. By the time this inaugural issue reaches your mailbox, the Garden will be celebrating its 50th anniversary and I will have completed my first year as the Garden’s first full-time director. Past, present and future is our theme this year and how fitting it is to launch a new vehicle to share information about what it means to be a conservation gardener with our members and friends.

Since opening its first trail in 1966, the North Carolina Botanical Garden has been a leader in botanical education, conservation and research in the state of North Carolina and beyond. We maintain and protect more than 1,100 acres of land in gardens, parks, preserves and conservation easements. We offer a remarkable natural environment to more than 100,000 visitors each year. We offer extensive educational programming focused on North Carolina’s native flora, horticulture, ecology, conservation and botanical art to over 9,000 people annually in more than 120 lectures, workshops and classes. We serve over 8,000 children each year through field trips and school outreach and offer more than 40 on-site programs designed to connect children and families to the natural world through summer camps, early childhood classes, afterschool and homeschool programs.

There is no question we are doing all the right things to inspire understanding, appreciation and conservation of plants and to advance a sustainable relationship between people and nature. The real question is, what can you do to better understand, appreciate and conserve North Carolina’s natural heritage and build a more sustainable relationship with the natural world?

Enter the Conservation Gardener. In the pages of this issue you will meet North Carolina’s 2016 Wildflower of the Year, Northern rattlesnake-master, discover how to order seeds, and put this plant to use in your landscape. We also introduce you to Emerald Ash Borer, an invasive exotic insect, and how you can help prevent the spread of this major threat to our nation’s ash trees.

Lastly, we provide you with step-by-step instructions to create a beautiful pollinator garden and recommend specific native plants that will support pollinator health.

And, there is one more thing you can do. A week or two ago you received our Spring Appeal asking you to renew your membership and take advantage of a new member benefit that gives you special admission privileges and discounts at 300 gardens and arboreta throughout North America. Please show your support for the Garden by making a gift and renewing your membership. We have planned special exhibits, events and programs all year long and we hope you will join us in celebrating this milestone in the Garden’s history.

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IN THE GARDEN SHOP

Pressed Wildflower Jewelry
By Sunshine Design. Real North Carolina flowers, hand-collected, dried and carefully mounted on a hand-painted background.

$12–26
Transformation

BY JENNIFER PETERSON, MANAGING EDITOR

I find that working at the Garden compels me to tune in to the seasons and appreciate how the landscape changes throughout the year. From the excitement of the first spring ephemerals in the Mountain Habitat, to the brilliant yellows in the Coastal Plain Habitat each fall, and all of the other botanical anniversaries throughout each year, I delight in the constant transformation.

This past year has been filled with a lot of change at the North Carolina Botanical Garden, too. A year ago, we were welcoming our new director to the Garden family. With Dr. Waitt’s leadership, we are embarking on several new adventures and making some subtle changes to how we communicate with you, our members.

One of the obvious changes is this, the first edition of the Conservation Gardener! As editor, I especially hope you enjoy our new magazine. Twice each year, we will fill the pages with the latest conservation news and information you can use at home.

We have also launched a new electronic newsletter. This is where you will find updates on events, programs, and more. If you aren’t receiving these messages, sign up! You can do so at ncbg.unc.edu/enewsletter.

And perhaps one of our biggest and most obvious changes is our new logo system! You might recognize the image as a dogwood (*Cornus florida*). We chose the dogwood because it is North Carolina’s state flower and we are the state garden of North Carolina. There are some other interesting features included in this logo, too. If you want to find out more about the logo go to ncbg.unc.edu/logo.

The rebranding process took a lot of work and help from a variety of people. A big thank you goes out to Rivers Agency and UNC Creative for their professional design expertise. We also had an internal group of staff whose insight was invaluable. The group included Allison Essen, Chris Liloia, Geoffrey Neal, Cricket Taylor, Elisha Taylor and Damon Waitt. Thank you!

While change is exciting, it is also comforting to know some things never change. Here at the Garden, you will always find the Paul Green Cabin, the Storyteller’s Chair, and of course, North Carolina flora in all its beauty. And, as our communication methods transform, you can rest assured that our first priority is still to serve the southeastern United States as a leading conservation garden.
Meet Northern rattlesnake-master
North Carolina’s 2016 Wildflower of the Year
BY HEATHER SUMMER, NCBG SEED PROGRAM COORDINATOR

Northern rattlesnake-master (*Eryngium yuccifolium*), an unusual prairie species native to the eastern and central United States, has been named the 2016 North Carolina Wildflower of the Year.

With a basal clump of leathery strap-like, blueish green leaves and a single upright flowering stalk, this distinctive species more closely resembles a yucca plant than its closest relatives in the carrot family (*Apiaceae*). Northern rattlesnake-master is a great garden plant for the interesting form and texture provided by its leaves, flower clusters and seed heads.

In mid- to late-summer, a single stiff stem topped with round, spiky flower clusters rises two to four feet from the clump of yucca-like leaves. Each cluster is composed of many small, tightly arranged flowers with white to pale green petals and pointy bracts, giving the appearance of small, bristly golf balls. The flowers attract a steady abundance of incredibly diverse pollinators including native bees, wasps, flies, butterflies, moths and beetles. Upon ripening in the fall, the seed heads look nearly identical to the flower clusters, except they are brown in color. Both the flowers and persistent seed heads can be interesting additions to cut flower arrangements, and the tough leaves and flowers are fairly deer and rabbit resistant.

Northern rattlesnake-master has a long and interesting history of human use. Perhaps the earliest known use of this species dates back 8,000 years, when prehistoric North Americans used the fiber from its thick leaves to make shoes and sandals. The common name of this species comes from early 18th century accounts of Native Americans applying a root preparation to their hands and arms to protect them while handling rattlesnakes, and brewing a root tea to use as rattlesnake antivenin.

Northern rattlesnake-master occurs throughout North Carolina along sandy roadsides, prairies and open woods, and prefers open, sunny sites with dry to average, well-drained soil. It will become spindly in the shade and will decline rapidly if planted in poorly drained soils. Given the right conditions, this species will produce a sturdy taproot and become a tough, long-lived, drought-resistant perennial.

Use Northern rattlesnake-master as an accent plant or dramatic focal point in a sunny perennial bed or pollinator garden with butterfly milkweed (*Asclepias tuberosa*), black-eyed susan (*Rudbeckia hirta*) and asters (*Symphyotrichum* spp.).

For a Wildflower of the Year brochure and packet of Northern rattlesnake-master seeds, send a stamped, self-addressed, business envelope with attention to NCWFOY 2016 to North Carolina Botanical Garden, UNC–Chapel Hill, CB 3375, Chapel Hill, NC 27599-3375.

The North Carolina Botanical Garden and the Garden Club of North Carolina work together to promote the use of native plants in home gardens. Each year since 1982, a showy native perennial has been chosen and seeds of that wildflower are distributed to interested gardeners. To view a list of the past North Carolina Wildflowers of the Year, visit the Garden’s website: ncbg.unc.edu/north-carolina-wildflower-of-the-year.

Almost 200 years ago, the 2016 North Carolina Wildflower of the Year was being cultivated in England under the name “Yucca-leaved Eryngo.”


*The Botanical Register*, later known as *Edward’s Botanical Register*, was an illustrated botanical magazine that ran from 1815 to 1847. Botanical illustrator Sydenham Edwards was the primary illustrator of the earlier *The Botanical Magazine* (*Curtis’s Botanical Magazine*) until he left in dispute with the editors to begin his own publication which ran for 33 volumes.

In England, the early horticultural magazines were published in sturdy book form with beautiful images of hand-colored engravings from noted botanical illustrators of the period. The North Carolina Botanical Garden is fortunate that The Botanical Garden Foundation’s William L. Hunt Library contains all 33 volumes.
Celebrating 50 Years of Conservation
Fifty years ago, on April 10, 1966, the North Carolina Botanical Garden opened its first offering to the public, the Piedmont Nature Trails.

However, the vision for the Garden started much earlier. William Chambers Coker and his student Henry Roland Totten proposed a botanical garden south of the main UNC campus in the late 1920s. Although some plantings were made by the 1940s, it was in 1952 that the university Board of Trustees dedicated 70 forested acres for botanical garden development. William Lanier Hunt, a horticulturist and former student of Coker and Totten, added 103 acres of dramatic creek gorge and rhododendron bluffs to this tract. Hunt also helped to found the Garden’s membership support organization, the Botanical Garden Foundation, in 1966.

Throughout the Garden’s history, conservation and native plants have been at the core of its work. In 1961, C. Ritchie Bell, a professor of botany and tireless promoter of the flora of North Carolina, was appointed the Garden’s first director, and work to open a public site for the appreciation of North Carolina’s plants began in earnest.

As the Garden grew beyond the nature trails, students, volunteers and a growing staff constructed “habitat gardens,” displays representing the major plant communities of the state and illustrating the theme of botanist B.W. Wells’s book *The Natural Gardens of North Carolina*. In addition to promoting native plants through display, the Garden sought to help gardeners across the state understand the importance of conserving these plants.

Encouraged by the North Carolina Wildflower Preservation Society (now the North Carolina Native Plant Society), the Garden promoted “Conservation Through Propagation,” advocating for native plants to be grown from seeds and cuttings rather than collected from their natural habitats.

The Garden also became a steward of natural areas in partnership with the Botanical Garden Foundation. They currently care for over 1,000 acres of land, including display gardens and nature preserves.

Through demonstration, forward-thinking policies, and its own conservation projects, the North Carolina Botanical Garden became known as a Conservation Garden, coining the term and setting an example for other public gardens across the country.

In addition to a focus on conservation, the Garden has acquired responsibility for other major sites during the past 50 years: Coker Arboretum, a beloved garden on the central campus of UNC-Chapel Hill; Mason Farm Biological Reserve, a tract of old farmland and ancient woodlands that provides wildlife habitat and research facilities for diverse projects; Battle Park and Forest Theatre, a well-loved, longstanding natural area bordering the UNC-Chapel Hill campus; the University of North Carolina Herbarium, home to more than 800,000 plant specimens; and the Carolina Campus Community Garden, a vegetable garden that provides fresh vegetables to UNC-Chapel Hill housekeeping staff.

Today the North Carolina Botanical Garden is nationally known for its conservation practices, educational programs and display gardens. Join the Garden during 2016 for a variety of events celebrating 50 years as a conservation garden. Find out more at ncbg.unc.edu/ncbg50.
Conservation Gardener

1903
William Chambers Coker
begins Coker Arboretum

1952
Trustees approve
creation of the North
Carolina Botanical
Garden

1961
C. Ritchie Bell
becomes first
director

1966
Piedmont Nature
Trails open, the
Garden’s first
offering; Botanical
Garden Foundation
incorporated

50TH CELEBRATION

Join us for a variety of programs and celebrations in honor of our 50th anniversary!

And be sure to stop by mid-May through mid-August for an exhibit about our history.

DETAILS AT
ncbg.unc.edu/ncbg50

Mark your calendars for a big 50th anniversary celebration in Chapel Hill on October 22!

BIRD PHOTO CONTEST & SHOW

Calling all shutterbugs! Grab your camera and take some photos of North Carolina’s native birds! Cash prizes will be awarded in adult and youth categories. Photos are due October 16. *Photo by Mike Dunn.*

DETAILS AT
ncbg.unc.edu/photocontest
1976
Totten Center dedicated

1982
NC Wildflower of the Year program begins; management of Coker Arboretum and Mason Farm Biological Reserve moved to NCBG

1986
Peter White becomes second director; Coastal Plain boardwalk installed

1998
NCBG becomes the first botanical garden to establish an exotic plant policy

2004
Management of Battle Park and Forest Theatre moved to NCBG

2009
James & Delight Allen Education Center opens

2015
Damon Waitt becomes third director

DEBERRY GALLERY EXHIBITS
On display through April - Stunning film photographs by Jennifer Parker welcome you into a timeless universe of elegance, drama and unexpected mystery. Deep Focus captures a place where the commotion of everyday life ceases and one can pause in the natural flow of beauty.

COMING IN MAY...OIL PAINTINGS BY SALLY SUTTON
Invasive Exotic Insects Threatening Our Native Forests

Emerald Ash Borer in North Carolina

BY CATHERINE BOLLINGER

Emerald Ash Borer (Agrilus planipennis)

Eric R. Day, Virginia Polytechnic Institute and State University, Bugwood.org
It doesn’t look like a dangerous alien, does it – this tiny iridescent green insect? But since June 2002, this invader from Asia, the Emerald Ash Borer (EAB), has already killed almost every ash tree species (Fraxinus spp.) in the Ontario and Quebec provinces in Canada and is at least present in most US states east of the Mississippi from Minnesota to Louisiana. It was confirmed to be present in North Carolina in 2013 and is currently moving north to south across the state.

Female EABs lay their eggs in bark crevices of ash trees. Tiny larvae hatch in mid-summer and chew their way through the outer bark to the inner bark and into the sapwood. These tree tissues transport food and water between roots and leaves. Feeding larvae create winding tunnels, called galleries, which completely disrupt the food and water transport systems of the tree. Deprived of food and water, branches begin dying until the entire tree is dead. Once an infestation arrives, most – often nearly all – ash tree species die within a few years.

The potential ecological and economic impacts of the obliteration of North American ash tree species are almost too enormous to contemplate. According to national inventory data, the United States contains more than eight billion ash trees of 16 different species in its eastern forests. Additionally, certain ash species and their cultivars are planted routinely to enhance urban/suburban landscapes. Several ash species are key components of the overstory of forest ecosystems in which they occur. For example, Green Ash (Fraxinus pennsylvanica) – the most widely distributed ash species in the United States – flourishes in a variety of soil types and is often abundant along waterways and in wetlands. Large gaps in the canopy are left when all the ash trees in local ecosystems die.

Affected Southeastern US Ash Species

In the southeastern United States, four species of ash are native. Three are wetland species:

- Green Ash (Fraxinus pennsylvanica)
- Carolina Ash (F. caroliniana)
- Pumpkin Ash (F. profunda)

Green Ash is the most common species and is often a dominant overstory component of wetland ecosystems.

White Ash (F. americana) is the other species commonly found in the southeastern United States. It naturally occurs on deep, well-drained soils, and its wood has been used for centuries to make fine furniture, baseball bats and any other wooden item required to be strong and lasting. Additionally, it has been used extensively as a landscape tree in urban and suburban settings.

Southeastern US Animals that Rely on Ash Trees

Humans aren’t the only living creatures who have relied on ash trees for centuries. According to Dr. Douglas W. Tallamy in his book Bringing Nature Home: How You Can Sustain Wildlife with Native Plants, ash trees support at least 150 species of moths and butterflies – more than hazelnut, walnut, beech or chestnut. These include Promethea and Apple Sphinx Moths, and Eastern Tiger Swallowtail and Mourning Cloak butterflies.

Aerial photo of EAB-induced ash tree mortality in Wisconsin, August 2013

Photo by Bill McNee, Wisconsin Dept. of Natural Resources, Bugwood.org

A FEW DEFINITIONS

Exotic: Any plant/animal/fungus/bacterium not indigenous to the southeastern US. Synonyms for the term exotic include non-native, alien, non-indigenous and introduced.

Invasive exotic: Any exotic species that threatens the survival or reproduction of native plants or animals, or threatens to reduce biological diversity.

Overstory: The uppermost level of vegetation in a forest, usually forming the canopy.


Systemic insecticide: A water-soluble poison that can be absorbed by a plant and moved around in its tissues. Such pesticides are usually either injected into a plant or applied to its root system, where they are absorbed.

Weed: A plant growing in the wrong place. Most weeds are annual or biennial herbaceous plants and may be native or exotic in origin. Although weeds are considered to be troublesome or unsightly, they do not threaten biological diversity.

FOR FURTHER READING

For more information about invasive insects, including Laurel Wilt, Gypsy Moth and Hemlock Wooly Adelgid, please go to: ncbg.unc.edu/emerald-ash-borer
Ash trees are important sources of browse and cover for deer. Seeds are consumed by wood ducks, northern bobwhites, purple finches, pine grosbeaks, fox squirrels, mice and many other birds and small mammals. Because of their tendency to form trunk cavities when their tops are broken, mature ashes are highly valued as nesting sites by woodpeckers, wood ducks, owls, nuthatches and gray squirrels. Green Ash woodlands often shelter the highest numbers of bark-foraging and ground-nesting bird species.

What will happen to these animals if almost every ash tree in North America dies? No one can predict the future with certainty, but we can look at what has already happened in southeastern Michigan, where massive gaps in forest cover have favored the invasion of invasive exotic plant species. Japanese honeysuckle (Lonicera japonica), for example, is starting to overwhelm woodlands the way kudzu (Pueraria lobata) does in the Southeast. Soil chemistries are changing, as are water cycling patterns, making it more difficult for remaining native species to maintain themselves. As ash-feeding insects disappeared, so did the birds that fed on those insects.

What is Being Done to Save Our Ash Trees?

“Research is ongoing,” says Kelly Oten, Forest Health Monitoring Coordinator for the North Carolina Forest Service. She notes, “Currently, there is not much we are able to do to prevent widespread ash mortality. But I am also optimistic that things will change.”

Oten notes that when a new invading species attacks our forests, there is always a learning curve as scientists study the new threat and devise ways to counteract it. A great example in North Carolina is the gypsy moth, which is now controlled to minimize damage, Oten notes.

Until controls are developed, Oten says our best bet is to buy scientists as much time as possible to study the EAB by:

• tracking its progress by using strategically placed traps and via reports from scientists and citizens who can provide information about confirmed sightings.
• encouraging all North Carolinians to use only local firewood. These pests can be inadvertently moved hundreds of miles by hitchhiking on or in untreated firewood.
• introducing beneficial wasp species that attack and kill EAB. This tactic is in the experimental stage now. But if it works, it will serve in the short term to slow the spread of EAB, and perhaps eventually help control the pest in the long term.
• strategically using systemic insecticides to protect ash trees in urban and home landscapes as well as parks and near trailheads.

Oten notes, “Not only do [protected] trees add aesthetic value, but they could become a hazard to property and/or people if they begin to die.” She adds that estimates for some chemicals indicate that trees can be protected from EAB for 20-30 years for the same amount of money it would cost to remove them.

“Our hope,” Oten notes, “is that we can provide landowners with the knowledge needed to make management decisions themselves, as each decision is not only personal, but will be based on many factors. One of the key things we’re urging landowners to consider is the speed at which EAB is spreading in NC. The natural spread of EAB is relatively slow. For many areas in NC, it will likely be years before EAB reaches them, and those are years that trees could put on valuable growth or continue to provide shade and aesthetic value. On the flip side, EAB has shown us that it can show up suddenly in new areas hundreds of miles from the nearest known infestation, so frequent monitoring is a must.”

Individuals can aid scientists by using only locally harvested firewood, by reporting any sightings of EAB, and by staying informed about the status of EAB and any emerging controls for it in their area. Public gardens, such as the North Carolina Botanical Garden, that are members of the American Public Gardens Association have access to its Sentinel Plant Network which provides training, equipment and educational outreach materials to help gardens keep their members informed about emerging pests and diseases.

“Currently, there is not much we are able to do to prevent widespread ash mortality. But I am also optimistic that things will change.”

Saving for Tomorrow

Scientists throughout North America are studying ash species native to Asia, from EAB for 20-30 years for the same amount of money it would cost to remove them.

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which is also the home of the EAB. Asian ashes appear to be resistant to EAB devastation, and the hope is that this genetic resistance can be incorporated into North American ash species in the future. To ensure they have viable ash tree seeds to work with, the USDA Forest Service’s National Seed Laboratory (NSL) is coordinating the collection of ash tree seeds from as many species and locations as possible. Landowners with healthy ash tree populations can contribute seeds collected from their trees by following instructions provided on the NSL’s Web site.

Other Imminent Invasive Exotic Species Threats to Our Forests
Unfortunately, Emerald Ash Borer is not the only invasive exotic species threatening the health of our native forests. When asked to list what she considers to be the top five invasive exotic species threats to our native southeastern forests, Kelly Oten lists:

• Emerald Ash Borer
• Laurel Wilt – a disease introduced by a non-native insect (Redbay Ambrosia Beetle) that is destroying key coastal wetland species including redbay (Persea borbonia) and spicebush species (Lindera spp.).
• Thousand Cankers Disease – introduced by the Walnut Twig Beetle, this fungal disease is devastating Black Walnuts and related species.
• Gypsy Moth – The caterpillars of this invader defoliated trees in the Northeast before controls were developed to moderate its impacts.
• Hemlock Wooly Adelgid – This tiny insect that has killed hemlock forests throughout North Carolina came from Japan. Populations are now established from northeastern Georgia to southeastern Maine and as far west as eastern Kentucky and Tennessee.

Landowners and other interested individuals are advised to remain informed about these threats and additional ones that may emerge in the future via information provided by government agencies and other interested organizations, such as public gardens.

A writer and editor for over 30 years, Catherine Bollinger prefers to write about botanical subjects whenever she can. For the last six years, she has been blogging about her landscape at www.piedmontgardener.com.
Plant a beautiful pollinator garden

Pollinators are vital to agriculture, yet they are in decline for a variety of reasons. While this is a large-scale problem, one solution can be found in your backyard! By choosing plants that help pollinators, you can make a real difference and support thousands of vital insects.

Here are some basic steps to ensure a wonderful garden for both you and native pollinators:

1. Use native plants ... many native pollinators prefer them, and some rely solely on them. Avoid cultivars as they often fail to produce nectar, pollen, or seeds.
2. Choose a variety of plants that will bloom throughout the season ... this makes for a more pleasing garden and also ensures that you will have food for different pollinators. Some pollinators are only active in early spring, late summer, or fall, while others are active all season.
3. Use a mixture of nectar and host plants ... both types of plants are important, and some native plants fulfill both needs. Butterflies and moths lay eggs on or near host plants so the emerging caterpillars can eat the leaves. You are growing food for the caterpillars, and the host plants will regrow the foliage that is lost.
4. Cluster plants of the same species ... this makes it easier for pollinators and caterpillars to feed and graze.
5. Include various colors of flowers ... different pollinators prefer different colors. The greater diversity of flower color you have, the more pollinators will visit your garden.
6. Don’t use insecticides! ... even those labeled “organic” are often deadly to pollinators. Pollinators eat or graze on all parts of plants, so anything sprayed on any part of the plant can kill pollinators.
7. Use native grasses ... grasses provide structure in the garden, and many pollinators rely on grasses for reproduction and food.

Keep in mind that you are creating an ecosystem that will provide native insects with food, shelter and water. Dead wood, flower stalks and leaf litter are a great habitat for insects. In fact, many insects, including lightning bugs and some butterflies, actually require leaf litter for their larvae. Rock and water features also benefit pollinators while enhancing the beauty of your garden.

**NECTAR-PROVIDING PLANTS**

**PERENNIALS**
- Aster (Symphyotrichum spp., Eurybia spp., Ionoactus linariifolius and Ampelaster carolinianus)
- Beebalm/Bergamot (Monarda spp.)
- Black-eyed-Susan (Rudbeckia spp.)
- Blazing Star (Liatris spp.)
- Boneset (Eupatorium spp.)
- Green and gold (Chrysogonum virginianum)
- Goldenrod (Solidago spp.)
- Joe-pye weed (Eutrochium spp.)
- Milkweed (Asclepias spp.)
- Mountain-mint (Pycnanthemum spp.)
- Passionflower (Passiflora spp.)
- Pea family (Baptisia spp., Thermopsis villosa, Centrosema virginianum)
- Purple coneflower (Echinacea purpurea)
- Rattlesnake-master/Eryngo (Eryngium spp.)
- Skullcap (Scutellaria spp.)
- Sunflower (Helianthus spp.)
- Tickseed (Coreopsis spp.)

**SHRUBS**
- Beautyberry (Callicarpa americana)
- New Jersey-tea (Ceanothus americanus)
- Ninebark (Physocarpus opulifolius)
- Serviceberry (Amelanchier arborea)
- Sweet pepperbush (Clethra alnifolia)
- Virginia sweetspire (Itea virginica)

**HOST PLANTS**
- Caterpillars need specific plants for food. Butterflies will lay their eggs on or near these plants.

**PERENNIALS**
- Beardtongue (Penstemon spp.) – Buckeye and Checkerspots
- Pipevine (Isotrema spp.) – Pipevine Swallowtail
- Golden Alexanders (Zizia aurea) – Black Swallowtail
- Milkweed (Asclepias spp.) – Monarch
- Passion flower (Passiflora spp.) – Fritillaries, Hairstreaks

**SHRUBS**
- Spicebush (Lindera benzoin) – Spicebush Swallowtail
- Winged Sumac (Rhus copallinum) – Red-banded Hairstreak

**TREES**
- Oak species (Quercus spp.) – multiple pollinators including several species of hairstreaks and moths
- Paw Paw (Asmina triloba) – Zebra Swallowtail
- Sassafras (Sassafras albidum) – Spicebush Swallowtail
- Tulip-trees (Liriodendron tulipifera) – multiple pollinators including Eastern Tiger Swallowtail

**GRASSES**
- Many pollinators rely on grasses for reproduction and food.
Thank you!

To all who have supported the Garden from July 1, 2014 to June 30, 2015.
Jeanine and Mitchell Reese
Katharine L. Reid
Jim and Lynda Reimann
Mary Reimann
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Cliff and Linda Butler
Susan and Alvis Bynum
Robert and Jeanne Chamberlin
Kathryn and Reece Chambers
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