

Tyler Topics

Autumn
2018



NEWS, PROGRAMS, AND EVENTS OF TYLER ARBORETUM

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Executive Director's Message

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Cover Photo: A spiky crop from Tyler's American chestnut orchard from 2017. Photo by Dave Charlton.



With another year of Tyler's Summer Camp behind us, we like to take a moment to evaluate our impact. Thanks to your support, we have

been able to extend the camp experience from grades 1-8, through grades 11 with meaningful, curriculum driven nature discovery that is engaging, memorable and FUN!

With our focus on creating Champions of the natural world, Tyler's camp is a great place for young people to test ideas and develop their values about the kind of world they want to be part of. How we treat the planet is directly related to how we treat each other, so our camp focuses on unleashing curiosity, exploring new things, team work, sharing insights, and kindness – to each other, and to this earth that is our home.

Over the last several years, we have consciously transformed the camp experience with the addition of fun traditions that build community, enriched science learning, and a strong youth development program focused on the five

C's - confidence, competence, character, connection and caring – in a supportive environment that fosters growth.

This approach to youth development governs all our youth education programs, which currently focus on youth from 18 months through grade 5. Our goal, with your help, is to extend this excellent programming to middle school grades 6 through 8, over the next couple years, with the ultimate goal to reach teens. We wish to deepen our impact among youth with the appropriate research driven curriculum, and to reach more underserved youth through scholarship programs.

With the natural world facing increasing challenges, environmental leadership from a broad and diverse community is vital. We are actively seeking funding to support our youth education and development initiatives. With your help, we can inspire youth to lead change, and ensure that future generations love ALL places like Tyler, as Champions of the natural world.

Tyler's Summer Camps



Camp staff share in the fun of 'Dress-Up Wednesdays.'



Every Friday campers celebrate the week around a campfire with skits, songs and games! One rainy Friday required a creative approach to the campfire!

Back from the Brink: The American Chestnut Restored

By Gary Bloomer, Communications Manager

Between 1904 and the late 1940s, the American chestnut, *Castanea dentata* was almost wiped out by a fungus accidentally introduced to the U.S. from Asia. The fungus, *Cryphonectria parasitica* spreads via microscopic, wind-borne spores that kill leaves and branches while leaving the roots largely unaffected.

Historically and economically, the American chestnut was an important forest tree. While its fast growing, easily worked, rot resistant timber made it ideal for building and furniture making, its nut crop was a valuable food source for wildlife and people alike. But by the mid-1940s, the blight had driven the American chestnut population almost to the brink of extinction.

Since 1997, Tyler has been part of the PA chapter of the North Central Region of The American Chestnut Foundation (TACF), an organization dedicated to saving the species. Other state chapters in the region include Ohio, New York, Indiana, and New Jersey.

While work in other chestnut orchards includes cross breeding, Tyler's orchard acts as a reservoir of the American genome, producing seed that is peripherally involved in the breeding program.

At the SUNY College of Environmental Science and Forestry (ESF) in Syracuse, NY, a research team led by Dr. William Powell and Dr. Charles Maynard has been leading the way in the American Chestnut Research and Restoration Project (ACRRP) for the last 25 years—research that if successful, will restore the American chestnut to its native range across the forests of the Eastern United States.

Exciting research using genetic engineering has made significant headway towards saving the species. Using biotech modifications called transgenics—the process of taking

genetic information from one organism and artificially adding it to an unrelated organism—ACRRP researchers have developed trees that are blight resistant.

Researchers copied and transferred a single gene from wheat into the genetic code of American chestnut specimens. The enzyme in the gene breaks down oxalic acid, a toxin produced by the blight.

With the new gene as part of its genetic make-up, an American chestnut becomes immune to the effects of the oxalic acid and as a result, trees become immune to the blight.

The long term goal is to grow and plant 10,000 blight resistant trees in an effort to restore the native tree population, first in the forests of New York state and then out into the rest of the eastern United States.

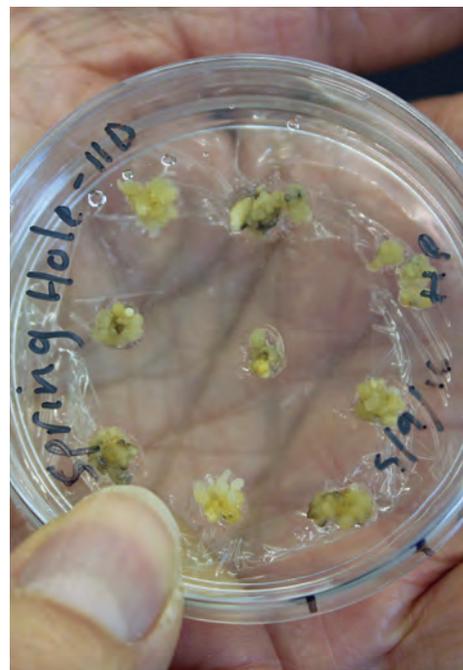


The saddest news from the woods of the Northeast is that a disease that baffles the tree doctors has attacked and killed all the chestnut trees in the neighborhood of the city of New York, and it is marching steadily westward.

—Julia Ellen Rogers,
Trees Every Child Should Know: Easy Tree Studies for All Seasons of the Year,
published in 1909.



While this is exciting, in a few southern areas of the American chestnut range, a second pathogen—*Phytophthora cinnamomi*—causes rot that kills trees from the roots, a situation that can be even more damaging than the chestnut blight, which leaves the trees roots untouched. This would mean that to effectively restore the species to its natural range, further research would need to combine resistance to both the blight and the root rot pathogen.



These insignificant-looking blobs are baby American chestnut trees. If SUNY scientists at the College of Environmental Science and Forestry (ESF) in Syracuse, NY, are right, the offspring of these tiny shoots could take the ailing species into next century. Photo by Dave Charlton, June 2016.

Longer term, ACRRP researchers see the ideas developed as part of this project being used to combat other tree diseases, including Dutch elm disease.

There is still work needed to ensure project's success, not least of which is the successful passage of regulatory approvals required by the USDA, the EPA, and the FDA—processes covering everything from nutritional safety to the potential environmental impacts of transgenics.

Barring regulatory delays, transgenic American chestnuts could be planted outside the confines of research facilities by 2022, making Powell and Maynard's ultimate goal of restoring the American chestnut to its native range within the next few decades a reality.

To learn more visit
<http://www.esf.edu/chestnut/>

Tyler at Twilight

Midsummer Night's Dream – You Are Making Dreams Come True

Your lively presence and generous bidding raised over \$133,256 to create champions of our natural world. Your support is making it happen at Tyler.

You came, you partied, you bid, and you gave generously, thank you! You are connecting more children of all ages to nature, gardens, and wildlife. With over 279 guests, a good time was certainly had by all.

Your support of Tyler through *Twilight* will connect visitors to nature and teach them more about the wonders of our natural environment. Your support also protects and shares this precious 650 acres of green space, gardens, and trails with our community. Thank you for your willingness to make Tyler a better place for all to enjoy. We can't do it without you!

"Tyler at Twilight is always a special evening. This year, we had the added pleasure of welcoming many new guests to the party. Thanks to all who were a part of it for your incredible generosity!"

*— Heather Saunders
Chair, Tyler at Twilight*

Our Generous Sponsors & Restaurant Partners Created a Delightful and Delicious Evening for All, Thank You!

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Tyler Events

Autumn
2018

Family Fun Run

Sunday, September 16, 9am – noon (rain date September 23)

Run for fun around the Scenic Loop! The Toddler 20 yard “dash” will kick off the festivities at 9:30am followed by the Stroller Stretch and Roll at 10am (a scenic power walk through the Rhododendron Garden). For older runners, the inaugural Tyler 2k will take place at 10:30am. Prizes for the top three finishers. The Toddler 20 will be on grass. *Food and beverages available for purchase.*

Pre-registration required. \$20 for adults, \$18 for seniors (65+), \$10 for youth (ages 3-17), children 2 and under FREE

Blues and Brews

Friday, October 5, 7 – 9pm

Start the weekend with a lively evening of specialty beers and tasty hors d'oeuvres from **Pinocchio's Beer Garden** and **Sterling Pig Brewery**. Virtuoso guitarist **Fred Powell** will provide bluesy jazz to set the tone. In Tyler's Barn Loft.

Suitable for adults 21 and over.

Pre-registration required. Limited capacity. \$30 members, \$45 non-members, \$20 designated drivers. Rain or shine!



Pumpkin Days

Saturday, October 20 and Sunday, October 21, 10am – 5pm

Celebrate fall with two days of family fun at this uniquely Tyler festival! Make your own scarecrow, take a hayride, jump into inflatable fun from BOING! with a slide, obstacle course and moon bounce. With crafts, games, facepainting, pumpkin racing, family photo ops galore – and of course, PUMPKINS! Special attractions this year include wildlife demonstrations, FREE live entertainment, and education stations that make our fall festival more than fun for you and the kids! Buy lunch at Tyler and spend the day.

Pumpkin Days is proudly sponsored by Wawa, Inc.

No pre-registration required. Free admission for members, compliments of Wawa. Non-member admission is \$15 for adults, \$13 for seniors, and \$9 for youth, students and active military with ID. Children 2 and under FREE. Buy admissions and activity tickets online to expedite your check in! Free parking at Penn State Brandywine with shuttle service. For reserved parking at Tyler, pre-paid parking passes are available for \$10. Check Tyler website for details.

Hayrides

Saturdays, October 27 and November 3, 1:00, 1:45 and 2:30pm

Enjoy the magic of fall at Tyler with a hayride! Each 30-minute hayride takes you around the Scenic Loop to view the splendor of the season. Your autumn chariot awaits!

Pre-registration suggested – space is limited; \$4 per person. Children ages 2 and under: FREE

Members Only Events

Tyler After Dark Adventures

Fridays, September 14, 21 and 28, 7 – 9pm

Enjoy a special evening at Tyler Arboretum with your family. Join Tyler Educators to explore the woods and meadows to listen for owls and search for bats and other nocturnal creatures. Enjoy roasting marshmallows over a campfire for s'mores. *Be sure to wear closed-toed shoes. Suitable for ages 3 and up.*

Pre-registration required; \$4 per person. Space is limited, register soon!



Tyler Programs

Tyler Travels

Birding Trip: Cape May

Tuesday and Wednesday, September 11 and 12, departing at 7am and returning by 6pm

Join birder **Sue Lucas** on an excursion to Cape May, NJ. You'll explore the shorelines, marshes and other habitats to observe the many birds that stop by this wonderful spot on the way to their winter destinations. *This two-day trip includes transportation, lodging, breakfast and lunch on Wednesday and a boat ride. Tuesday dinner is Dutch-treat. Bring field guides, binoculars and a brown bag lunch for Tuesday.*

\$240 double or \$265 single for members, \$275 double or \$300 single for non-members

Art in Nature Tour: Natural Wonders Exhibit

Thursday, October 11, 9:45am – 12:15pm

Enjoy a morning out at the Brandywine River Museum of Art for an exclusive one-hour tour of the *Natural Wonders: the Sublime in Contemporary Art* exhibition. The exhibition showcases the work of thirteen American artists who engage nature in all its fierce magnificence and raise a number of key issues involving our relationship with the natural world. We will also look at some of Andrew Wyeth's work by way of comparison and then discover more about the artist with a one-hour tour of Andrew Wyeth's studio where he painted from 1940 until 2008. Afterwards, feel free to enjoy lunch on your own at the museum's Millstone Café. *Meet us there: 1 Hoffman's Mill Road, Chadds Ford, PA 19317.*

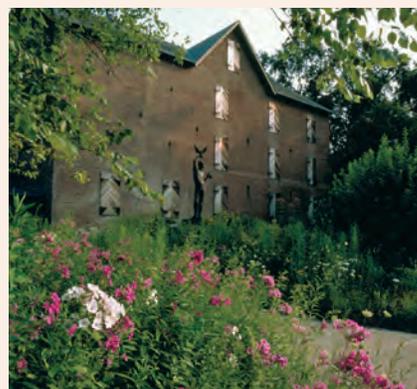
\$35 members, \$45 non-members

Birding Trip: Forsythe National Wildlife Refuge

Tuesday, October 16, 7am – 5pm

Located on the South Jersey shore, Forsythe National Wildlife Refuge is an important part of the Atlantic Flyway with its tidal wetlands and shallow bay habitats. Join birder **Sue Lucas** on a trip to Forsythe Refuge, Brigantine Island and surrounding areas in search of fall migrating waterfowl. *This trip includes transportation, beverages and snacks. Bring a lunch, field guides and binoculars.*

\$60 members, \$75 non-members



Gardening and Horticulture

Simple Steps to Productive Composting

Sunday, September 30, 2 – 4pm

Don't know what to do with kitchen scraps or yard waste after cleaning up your yard? Join **Sam Barnett**, Delaware County Master Gardener, to explore the best practices for successful composting. Learn simple steps on how to construct a compost pile, what to put into it, how to manage it, and ultimately, how you can use compost to enhance your garden.

\$15 members, \$20 non-members



Winterizing Your Garden

Saturday, October 13, 10am – noon

Is your garden ready for the winter chill? Not sure how to help your garden through the winter? Join **Joe Daniels**, Delaware County Master Gardener, to learn the steps for proper seasonal garden maintenance focused on perennials, shrubs, trees and lawn to get your garden ready for its spring awakening. Come with your gardening questions!

\$15 members, \$20 non-members

Botanical Arts

Photo Walk: Fall Splendor

Sunday, October 28, 3 – 5pm

Colors abound at Tyler in the autumn, as the woodlands and meadows trade their verdant tones for the rich and vibrant palettes of fall. Enjoy a leisurely stroll timed right when the natural light brings out the best in our scenic landscapes. Learn tips and techniques for capturing stunning images. *Open to all levels of photographers; camera phones are welcome.*

\$10 members, \$20 non-members



Thanksgiving Floral Arrangement

Saturday, November 17, 10am – noon

Create a one-of-a-kind Thanksgiving centerpiece to grace your dinner feast and delight your guests. Floral designer **Leona Swiacki** will provide guidance and instruction to help you create a cornucopia-centered masterpiece accented with natural and dried elements. *Bring floral shears or hand pruners.*

\$40 members, \$50 non-members

Nature Studies

Bird Feeding Essentials

Saturday, September 22, 10 – 11:30am

Come explore the 12 essential elements for a thoughtful bird feeding station with **Chris Weaver** from Wild Birds Unlimited-Concordville. Discover which food and feeder combinations are most likely to attract daily, seasonal and rare birds. Learn about proper feeder placement and how to solve common issues. Experience the essential elements first-hand with a feeding station set-up demo and various hardware, food and feeder products to

explore. Participants will get a starter feeder and bird food to take home!

\$20 members, \$25 non-members



Goats vs. Gardens

Sunday, September 23, 2 – 3:30pm

Join Executive Director **Cricket Brien** to discover Tyler's strategies for controlling invasive and successional plants. Now in our third year with goats as one of our seasonal strategies, we have gained insight into how the plant composition and ecology changes in the meadows that they munch. Enjoy a guided tour of the paddock perimeters to see our four-legged meadow managers in action!

\$15 members, \$20 non-members

Full Moon Night Hikes

Saturday, September 22, 7 – 9pm

Saturdays, October 27 and November 23, 6 – 8pm

Experience the magic of Tyler's natural areas at night. Guide **Dick Cloud** and Tyler staff will share points of special interest and seasonal highlights while leading a brisk hike. Come walk your turkey off with us on November 23! *Suitable for teens and adults. Bring a flashlight and wear shoes suitable for uneven terrain that may include moderate to steep trails.*

\$10 members, \$20 non-members

Health and Wellness

Essential Oils – Back to School and Beyond

Saturday, September 29, 10:30 – 11:30am

Curious to learn ways to naturally support your family's health? Join natural health educator, **Megan Koppel** for an interactive DIY workshop to experience the foundational essential oils for improving the

quality of sleep, stress management, preventing the spread of illness in the classroom/ workplace, respiratory support, soothing sore throats and digestive support.

You'll create a personalized blend that you will take home to begin using right away!

\$20 members, \$25 non-members

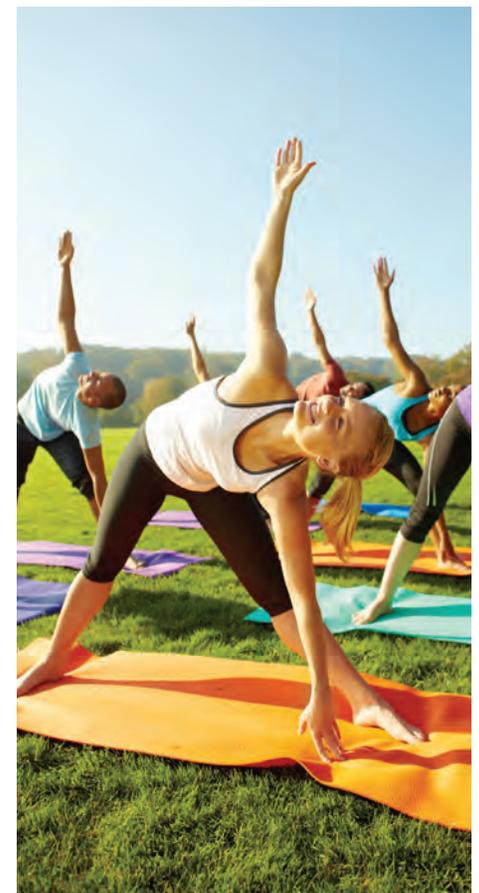
Yoga at the Arboretum

Tuesdays, October 2 – November 6, 6 – 7pm

Experience the joy of practicing yoga in a magnificent setting! Classical yoga instructor **Beth Mulholland** will provide participants with an opportunity to seek inner serenity while emphasizing smooth, flowing postures and the benefits of focused breathing. Intended for beginner and intermediate level students. *Classes take place indoors and outdoors, weather dependent. Please dress appropriately and bring a mat.*

Series discount: \$78 members, \$96 non-members

Individual class: \$15 members, \$18 non-members



Medicinal Meanderings: Herbarium Workshop

Saturday, October 27, 10am – noon

Join **Martha O'Neill** of Tooth of the Lion Farm & Apothecary for a fall medicinal plant walk through Tyler's landscape. Discover identification techniques and medicinal qualities out in the field. Come back inside for a hands-on workshop to learn the basics of pressing plants and flowers. Create the beginnings of an herbarium to use as field notes and for preserving memories of the natural world.

\$20 members, \$25 non-members

Stress Free Home for the Holidays

Saturday, November 10, 10:30 – 11:30am

Are there go-to essential oils for surviving and thriving in the hustle of the holiday season? Join natural health educator, **Megan Koppel** to learn oilers' favorite tips, tricks, and recipes for rest and stress management, preventing the spread of illness, and dialing up the joy. Get your hands oily by creating a personalized blend to help you enjoy your holiday season to the fullest!

\$20 members, \$25 non-members

Joy of Movement through Nia

Tuesday, November 13, 6 – 7:15pm

Join **Denise Gilchrist** to explore Nia (pronounced Nee-ah) – a body-mind fitness program that gently draws from the dance arts, the martial arts, and the healing arts. The practice of Nia honors the profound effects of music while allowing participants to personalize their movements as they work on cardio, strength, flexibility, alignment and balance. BONUS: special extended class – play with Nia FreeDance where “anything goes”! *Bring a yoga mat, water bottle and towel. Classes are typically taken barefoot (shoes are optional).*

\$15 members, \$18 non-members

Nature Walks and Tours

FREE for members; FREE with admission; No pre-registration required

Weekday Bird Walks

Every Wednesday, 8:15 – 10:15am

Join Tyler's experienced birders in the search for fall migrants heading south through the Arboretum. *Birders of all levels are welcome.*

Saturday Bird Walks

Saturdays, September 8 and October 13, 8 – 10am and November 10, 9 – 11am

Join **Chris Weaver** from Wild Birds Unlimited – Concordville to discover year-round residents and seasonal migrants, while learning the basics of bird identification. *Families and beginners are welcome!*

Weekday Wildflower Walks

Every Wednesday, 11:15am – 1:15pm

Wildflowers are an essential and beautiful part of woodland and meadow ecologies. Head out to the trails with wildflower experts **Richard Brenner** and **Dick Cloud** and experience fall at Tyler.

Saturday Wildflower Walks

Saturdays, September 15, October 6 and November 17, 1:30 – 3:30pm

Fall is a wonderful time for wildflowers! Join **Dick Cloud** for a pleasant afternoon search for late season bloomers in Tyler's meadows and woodlands.



Fall Tree Identification Walk

Sunday, November 4, 1:30 – 3pm

Join **John Wenderoth** to learn how to recognize trees based on fall characteristics. Explore identification tools like color change, leaf texture and canopy shape.

Once Upon a Farm Tours

Fridays, Saturdays and Sundays, September 1 – 16, drop-in between 12 – 3pm

Our journey from a settlement to a modern-day public garden took several hundred years. Find out how the Minshall, Painter and Tyler families loved and stewarded this property.

Tree Tales

Fridays, Saturdays and Sundays, September 21 – October 28, drop-in between 12 – 3pm

From state champions to horticulture wonders, Tyler is home to many trees. Join us as we take you through our historic collections and woodlands for a great conversation about trees and their majestic fall color. *No tours October 20 and 21 on Pumpkin Days.*

Beyond the Fence Hikes

Dates and times set by Mother Nature

Join ecologist and naturalist **Steve Tessler** for fun and informative seasonal nature hikes out on Tyler's trails. Hunt for fungi, insects, spiders, moss and other creatures of the season. Feeling spontaneous? If you'd like to receive notice of Beyond the Fence hikes, please contact Amy Mawby at (610) 566-9134 ext. 301 or amawby@tylerarboretum.org.

Youth & Family Programs

Youth Programs

Little Chefs

All Ages

Wednesdays, 10 – 11:30am and 1 – 2:30pm

Kids are more likely to try new foods when they help prepare them. The Arboretum will serve as both kitchen and culinary inspiration for our youngest gourmands. Work together to prepare delicious snacks made with healthy, natural ingredients. Thematic content and cooking tasks will be best suited for ages 3-6, but all ages are welcome. Please inquire when registering if you have allergy concerns.

\$15 members, \$20 non-members
(Fee is for the child only)

Taco Time

September 12

Let's set up a taco bar and make our own fun and tasty creations packed with fresh veggies.

Fun with Smoothies

September 26

Want your kids to eat their fruits and veggies? Get them hooked on smoothies!

Granola Treats

October 10

Learn to make super healthy no bake granola bars and bliss balls that kids will adore.

Appetizing Apples

October 24

It's getting chilly outside, let's warm up by making apple and squash soup.

Happy Diwali

November 7

Diwali festival is the most celebrated holiday of India. Learn about its significance and make delicious butter chicken with saffron rice.

Thanksgiving Feast

November 21

Make your own (cinnamon roll) turkey and mashed potatoes and have a Thanksgiving feast!



Toddlers in Nature

Ages 18 mths-3 years

Wednesdays, 10 – 11am and 1 – 2pm

Toddlers in Nature programs are for toddlers and their favorite adult. Toddlers are all about exploring their sense of wonder and each program includes a story, exploration, and time in nature.

\$10 members, \$15 non-members
(Fee is for the child only)

Hop, Skip, Jump or Fly

September 5

Explore how different animals move around. Can you hop like a bunny or run faster than a deer?

Fly Monarchs Fly

September 19

Butterflies do cool things to survive the cold. Discover what monarchs do that's extra impressive.

Bye Bye Birdie

October 3

Many of our summer birds are leaving us now. Find out why and where they are headed. Use binoculars to look for them.

Pumpkin Time

October 17

Learn about the life cycle of a pumpkin. Sample some pumpkin seeds and sing a song about this backyard giant!

Trick or Treat?

October 31

Boo, it's Halloween! Wear your costume and let's go trick or treat out in nature – knock at some animal homes and see what we get.

The Very Busy Squirrel

November 14

Winter is coming and the little squirrel in this story has no time to play. Find out what he's up to and try to observe some squirrels who are very busy around Tyler.

Hurry up, it's Getting Cold!

November 28

Do you wear a jacket when it gets cold and crank up the heat in your house? Discover what animals do in cold weather.

Garden Sprouts

Ages 4 – 6

Tuesdays, 1 – 2:30pm

Garden Sprouts programs introduce children and their favorite adult to the world of plants and gardening. Each program includes an interactive lesson and chores around the garden!

\$10 members, \$15 non-members
(Fee is for the child only)

Fruit or Vegetable?

September 11

Learn about the life cycle of a tomato plant. Is a tomato a fruit or a vegetable? Let's find out!

Fun with Compost

September 25

Discover why composting is important for our gardens and the environment. Make your own micro composter.

Annual or Perennial?

October 9

Find out which plants are annuals and which plants are perennials. Learn to identify them in our garden.

A Garden to Dye For!

October 23

Explore why plants have so many different colors. Discover which fruits and veggies we can use to dye cloth.

Bulb Botany

November 6

Bulbs store enough food to help them grow and flower each year. Learn about these fascinating bundles of joy and plant some in the garden for spring!

Pumpkin Party

November 20

Pumpkin is to fall as snow is to winter. Talk about the life cycle of a pumpkin and learn about its cousins – squash and gourds.



Tiny Trackers

Ages 4 – 6

Thursdays, 1 – 2:30pm

Tiny Trackers programs are for children and their favorite adult. Each program includes a lesson and nature exploration.

\$10 members, \$15 non-members
(Fee is for the child only)

Hello, Squirrels

September 6

Scamper through a year in the life of a squirrel and learn all about these lively critters. Let's see if we can spot any squirrels getting ready for winter.

Jungle Animal Yoga

September 20

Time to take a deep breath and do M&M meditation! Bring your little one's favorite soft animal and towel and join on our hike to the jungle for animal yoga.

Fall Leaves Fall

October 4

Discover why autumn is called fall as we stomp, crunch, kick, jump, and dance through the leaves. Collect leaves to compare and use for our special craft.



Mighty Monarchs

October 18

Butterflies do cool things to survive the cold. Learn what monarchs do that's extra impressive and make your own monarchs to take home.

Oh, Deer!

November 1

Learn some surprising facts about the largest animal in our forests. Come ready to be deer detectives searching for signs, scat and tracks.

Gifts from Trees

November 15

Every day we use gifts from trees, often without even thinking about it! Go on a hike and adopt a tree which we can visit each season to see how it changes.

Afterschool Adventures Club

Grades 1 & 2

Wednesdays, 4 – 5pm

Connect with friends and nature after school! This series is designed to let kids be kids after a long day in the classroom. Children will explore the natural world around them, play outside, and discover the many critters that make nature so interesting. Suitable for children in grades 1 & 2.

Series Discount: \$50 members, \$80 non-members
Individual classes: \$10 members, \$15 non-members

Let's Go Batty

September 19

Learn all about these flying mammals and how we can help bats to thrive.

Seeds & Plants

September 26

Explore how seeds are formed and how they travel. What are some of the seeds you eat?

Trees in Fall

October 3

Discover the colors of autumn and find out why leaves change colors.

Stars & Planets

October 10

Go on a constellation exploration and learn about the planets in our solar system.

The Water Cycle

October 17

Have fun with precipitation – rain, sun and clouds, oh my!

Changing Seasons

October 24

Discover the ways that wildlife prepares for the coming winter months.

Homeschool Days

All Ages

3rd Tuesday of each month, 10 – 11:30am

Visit the Arboretum for hands-on learning in an outdoor setting. Connect with other homeschool families in this program exclusively for you. Admission to the Arboretum is included; stay for just the program or for the entire day! Each program is aligned to PA state educational standards. This program is best suited for ages 5-12, but is open to all ages.

\$10 members, \$15 non-members (Fee is for the child only)

Seeds & Plants

September 18

Learn how plants have adapted to different environments, discover plant life cycles and reproductive strategies through flower dissection and explore Tyler's diverse trees and plants.

Soil Investigators

October 16

Get your hands dirty and discover the texture of soil, dig in a compost bin, investigate forest soil layers, turn logs to see decomposition at work among other fun activities.

Nature's Adaptations

November 20

Learn how some animals have adapted to survive in the wild. Compare artifacts from different species and have fun comparing your abilities to those of our native animal friends.



Family Programs

Grab the kids and come have fun all together at Tyler! Interactive programs let you learn, create, or explore nature and plants. Fee is for each child and each adult, unless noted.

A Grand Adventure

Sunday, September 9, 10 – 11:30am

Celebrate Grandparents Day at Tyler Arboretum! Discover the great outdoors together on an adventure hike. Enjoy making memories as you create art inspired by nature. Grandparents are FREE. Suitable for ages 3 and up.

\$10 members, \$15 non-members

Binocular Walk

Saturday, September 22, 10 – 11:30am

Roam the Arboretum with binoculars searching for signs of our furry and feathery friends on this woodland scavenger hunt. Learn about different species of birds, their habitats, and their behaviors. Bring binoculars if you have them, or borrow ours! Suitable for ages 7 and up.

FREE for members, \$12 non-members

Glow-In-The-Dark Scavenger Hunt

Saturday, October 27, 6:30 – 8:30pm

Harness your inner firefly and light up the night at Tyler! Wear your favorite glow-in-the-dark outfit and have a fun adventure searching for glimmering clues around the Arboretum. Suitable for ages 5 and up.

\$15 members, \$20 non-members

FREE FOR MEMBERS!



Build a Bat House

Saturday, November 3, 10am – noon

Build your very own Rocket Bat House! Sponsored by Beatty Lumber, we'll supply all the materials and tools needed to build this backyard bat habitat. Learn about why bats are so important and take home your creation. Suitable for ages 7 and up. Price is per bat house, not per person.

\$30 members, \$45 non-members

EarthEcho Water Challenge

Saturday, October 6, 10am – noon

Join Penn State Brandywine faculty and students for another Sustainability Research Station activity - this time for the EarthEcho Water Challenge! Led by **Laura Guertin, Ph.D.**, Professor of Earth Sciences, participants will explore how to conduct basic monitoring of their local water bodies. Learn techniques for water quality investigation and engage in hands-on testing for pH, dissolved oxygen, temperature, and turbidity. Discover how to share your data online and contribute to a network of global water monitors. Keep the science going at home with a FREE basic test kit for each family registered.

Suitable for ages 4 and up. Fee is for each family, not per person.

\$15 members, \$20 non-members

Ages 4 and Up



Tyler Calendar Autumn 2018

These walks are
ALWAYS FREE
FOR MEMBERS!

- Once Upon a Farm Tours*** Fri., Sat. & Sun., Sept. 1 – 16, drop-in between 12 – 3pm
- Tree Tales*** Fri., Sat. & Sun., Sept. 21 – Oct. 28, drop-in between 12 – 3pm (no tours Oct 20 & 21)
- Weekday Bird Walks*** Every Wednesday, 8:15 – 10:15am
- Saturday Bird Walks*** Sept. 8 & Oct. 13, 8 – 10am and Nov. 10, 9 – 11am
- Weekday Wildflower Walks*** Every Wednesday, 11:15am – 1:15pm
- Saturday Wildflower Walks*** Sept. 15, Oct. 6 and Nov. 17, 1:30 – 3:30pm

Programs marked with asterisk* are FREE for Tyler Members

September

- Wed. Sept. 5** Toddlers in Nature: Hop, Skip, Jump or Fly
- Thurs. Sept. 6** Tiny Trackers: Hello, Squirrels
- Sat. Sept. 8** Saturday Bird Walk*
- Sun. Sept. 9** Family Program: A Grand Adventure
- Tues. Sept. 11** Garden Sprouts: Fruit or Vegetable?
- Tues. & Wed. Sept. 11 & 12** Birding Trip: Cape May
- Wed. Sept. 12** Little Chefs: Taco Time
- Fri. Sept. 14** **Members Only: Tyler After Dark Adventures**
- Sat. Sept. 15** Saturday Wildflower Walk*
- Sun. Sept. 16** Family Fun Run
- Tues. Sept. 18** Homeschool Days: Seeds & Plants
- Wed. Sept. 19** Toddlers in Nature: Fly Monarchs Fly
- Wed. Sept. 19** Afterschool Adventures Club: Let's Go Batty
- Thurs. Sept. 20** Tiny Trackers: Jungle Animal Yoga
- Fri. Sept. 21** **Members Only: Tyler After Dark Adventures**
- Sat. Sept. 22** Family Program: Binocular Walk*
- Sat. Sept. 22** Bird Feeding Essentials
- Sat. Sept. 22** Full Moon Night Hike
- Sun. Sept. 23** Goats vs. Gardens
- Tues. Sept. 25** Garden Sprouts: Fun with Compost
- Wed. Sept. 26** Little Chefs: Fun with Smoothies
- Wed. Sept. 26** Afterschool Adventures Club: Seeds & Plants
- Fri. Sept. 28** **Members Only: Tyler After Dark Adventures**
- Sat. Sept. 29** Essential Oils – Back to School and Beyond
- Sun. Sept. 30** Simple Steps to Productive Composting

October

- Tues. Oct. 2** Yoga at the Arboretum
- Wed. Oct. 3** Afterschool Adventures Club: Trees in Fall
- Wed. Oct. 3** Toddlers in Nature: Bye Bye Birdie
- Thurs. Oct. 4** Tiny Trackers: Fall Leaves Fall

- Fri. Oct. 5** Brews and Blues
- Sat. Oct. 6** Family Program: EarthEcho Water Challenge
- Sat. Oct. 6** Saturday Wildflower Walk*
- Tues. Oct. 9** Garden Sprouts: Annual or Perennial?
- Tues. Oct. 9** Yoga at the Arboretum
- Wed. Oct. 10** Little Chefs: Granola Treats
- Wed. Oct. 10** Afterschool Adventures Club: Stars & Planets
- Thurs. Oct. 11** Art in Nature Tour: Natural Wonders Exhibition
- Sat. Oct. 13** Saturday Bird Walk*
- Sat. Oct. 13** Winterizing Your Garden
- Tues. Oct. 16** Birding Trip: Forsythe National Wildlife Refuge
- Tues. Oct. 16** Homeschool Days: Soil Investigators
- Tues. Oct. 16** Yoga at the Arboretum
- Wed. Oct. 17** Toddlers in Nature: Pumpkin Time
- Wed. Oct. 17** Afterschool Adventures Club: The Water Cycle
- Thurs. Oct. 18** Tiny Trackers: Mighty Monarchs
- Sat. Oct. 20** **Pumpkin Days**
- Sun. Oct. 21** **Pumpkin Days**
- Tues. Oct. 23** Garden Sprouts: A Garden to Dye For!
- Tues. Oct. 23** Yoga at the Arboretum
- Wed. Oct. 24** Little Chefs: Appetizing Apples
- Wed. Oct. 24** Afterschool Adventures Club: Changing Seasons
- Sat. Oct. 27** Medicinal Meanderings: Herbal Herbarium
- Sat. Oct. 27** **Hayrides**
- Sat. Oct. 27** Family Program: Glow-In-The-Dark Scavenger Hunt
- Sat. Oct. 27** Full Moon Night Hike
- Sun. Oct. 28** Photo Walk: Fall Splendor
- Tues. Oct. 30** Yoga at the Arboretum
- Wed. Oct. 31** Toddlers in Nature: Trick or Treat?

November

- Thurs. Nov. 1** Tiny Trackers: Oh, Deer!
- Sat. Nov. 3** Family Program: Build a Bat House
- Sat. Nov. 3** **Hayrides**
- Sun. Nov. 4** Fall Tree Identification Walk*
- Tues. Nov. 6** Garden Sprouts: Bulb Botany
- Tues. Nov. 6** Yoga at the Arboretum
- Wed. Nov. 7** Little Chefs: Happy Diwali
- Sat. Nov. 10** Saturday Bird Walk*
- Sat. Nov. 10** Stress Free Home for the Holidays
- Tues. Nov. 13** Joy of Movement through Nia
- Wed. Nov. 14** Toddlers in Nature: The Very Busy Squirrel
- Thurs. Nov. 15** Tiny Trackers: Gifts from Trees
- Sat. Nov. 17** Saturday Wildflower Walk*
- Sat. Nov. 17** Thanksgiving Floral Arrangement
- Tues. Nov. 20** Homeschool Days: Nature's Adaptations
- Tues. Nov. 20** Garden Sprouts: Pumpkin Party
- Wed. Nov. 21** Little Chefs: Thanksgiving Feast
- Sat. Nov. 23** Full Moon Night Hike: Walk Your Turkey Off!
- Wed. Nov. 28** Toddlers in Nature: Hurry Up, It's Getting Cold!



Register online via our Calendar page: www.tylerarboretum.org/calendar
or call Joanne Landau at 610-566-9134, ext. 303 or e-mail: jlandau@tylerarboretum.org.

MEET LEARN ENJOY HELP

Lend-A-Hand

We are looking for new volunteers to join us this fall. From pruning shrubs to creating natural works of art – Tyler Volunteers play an active role in all Arboretum operations. Did you know that during the two days of Pumpkin Days each year we are supported by over 200 volunteers? Are you wondering how you can join in the fun this fall? Contact Julia Lo Ehrhardt at 610-566 9134, ext. 305 or via email at jlo@tylerarboretum.org

Corporate Volunteers – Teamwork

“I look forward to getting a chance to work with my colleagues outside the office and make a difference together. Our day to day tasks do not always involve collaborative work so it’s great to hands dirty, and know that our collective work will aid in the preservation of nature.”

— Sabina Staruszkiewicz, SAP

Teamwork, tenacity, competitiveness, resourcefulness and ability to learn are at the core of corporate culture. In the modern workplace, email has taken over the desk-side, face-to-face conversations. Our offices are located in different states (even countries). Since we live in a 24-7 working world, the split shift has isolated us from our colleagues. It can be a challenge to connect. As we know, connection helps us build champion teams. We become more empathetic, communal and resourceful as we learn from each other. When these connections are built around shared goals, they are much stronger.

What happens when the shared goal is stewardship and support of the environment through group volunteer work at Tyler Arboretum? *“We love heading to Tyler Arboretum, to explore the world away from our computer screens. We leave the Arboretum feeling refreshed, accomplished, and happy to have given something back to our community!”* says Emily Brantner, SAP. Mark Dougan, IT supervisor at Vanguard adds that *“this volunteer experience brings people together so that when they need to collaborate at work to solve a production issue, they feel like they are working with a friend.”*

Corporate volunteer groups bring an army of helping hands and a can-do spirit. They range from 12 to as large as 75. Projects that would take Tyler



staff days to accomplish, are completed in a morning – weeding and mulching our gardens and trails, care of the Wister Rhododendron Garden, invasive plant removal, painting and doing light maintenance work for our well-used buildings, stuffing envelopes, collecting chestnuts, prepping the Pollinator Garden for spring planting and Pumpkin Day set-up. Hosting these corporate groups reminds us that strangers will and do come together to help their communities, in a spirit of giving back. We see many buttoned-up office people break into a different beat when tackling 10 yards of mulch. Most of all we hear laughter.

Many of our corporate groups return year after year. Mark’s team from Vanguard celebrated its 10th anniversary at Tyler this spring. SAP has a tradition of bringing their new hires every year. *“The team can relax and get to know each other. Each class talks about their experience with new classes over the*

years. Tyler is easy to work with to set up the event and so welcoming to our new hires. Tyler embraces the SAP culture and passions – we work well together!” says Michelle Murray, SAP.

Tyler staff and volunteers across multiple departments come together to work with our corporate volunteer groups to provide a meaningful experience for all. Our staff and volunteers have come in on weekends to host groups who are only available at that time. Tyler currently works with corporate groups from SAP America, Vanguard, PECO, Accenture as well as college groups: Villanova, Penn State, Neumann and Bucknell (alumni).

If you have a group and would like to get involved at Tyler, email Julia Lo Ehrhardt (jlo@tylerarboretum.org) at least a month ahead to arrange for a productive group volunteer work experience.

Sowing Seeds, Rea

Tyler Storm Damage Update

“I was amazed by the generous support you gave to me, my staff, and volunteers as we tackled this critical work. Your gifts and kind words of encouragement gave us a tremendous boost. Thank you!” — Mike Karkowski, Director of Horticulture

It took a lot of time and enormous effort, but *thanks to you*, we’ve recovered as much as possible from winter’s storms! With your support this spring, we were able to:

- ☞ Clear the storm damage from 100 acres of land inside the deer fence, all 17 miles of hiking trails, and along Painter Road
- ☞ Work with Bartlett Trees to assess the condition of the Weeping Hemlock and get started on a long term plan for its care
- ☞ Clear the downed red oak from the Wister Rhododendron garden and the downed rhododendrons from the Native Woodland Walk
- ☞ Ensure the goats have a safe enclosure while they eat our invasive plants

- ☞ Work with a contractor to care for the damaged Blue Atlas Cedar in the “Old Arb”
- ☞ Assess the health of the “Winston Churchill” lilac – *it leafed and flowered for the season!* – and determine next steps for its care

Thank you so much for being there for Tyler in our time of need! With your help, we were prepared for the arrival of the goats, the *Tyler at Twilight* garden party fundraiser, and the start of Summer Camp. For each of these, you made it possible for our guests to experience the best that Tyler has to offer for fun and learning in the natural world.

Thank you for all that you do for Tyler!



Help Get the Word Out for Tyler’s NEW Library Pass Program!

Here at Tyler, our mission is to *inspire and create champions of the natural world*. Which means we’re always looking for new ways to reach potential champions. Recently, we found an exciting new source...**libraries!**

These days, libraries offer so much more than books! In fact, many provide passes to regional attractions (such as museums and gardens) for checkout. For this reason, we launched our own Library Pass program in November. Since then, seven libraries have purchased an

annual Tyler “library pass” for their cardholders to borrow. This pass admits 4 guests (adults or children) for complimentary general admission to Tyler.

Now that libraries have expanded their offerings to include educational experiences, we are excited about all of the new people we can welcome to Tyler! So far, over 150 people have taken advantage of their library pass. We’re hoping more and more people will use it to visit Tyler. Enjoying nature is something everyone can benefit from!

Help us get the word out to more libraries about this opportunity. Be sure to tell your local librarian about our new library pass program! Call or email Caitlin Anello, Membership and Annual Giving Manager, at canello@tylerarboretum.org or 610-566-9134, ext 208. Thank you!

Current Participating Libraries

Ambler Library
Free Library of Springfield Township
Haverford Township Free Library
Middletown Free Library
Newtown Public Library
Vairo Library of PennState Brandywine
Wissahickon Valley Public Library

ping Opportunities

Edible Garden – You Sowed the Seeds with Your Generosity, Thank You!

**You've seen the construction happening this summer.
The teaching and learning will begin this fall.**

With the generous support of over 54 individual and institutional donors, we have raised \$1.4 million since July of 2013 to build Tyler's Edible Garden! This garden gives us another opportunity to teach visitors how the natural world works. Here our focus is on learning healthy eating and healthy living for ourselves and our Earth. Research shows that hands-on gardening changes behavior. By changing our behavior to source and eat healthier food, we help our entire community. If we also grow it in ways that are better and more sustainable for the land, we maximize our life-giving impact. Come join us for classes on how to care for your garden in the fall and winter sessions.



Generous Donors, Sponsors, and Friends Are Making Their Mark – Many Thanks!

March 8 – June 5, 2018

\$100,500

Estate of Anne Donnell

\$50,000

Anonymous

\$20,500

Pat & Jane Lusk

\$5,000

Estate of Margaret Pelino

\$2,500 – \$4,999

The Country Gardeners
of Lima

Elwyn Pharmacy

Wilbur C. and Betty Lea

Henderson Foundation

Sandy & Bruce Lutz

Kearon Ashcroft Wealth
Management/Morgan

Stanley Wealth Management

\$1,600 – \$2,499

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Jamie & Meg McLane

Walter Graham & Betsey Ney

Dave Warner & Barbara Norton

Joe & Rita Tyson

Catherine Vicente

*Our recognition lists are accurate to the best of our knowledge for gifts in this timeframe.
If you note any errors, please let us know so that we may correct them promptly. Thank you.*

Finding Their Way: Hummingbird Migration

By Gary Bloomer, Communications Manager

For many visitors to Tyler, summer isn't the same without sighting a Ruby-throated Hummingbird, *Archilochus colubris*. Usually arriving in mid-April, hummingbirds migrate alone each spring from Mexico, Central America, and parts of Florida. Hummingbirds breed and rear their young in North America before migrating south again between late August and mid-September.



Ruby-throated

Hummingbirds measure only 3"– 4" and weigh a little more than a dime. These aerial masters can fly vertically, horizontally, forwards, and backwards at will. They can even fly upside down.

They frequent Tyler's grasslands, meadows, gardens, and open woodlands. While hummingbirds prey on tiny flying insects, they are mainly nectar feeders that are particularly drawn to native red and orange, tubular flowers that they will defend against other hummingbirds.

Hummingbirds help pollinate at least 19 species of native plants including: fly honeysuckle, cardinal flower, wild bergamot, trumpet honeysuckle, and columbine.

As the days shorten and cool as we approach autumn, hummingbirds begin their southern migration. The question of quite how migratory birds know to head to warmer climes has recently been discovered by researchers at Sweden's Lund University, who published a study that's changing the way we look at avian migration.

It's been known for some time that birds react to the Earth's magnetic field to help them navigate but what's not been clear is how. While studying protein levels in the eyes of Zebra finches, Lund University researchers discovered that levels of one protein—Cry4—remain constant regardless of lighting conditions. Researchers also discovered that Cry4 levels rise significantly during the migration season and that Cry4 is found in greater concentrations in areas of a bird's eye tuned to detect blue light.

Cry4 is a cryptochrome—a protein responsible for biological timekeeping—and also a magnetoreceptor that allows the detection of a magnetic field from which a bird can judge its direction, altitude, and location. The combination of Cry4 levels and blue light sensitivity led researchers to infer that migrating birds can 'see' the Earth's magnetic field. While the research does not conclusively prove Cry4 is the key to bird migration, it provides compelling evidence.

Hours

March – October
Mon – Fri 9am – 5pm
Sat & Sun 9am – 6pm

November – February
Mon – Fri 9am – 4pm
Sat & Sun 9am – 5pm

Closed on Thanksgiving Day,
Christmas Eve, and Christmas Day

Information

610-566-9134
www.TylerArboretum.org
info@tylerarboretum.org