

C H A U T A U Q U A



BIRD
TREE
&
GARDEN
CLUB



**A Little
Latin Lesson**

The Linden Tree

by Amy Gawtry

When discussing **trees in Pliny's *Natural Histories***, Pliny the Elder describes trees in this way:

Long, indeed, were these last bounties of hers concealed beneath the ground, the trees and forests being regarded as the most valuable benefits conferred by Nature upon mankind.

He begins his discussion of trees after many chapters discussing the animals that he knows to exist at that time in **ancient Rome over 2,000 years ago**. Pliny takes on the job of writing *The Natural Histories* (the first Britannica ever!) in order to cease pleading cases during the reign of Nero. A brilliant rhetorician (lawyer), Pliny decides to save his head and dives into all things Nature.

Pliny the Elder's discussion of trees begins by acknowledging the greatest role of a tree, particularly the Linden, was providing sacred space to be safe and honor the gods above. Both the Greeks and Romans recognized the Linden tree to be both "sacred and universal". The tree grew across the empire of Rome. Indeed, the Gauls (modern day French) always planted a **Linden tree centrally in their towns as a place to gather and worship**. In this sense the space of the Linden functioned as a way of paying homage to the mythical deities and as a place to gather. The Linden was associated with and **dedicated to Venus, goddess of love and fidelity**. The Linden was a **feminine tree**, a tree of goddesses and it stands out as being the **tree of maternal love**.

Pliny continues his discussion by outlining the reasons for the Linden's many wonders. He and other ancients recognized the tree as a "string tree" because it is the first known tree from which the **Romans extracted fibers from the bark**. (The **bark was called the "liber" which is the Latin word for book**. Paper was ultimately made from trees which demonstrates an interesting etymological link...which came first the Name or the Function?)

Sailors and farmers used the tree because of its strength and flexibility for ropes and constructions they erected. The strength of the tree gave it the name **“the tree that weaves ties”**. There is a connection here between the understanding of the Linden to create a sense of community and constructing a central gathering place. In creating this connection, **the Linden creates a weaving and connecting for both ancient peoples of Gaul, Rome, Greece and Egypt and those of us that walk the forests today**. The importance of the tree lies both in its functionality and also in the “modus operandi”, the way in which the ancients employed those functions on connection and weaving to become givers of life. The Linden is both a connector of lives and a shelter space for gathering.

The word “linden” in Latin means “lime” which comes from the word “tilia”. The word linden itself is likely Germanic or Old English. One might be quick to think of that cute little green ball that we use so often in cooking and drinking (which also has grand medicinal value) but allow your mind to extend to **the lime that we use to treat soil**. In the soil it provides a balancing effect so that the Ph balance of the soil is ripe for vegetation of all sorts. **The juices from the fruits and the bark of the Linden were used to treat “the vices of the skin”** according to Pliny. In addition he allows that leaves had been used for a long time as **poultice on wounds and burns**.

Jack Voelker has spoken in this newsletter about the healing nature of being outside. That same healing nature is linked to trees we walk with and gifts that trees provide for humans. Walking among the trees, using the medicinal products of its bark and blossoms both cure us of the distractedness of life that often manifests in our bodies and on our skin. **The products of the Linden soften our skin and spirits alike, and connect us both with humans and ourselves**.

We are all connected, both ancient and modern. Chautauqua reminds us of that connectedness. The Linden stands in Chautauqua as the perfect tree to represent softness and strength. Both qualities necessary to participate in the distractions of today's world. Call yourself to “worship” the next time you walk among the trees of Chautauqua. It will heal your many wounds and it will remind you that we are all connected: yesterday, today, and tomorrow.

“Poems are created by fools like me,
But only God can make a tree.”

- Joyce Kilmer

Many thanks to Amy Gawtry for this article. Amy is BTG Life Member, life-long Chautauquan, and a Latin teacher. She lives in Charlottesville, Virginia and has volunteered her time to enrich us with her Little Latin Lessons. Look for more to come!

Photo above of the [Littleleaf Linden at the Hall of Missions](#) after a light dusting of snow on January 6, 2023 by Beth Brockman Miller. Follow Beth on Instagram [@chq4u](#)

BTG Naturalist Jack Gulvin leads weekly tree tours during the summer. The American Basswood is one of his favorite native trees. To hear him talk about the tree, [click here](#).

Link to full Joyce Kilmer [poem](#) here



Who's Nesting?

Bald Eagles
by Twan Leenders

Bald eagles were severely impacted by DDT until its ban in 1972 - and for a considerable time after because its active ingredients lingered in the ecosystem (mostly embedded in the fatty tissues of live animals, such as fish and birds - main prey items for bald eagles). Being top predators and scavengers, bald eagles bioaccumulated toxic compounds from eating living prey and from scavenging dead animals over time. As with Osprey, DDT's lingering effects did not necessarily outright kill the birds but caused their eggs to break during incubation. **Many years of failed reproduction made a significant dent in their population.**

Although DDT is no longer a major threat for bald eagles, similar predator prey pathways cause them to accumulate **heavy metals, such as lead and mercury, which are still a major source of mortality** for these birds.

In Chautauqua County eagles start nesting in January - building a new nest, or remodeling their old one (pairs mate for life and return to the same nest each year). **They'll lay 1-2 eggs in February and will be on nest for 2-3 months.** Once the chicks hatch parents can be seen bringing food to the nest regularly - increased activity & increased visibility on CHQ Lake because they have hungry mouths to feed! In Chautauqua County, **the young generally don't leave the nest and fend for themselves until late July or early August.**

Large numbers of bald eagles winter on our lakes - especially if much of the open water is frozen around us. They'll **feed on ducks, gulls, and fish and are important predators of weakened waterfowl.** Several individuals are usually seen on/near CHQ lake on the annual Christmas bird count in early December.

In severe winters dozens may be seen on the ice of Lake Erie. These wintering birds disperse over the landscape in January to return to their nest sites.

Juvenile bald eagles are the same size as the adults by the time they fledge (leave the nest), but are all brown. They'll develop increasingly bold white patches on the undersides of their wings and tail during the first two years of their life, at which point the head starts to turn white and their bill changes to yellow. It takes **4-5 years for them to fully develop their adult plumage.**

They are doing great in Chautauqua County and their numbers are going up each year. At least half a dozen active nest are being monitored around Chautauqua Lake in recent years.

Twan Leenders is the Director of Conservation at the [Chautauqua Watershed Conservancy](#). He is the author of *Amphibians of Costa Rica* and *Reptiles of Costa Rica* and coauthor of *The Wildlife of Costa Rica*. His photographs have been featured in many books and magazines, including National Geographic, New Scientist and National Wildlife. AND, most importantly (to us anyway!), Twan is a very popular speaker and guide for the BTG each summer. Thank you, Twan!

Photo above by Jeanne Wiebenga of a pair of bald eagles and their nest off E. Lake Road between Mayville and Hartfield in June 2020. Jeanne is a retired OB-GYN physician, originally from the Netherlands. An avid photographer, her photography exhibit *Return of the Osprey to Chautauqua Lake* was on display at the Athenaeum Hotel in 2022 and at the Roger Tory Peterson Institute in 2021. AND, most importantly (to us anyway!), Jeanne is currently serving on the Board of Directors of the BTG.

The three photos below are by Twan Leenders: bald eagles on the ice of Lake Erie offshore from the Dunkirk Harbor; a bald eagle in flight; and a huge nest in the Cheney Road Wetlands in North Harmony.

More on bald eagles here: <https://www.dec.ny.gov/animals/74052.html>





The Planter Painter

Above: the square planters between the Colonnade parking and Bestor Plaza on May 31, 2022

Below: the same planter on July 25, 2022.



From Paper to Pizzazz:
Painting Chautauqua with Annual Flowers

by Betsy Burgeson

In 2015 I was thrown into a world of annual flowers and I knew it was a make-or-break moment. If I recall correctly, when my assistant manager Don broke the news to me on my 2nd day, I believe I said... “So you're telling me I have to design all (over 300) baskets & beds, order the plants, plant them, take care of them and make sure they don't die?” I mean no pressure, right? The hanging baskets along Rt. 394 at the Welcome Center are only one of the most iconic things I can think of when I think of Chautauqua Institution!

Looking through photos of past years I realized petunias were the go-to for the Welcome Center baskets so that's what I decided on for 2015 as well – a purple petunia.

Did you know that if you go into a nursery and ask for a petunia, there's literally a thousand different kinds of petunias? Neither did I!! Just like dogs are broken down into breeds and each breed has color & size variations, so do annual flowers.

Annual flowers have **SERIES** that are usually based on the plant's growth habit; upright, mounding, trailing, semi trailing, spreading as well as its height & vigor.

The choices don't stop there however, each series then has a multitude of color choices with every shade you can think of. Did I want a tall upright vigorous violet petunia or a short trailing amethyst petunia with low vigor. Plum? Lilac? Lavender? Did I want an early blooming variety or a mid-late season variety? NEEDLESS TO SAY, my head was spinning.

I made my choices, crossed my fingers, said a lot of prayers and hoped for the best (that's what gardening is after all...planting seeds of hope for a beautiful future). Luckily there were blooms, despite one of the latest frosts on record that year over Memorial Day weekend, right after we hung the baskets out.

The **2023 season will be my ninth season at Chautauqua** and I feel like I've only nibbled on the tip of the annual flower iceberg. Each year, I learn more, and with invaluable feedback from my gardens team, we have been able to test out a lot of different annuals to see what works best in terms of low maintenance as well as attracting pollinators.

Last year's varieties and mixes were some of the best in my eight years. The circle beds in Bestor Plaza were stunning with many people commenting on how they loved the purple theme throughout the Institution.

The Process

In the late summer and fall, I start planning for the next year's annual flower designs, coming up with color ideas or a theme (ex. Colors of Sunsets) and I have to give credit where credit is due. In the fall of 2021 one of my stellar crew leaders, Kindy Parker, came up with the idea of trying a "monochromatic" theme of purple with silver highlights for 2022. I thought that was a great idea and something we hadn't tried before. I couldn't believe just how striking variations on one color could be.

Once a theme is decided, we look through annual flower catalogs choosing flowers with growth habits that fit the various locations' conditions - **hot & dry or shady & wet.**

We design over 120 plant layouts for the baskets, boxes & beds throughout the grounds and **tally up how many of each plant** we need.

We place our flower order by January then we wait in eager anticipation for their delivery in early May. Thousands of little plugs arrive in boxes that we plant based on our designs and then... we pray. Our prayers were answered in 2022 even though it took a while for the blooms to get going.

In mid-July the circle beds exploded with color and became the centerpiece they were meant to be. The blooms even lasted into October providing a striking color contrast to the fall leaves.

I have learned a lot with a long way to go still. Here are some things I've learned to help annual planters stay beautiful all season long:

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1. **FERTILIZE** at least biweekly or more. Plants in containers don't have access to all the nutrients found in the ground so they need nutrient replacements. We use an organic liquid fertilizer every other week. As blooms get bigger and more numerous throughout the season we sometimes go to weekly feedings.
 2. **DON'T OVERWATER!!!** Overwatering is the #1 killer of containerized plants. Plants can recover from wilting due to lack of water, they can't recover from root rot. Wait for the plant to tell you it needs water! (Exception – a floriferous basket in full sun will DEFINITELY need water daily perhaps even 2 times.)
 3. **DEADHEAD** – even if it says deadheading isn't necessary if you have time, it makes the plant produce more blooms.
 4. Give your plants a **HAIRCUT** every few weeks. To stop your plants from getting too leggy (especially petunias) clip a couple inches off to stimulate a new flush of lateral growth and more blooms.
 5. **ATTRACT POLLINATORS** Chose annual flowers that add function to the landscape not just beauty. Each year we watch to see what flowers are visited the most by bees, butterflies & even hummingbirds & make sure to keep using those. Here are some top choices for ease of maintenance & pollinator traffic: 'Rockin' series of Salvia ('Rockin Fuchsia' was a standout new addition in 2022 with hummingbirds & pollinators galore), Lantana, Verbena, Pentas, Ageratum, Zinnias, Tithonia & the old standby Marigolds.

It's truly amazing to watch the baskets and boxes come alive with blooms. Every year I'm blown away by the transformation from planting in May to pulling in October. The planters always look so bare & sparse in the beginning I have to restrain myself from putting more flowers in! When I feel the urge to fill an "empty" spot, I turn to photos to quell my desires and remind myself they will fill out **tremendously**... **DON'T PUT ANOTHER PLANT IN THAT BOX BETSY!!!**

[Betsy Burgeson](#) is the Supervisor of Gardens & Landscapes for Chautauqua Institution.



Above and below: The Gromet Circle Gardens on Bestor Plaza on July 6 and then again on August 15.





The magicians behind the curtain!

Pictured above are a few of Betsy's Crew: (from left to right) Tim Stewart, Jason Thorpe, Roman LoBianco, Dick Peterson & Bruce McNamara. Below: tender annuals spend the spring in a seasonal hoop house located near the new maintenance building.





Reconnecting with Nature

Part 3: Emotional Health Can Nature Really Make Us Smarter?

by Jack Voelker

We all have experienced moments of depression, of feeling the blues, and stress seems to be a part of our everyday life. Yet for many, these moments become all too frequent and severe. Much is written about the “mental health crisis” affecting teenagers and adults, celebrities and the disadvantaged alike.

The statistics are sobering...one in four young adults will likely experience clinically defined depression. Two generations ago it was one in ten. One in five adults live with mental illness. The volume of prescribed anti-depressants and anti-anxiety medications can be measured in hundreds of *tons*. But could reconnecting with the natural world be part of the prescription for healing these emotional wounds? Could a “pursuit of happiness” lead us outdoors?

Each of us defines happiness in very personal and different ways but there are certainly common themes: a general satisfaction with life, more positive thoughts than negative, more energy and interests, more joy. Research suggests that time spent in green spaces and *blue spaces* (lakes, rivers, oceans) simply makes us happier. When was the last time you were depressed and sad after a walk on the beach or a hike in the woods? These positive results are not merely a reaction to being on vacation or physically away from your home or workplace. Rather it's those phytoncide woodland aromatics and the full sensory engagement, it's the calming and focusing of our over-energized and distracted brains, and it's the inhibiting of those stress hormones that all happen when we reconnect with the natural world.

The American Psychological Association cites a Danish study that tracked nearly a million children from birth to age ten, comparing their exposure to green spaces. They found that those who lived in proximity to those green spaces had a significantly reduced risk of emotional disorders later in life, including depression, and those who had the lowest exposure to the natural world had a 55% higher risk of developing mental disorders.

(It should be noted here that usually the most desirable and most valuable real estate in urban communities lie in or near green or blue spaces. Economically disadvantaged neighborhoods are often devoid of natural areas and also have the highest rates of mental illness.)

Studies have found that workers with windows and only a *view* to natural settings are more cooperative than co-workers in windowless cubicles or with windows facing parking lots. Students with regular experiences in nature exhibit more positive social interactions, and demonstrate more empathy.

This power of the natural world to address our emotional health is so strong that even *images* of nature have been shown to evoke positive thoughts and help lower blood pressure.

A frequently overlooked facet of nature is its ability to also evoke a sense of awe and wonder. In a world quite jaded and full of itself and its technological advances, the power of a thunderstorm, the beauty of a rainbow, an infinite starry night sky, or the chatter of a chickadee still moves us in ways no computer or video game can. Somehow it makes us feel a part of something greater. And this feeling of real connection with nature not only lifts our spirits but should lead us to protect and care for these spaces that can so generously nourish us.

Less than 25 years ago, when Richard Louv wrote his ground-breaking book, [Last Child in the Woods](#), there were literally only a handful of research projects and scientific studies on the benefits of reconnecting with nature. Now the subject has found its way solidly into both mainstream media and academia, with psychologists, biologists, educators and physicians all weighing in on the restorative powers of the natural world. As our knowledge expands and public awareness grows, parents (and grandparents!), school boards, city planners, elected officials and community leaders must find ways to restore, preserve and expand our natural spaces and allow the benefits to accrue to all.

Healthier, smarter, and happier...reconnected with nature.

Jack Voelker is a BTG Life Member, Director (Retired) of Recreation and Youth, Chautauqua Institution, Aspiring Harmonica Player, and Former Hop Farmer

Photo by Beth Brockman Miller

Many thanks to Jack for this article, which is the last in a 3-part series. Click [here to read Part One](#) and [here to read Part Two](#) if you missed those.



Historical Tidbit

Fish on a Harpoon

c. 1900

Looks like the ice fisherman used to dress up a little more back in 1900 than they do nowadays. (They also took pains to hide their excitement and pride. But you know they were feeling it.)

[Captain Jeff Zellers](#), who leads guided fishing trips on Chautauqua Lake in the summer, says that all the fish on this harpoon appear to be muskellunge (muskie). Today muskie are usually found in the deepest waters in the middle of the north basin.

In Jeffrey Simpson's *Chautauqua: An American Utopia*, he writes: "When President Theodore Roosevelt visited Chautauqua in August 1905, he was served a "breakfast" including escalloped Chautauqua Lake muskallonge and raspberry shortcake." *

Fast forward to November 2022 in the photo below. The muskies in Chautauqua Lake are still impressive, and Bill Swanson looks very excited about the 51-inch, 40-pound muskie he caught in November...and warm and comfortable in his puffy coat. Read more about his catch [here](#).

- Leslie Renjilian

* "escalopped" and "muskalolonge" are spelled like that in the book. I'm not whether that's a mistake or the old spelling....



More on Muskies

From the New York State Department of Environmental Conservation (NYS DEC):

Chautauqua Lake is the source of muskellunge eggs for New York's stocking program and the brood stock netting program has produced record high catch rates and numerous fish over 50 inches in recent years. The smaller lakes in western New York tend to have high numbers of fish but trophy sized muskies are less common.

In south-central New York, the Susquehanna and Chenango rivers support self-sustaining muskie populations. Fish in the 40-50 inch size range are commonly landed.

Muskellunge, or "muskie," are the largest freshwater sportfish in New York State and are considered the ultimate trophy by anglers who pursue them. Their legendary ability to challenge and confound the angler, their massive size potential, and their well-earned status as top predators, have often inspired anglers to forsake other fish for a chance to encounter the "fish of 10,000 casts."

Muskellunge are the largest members of the pike family, *Esocidae*, which also includes northern pike, chain pickerel, redbfin pickerel and grass pickerel-all native to New York State. When muskellunge and northern pike interbreed, they produce a sterile hybrid cross called a tiger muskellunge. Tiger muskellunge are sometimes produced naturally in waters where both species reside, but they are also reared in hatcheries and stocked as a popular sportfish.

Muskellunge inhabit coolwater lakes and large river systems in eastern and north-central North America. They spawn in the spring in water temperatures around 50-60° F in shallow water, typically along lake and river shorelines. Muskellunge grow rapidly, attaining 10-12 inches in length by their first winter, and are around 30 inches long by age 4. Most muskies are reproductively mature by age 6, when they average 34 inches long, with females typically larger than males. Muskies can grow to enormous proportions, sometimes reaching 50 pounds or more. The state record muskellunge tipped the scales at 69 lbs., 15 oz!

At least 13 lakes and 19 rivers have muskellunge populations in New York State. The [St. Lawrence River](#), Upper Niagara River and [Chautauqua Lake](#) are the most renowned muskie fisheries in the state, but quality fisheries also exist in smaller lakes such as [Waneta](#), [Greenwood](#), [Bear](#), and the [Cassadaga lakes](#), and in inland rivers such as the [Susquehanna](#), [Allegheny](#), Delaware, Great Chazy and major tributaries of the St. Lawrence River.



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