

C H A U T A U Q U A



BIRD  
TREE  
&  
GARDEN  
CLUB



**What's  
A-Float?**

## Buffleheads!

Even without zooming, you can probably make out the white and black markings on the males in this flock of buffleheads, which Jeanne Wiebenga spotted and photographed on Thursday in the lake near the Boys and Girls Club.

If you would like to see closeup photos of Buffleheads and hear their calls, [click here to go to our app, exploreCHQ.](#)


Chautauqua is at the northern edge of the winter range for Buffleheads, who spend spring and summer at their breeding grounds near lakes in central Canada. They nest in tree cavities, but feed in the water. They leave Canada before the water systems freeze in search of open water further south, which is essential for their survival. Since saltwater freezes at a lower temperature than freshwater, many buffleheads head to the coast during the winter, but some find their way to Chautauqua. Apparently, when the lake freezes, they move to Lake Erie which rarely freezes completely.




This second photo, also by Jeanne Wiebenga, is from December 3, 2020, and shows a long row of female and/or juveniles with 2 white males in the center.

[All About Birds](#) (a website maintained by Cornell University) says this about the bufflehead: "A buoyant, large-headed duck that abruptly vanishes and resurfaces as it feeds, the tiny Bufflehead spends winters bobbing in bays, estuaries, reservoirs, and lakes. Males are striking black-and white from a distance. A closer look at the head shows glossy green and purple setting off the striking white patch. Females are a subdued gray-brown with a neat white patch on the cheek. Bufflehead nest in old woodpecker holes, particularly those made by Northern Flickers, in the forests of northern North America." And this about their behavior: "Bufflehead dive underwater to catch aquatic invertebrates. When courting females, male Buffleheads swim in front of them, rapidly bobbing their heads up and down. In flight, you can identify Bufflehead by noting their small size, fast wingbeats, and pattern of rocking side-to side as they fly."

---



**Housekeeping Note:** Our gardens are all put to bed for the winter, so the Tech Committee is spending the cold months improving [our app](#) and our [website](#). One special project is to publish a list of the names of all of our Life Members on our website. If you are a Life Member and do **not** want your name published on our website, [please email us](#).



---



**Reconnecting  
with Nature**

---

by Jack Voelker

In his ground-breaking book, Last Child in the Woods, and the sequel The Nature Principle, author (and Chautauqua lecturer) Richard Louv makes the case that our current disconnect with the natural world has a critical, negative impact on our physical, emotional and cognitive health. In short, our separation isn't just a sad thing, it's a decidedly *bad* thing. Happily, the converse is also true. Reconnecting with nature can have immense positive impacts, and the current and ever-expanding body of scientific research offers confirmation.

Part 1, Physical Health: Take a walk in the woods...

Walking has long been advocated as a simple and healthful form of exercise. But a walk in the woods can have far more benefits for our physical health than time on a treadmill or a walk along a prepared track or roadside. For starters, a walk in the woods is likely to present a more uneven surface, using and strengthening a broader range of muscles and tendons, as well as improving balance. As childhood has moved indoors, our youth, when they do venture outside, are more likely to be engaged in activities on manicured sports fields and not woodland trails. It's no coincidence that the medical specialization of pediatric orthopedics has grown rapidly in recent years to meet the demand of treating childhood knee and ankle injuries, related at least in part to this shift in location of childhood activities.

Did you know that when you take a walk in the woods that you are exposed to *phytoncide*? As it turns out, this is a really good thing. Trees can emit dozens of aromatic chemicals, known collectively as phytoncide. Our human sense of smell is limited and may only detect a few, but they are all entering our body nonetheless through our nasal passage. Increasingly science has been discovering the efficiency of delivering drugs and vaccines through our noses, finding a speedy pathway to the brain and on to our body-wide circulatory system. With much of the current research coming from the Far East, the phytoncide are being isolated and analyzed. Drs. Selhub and Logan in their book, Your Brain, On Nature, cite studies that have shown the ability of phytoncide to reduce anxiety and stress producing hormones, increase pain threshold, and improve immune function by increasing the production of our

body's natural defenders. The authors also note the relatively new Japanese tradition of *shinrin-yoku*, or "forest bathing". Based on the restorative and healthful benefits available, woodland preserves have been set aside specifically for practitioners to simply walk.

One final gift from that walk in the woods---cleaner air. While it's common knowledge that trees and plants provide oxygen for us to breathe, it has been shown that they also can act as a filter, absorbing harmful environmental pollutants from the air. Transferring them to the soil through their root system allows natural bacteria to break them down and render them less harmful. Particularly in urban areas, this underscores the need for and the healthful benefits of woodland parks and nature preserves.

Future research will surely unlock further the mysteries and healthful benefits of the phytoncide and all of the other positive impacts on our physical health that nature can provide. In the meantime, find your favorite woodland trail, take a walk and breathe deeply.

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

- photo of the ravine by Jeanne Wiebenga

Our thanks to Jack for this article, which is the first in a 3-part series. Part 2 will focus on cognitive health and Part 3 on emotional health. Look for those in newsletters to come.

---

**Who's  
Tough?**



The photos above of a **tough blue jay and cardinal** in the snow were taken this morning by Jeanne Wiebenga. She used an and shot through the window of her sunroom. How come my photos never look that good!?

Stay safe warm, Jeanne and little birds!

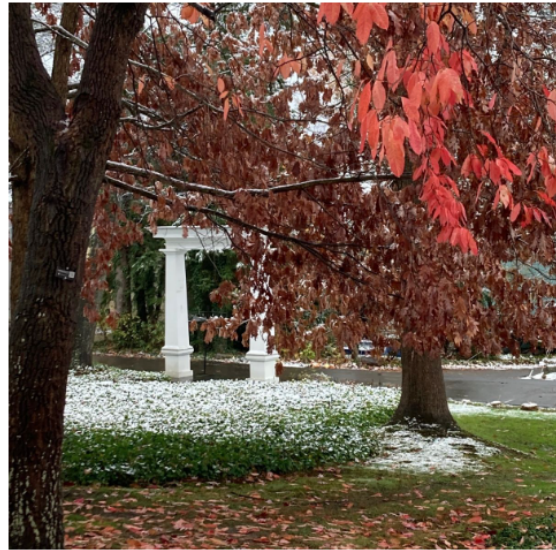
~ ~ ~ ~ ~

The photos below were all taken last week by Beth Miller of some **pretty tough plants** in the snow.

Clockwise from the top left:

- a hydrangea at the Sports Club
- anemone in the Krembs garden near Lincoln Park
- the red leaves of the [sourwood](#) at the Hall of Philosophy
- winterberry along S. Lake Drive

The photographer, Beth Brockman Miller and her husband, Coby Miller, live in Chautauqua full-time. Beth posts beautiful photos of Chautauqua year-round on Instagram and FB - @chq4u - including more great photos of the snow yesterday. Coby works on Betsy's Garden Crew. Many of you will remember the talk he gave this summer for the BTG about the newly renovated Rappole Night Garden at Smith Wilkes Hall.



---

# Who's Eusocial?

## Ants and Sociality

A new study by Dr. Patrick Schultheiss, of the Univ. of Hong Kong, and his associates was published this fall (Sept, 2022) in the [Proceedings of the National Academy of Sciences](#). It examined prior published scientific censuses



of the number of ants on the earth's surface from all continents except Antarctica. Their estimate – excluding subterranean ants, mind you – is that there are **20 quadrillion ants** – 20 with 15 zeros following it. Ants outnumber humans on Earth at least 2.5 million to 1. This is, according to Schultheiss, a very conservative estimate and is predicted to grow by as much as an order of magnitude (that means “add a zero”) as more studies are done.

**Ants are crucial to decomposition and recycling of dead organic matter in all terrestrial ecosystems where they are found. If they were eradicated, most other life on Earth's surface would disappear.**

**Ants are eusocial hymenopterans.** That means they are among those rare insects that have queens that lay the eggs while her genetic sisters do the rest of the work of maintaining their colony. We biologists borrowed the term “**altruism**” from ethicists and apply it to this kind of selfless behavior.

Other eusocial insects include **termites, honeybees, and yellow jackets.** Among insects, only the termites (Order Isoptera) and members of the order Hymenoptera (bees, wasps and ants) have mastered this highly successful method of coping with life's challenges. **Some mammals (e.g., humans, wolves, lions)** have accomplished this also, and a few other species come very close, but the ants seem to have mastered this “theme and variations” of successful sisterhood in the extreme.

**It takes a reproductive and genetic trick that appears to turn Darwinism on its head to accomplish eusociality.** The workers, and other castes within a colony, give up their ability to reproduce in order to protect the queen. Natural selection generally promotes the survival of the most fit individuals (those carrying the most successful genetic traits), so how can sacrificing reproduction lead to such success? The answer seems to be that the subordinate castes (workers, soldiers, etc.) are working to perpetuate their genes as represented by the queen, to whom they are closely related. How this originally came about is speculative, but, once it does, it succeeds like gangbusters.

The “trick” was identified mathematically by W.D. Hamilton in 1964 and

biologists call it “**inclusive fitness.**” It’s part of the basis for the famous 1976 book *The Selfish Gene* by Richard Dawkins in which the author emphasized the importance of gene transmission, as opposed to “trait” transmission, to establishing evolution. Dawkins got a lot of publicity and started a lot of popular and scientific controversies, by emphasizing the concept that “**A chicken is just an egg’s way of making another egg.**”

Arguments about Richard Dawkins, and his controversial book, aside, the evolution of eusociality among ant ancestors has certainly been a success if current numbers are any indication.

Dr. Schultheiss and his colleagues have produced a well-founded estimate that ants rival humans among the animals living on the surface of Earth. Besides the size of their brains and the numbers of their legs, the biggest contrast between us and these industrious insects is that **ants seem to be sustaining ecosystems** everywhere whereas we seem to be single-mindedly devoted to destroying them. Perhaps people, who are by far the dominant species affecting life on Earth at present, have something to learn from these other eusocial species, the ants.

- Dennis McNair, Board Member and Head Entomologist of the [Bird, Tree ANT Garden Club](#). Also a retired biology professor and expert on dragonflies.

## What's New?



A new art exhibition entitled ***Curious by Nature*** opened recently at [The Roger Tory Peterson Institute \(RTPI\)](#). The images above are from **The Charley and Edie Harper** exhibition, which encompasses the entire first floor of the Lodge, a magnificent building designed by Robert A.M. Stern. If you have never been before, winter is a great time to visit. The exhibit will be on display until March 5, 2023.

---

## Historical Tidbit



The 1915 photo above of ice skaters on Bestor Plaza is from the Chautauqua Oliver Archives Online.

Other photos from the same time have captions referencing a **Winter Carnival** which was held from 1914-1917. An excerpt: "In 1915 the Carnival was held Jan. 30th to Feb. 7. A program of 3 daily indoor movies, lectures and entertainments were held. The plaza was flooded and if the Lake ice was usable a place in front of the dock [now, College Club] was cleared for skating, Hockey and Ice Boating. Foster Ave. was closed for toboggans."

In the photo above, the **Newton Hall Museum** stands in the background, where Smith Library is today. Newton Hall was built in 1882 and replaced by Smith Memorial Library in 1931.

I also found ice skating photos from 1944 and 1979 in the [archives](#). If you have photos or memories of ice skating on Bestor Plaza, please [share them](#) with us!

- Leslie Renjilian

---

## Table-Top Trees and Kissing Balls

By Janine Obee

The Germans have a long history with Christmas traditions. The first documented Christmas Tree dates back to 1419. The town baker of Freiburg set up an evergreen and decorated it with fruits, nuts and baked goods. Using greenery found in the woods captured the notion of bringing nature inside during winter's dormancy.

The German tradition of the Christmas Tree was brought to England when Queen Victoria married German-born Prince Albert in 1840. Many holiday embellishments were influenced by Queen Victoria; for example yule logs and using pine branches and boxwood for swags.

Another tradition inspired by Queen Victoria was the table-top-tree. A small evergreen was placed on a round table adorned with trinkets and treats. In 1848 a British newspaper published an illustration of the Royal Family standing around a table-top-tree. The tradition was embraced in England and slowly caught on in the U.S.

By the 1870's decorating homes for Christmas flourished in the states. Ferns and holly were added to the mix in the form of wreaths and centerpieces. Christmas trees were off the table and stood as tall as a 6-foot man!

Originally "Kissing Balls" were called "holly boughs."

They were made with evergreens and figurines of baby Jesus. During the Middle Ages in England they were hung in entryways as a symbol of goodwill.

Ever the romantic, Queen Victoria was credited with the new name and a new look. The base of the Kissing Ball was an apple or potato adorned with herbs and foliage.

The herbs were symbolic; lavender and rosemary signified loyalty and devotion, thyme stood for courage and mistletoe indicated good fortune and fertility.

(Queen Victoria did give birth to 9 children!)

How to Make an Easy Kissing Ball:

Materials: 1 4 or 6-inch  
styrofoam florist ball

Sprigs of evergreens,  
juniper, holly or ivy;

Spanish moss

Glue gun, pruners, 18"  
of craft wire, 2 yards

---

of red ribbon

Directions: Cut sprigs into 2-3"  
pieces using pruner.

String craft wire  
through the florist ball.

Make a u-shaped  
hook at bottom to hold  
in place and a loop at  
the top for hanging.

Loosely glue Spanish  
moss over the foam  
ball. With the tip of  
the glue gun make  
holes all over the ball.

Put a small amount of  
hot glue in each hole  
and immediately insert  
a sprig of greenery.

The sprigs will hold  
the Spanish moss in  
place.

Finish by adding a bow  
to the top of the ball;  
use tie for hanging and  
lacing streamers  
through the U at the  
base. Use glue gun as  
needed.

If you use herbs be  
sure to select with  
intention ;)

---

- Janine Obee, BTG Historian

---

Help Us Grow! Our year-end fundraiser will begin soon. Please consider a gift to the BTG as you plan your year-end giving. And don't forget - a Life Membership would make a nice holiday gift for a nature-loving person in your life.

---

---

---