## Where Did the Trees Go? by Peter Malone

This story begins with a memory of gazing out a Meeting Room window on a Spring day in 1988, when leaves were showing on trees that stood along the North property line of the Chapel Hill Friends Meeting property. But that memory is only a memory because the trees are gone, now.

Friend Wendy remarked recently: "There once was a treeline across the back...." which was simultaneously true, startling, and disturbing. Yes, I remember part of that "once was" and became immediately engaged in finding out what had happened.

For some time I had been entertaining myself with an internal dialog which was becoming ever more urgent, some silent self-talk that I was having as a member of Buildings and Grounds committee.

The central question for me hinged on having knowledge about Buildings, but from a practical standpoint, having very little knowledge about Grounds, and asking myself "with all this effort going into buildings, what are we missing in the environment around the buildings?".

It's becoming clearer now, that some keystone tree species in our surroundings have died off, and the cause is the very aggressive invasive plant species taking up nutrients, and weakening the trees until they can't stand up to the rigors of their surroundings and the burdensome weight of girdling vines.

Before asking what is the science behind all of this, I tried to learn what mattered to people in the Meeting, and what they were willing to do about it.

The first answers I heard were that the "wisteria took over". Not without some concerted efforts by various B&G members over years trying to "control" the wisteria by pruning. It had long been recognized as trouble.

Then, I came to understand that not all wisteria does this, but that Asian varieties are very aggressive and both rob the soil of nutrients, as well as climbing trees, cutting off nutrient flow by girdling trees, as well as taking up much of the available nutrients as the wisteria grows in its characteristic rapid pace.

Then, I noticed that bamboo was screening light from the forest floor, and nothing was growing below the bamboo "canopy". This is a grass that grows year-round, and forms a mono-culture by spreading subsurface rhizomes and also has a rapid growth rate that requires lots of nutrients and water.

Partly hidden in the bamboo overgrowth are the boles of fallen trees of various species, rotting and some gone from this visible world. These deciduous trees had growth cycles that are more gradual on-and-off seasonally, taking water and nutrients intermittently as they make their lives rooted in place. Having bamboo move into their drip line was an existential challenge. Weakened by lack of nutrients and water left the trees susceptible to overload weight of the vast vine growth that crept up and built in the upper branches, wisteria seeking light for itself, and blocking light that was needed in the trees' leaves, the trees simply died and fell. They are laying out there in parts and pieces, in that blacked-out world beneath the bamboo.

We received a letter from a neighbor, that actually addressed this in regard to one of the remaining damaged trees. The neighbor used legal channels to notify Meeting that we have a "dangerous tree"

that threatens the neighbor's property if it falls, which gives the neighbor avenue to recourse for compensation for damages.

We called an arborist called The Treeist, owned by certified aborist Craig Nishimoto. Craig helped with the trouble tree and judged that it could be saved if the base were cleared out to the drip line, and vines cut away.

We undertook the project of clearing vines and a contractor worked hard at some removal, but we couldn't budget much more work at that time, so the ongoing work needed went into the following fiscal year.

A conversation with Craig about the wisteria and bamboo remaining, with the plaintive "what do people do?" in that line of questions, led to Craig suggesting we ask Greg Walker, who specializes in removing invasive plants run amok. Greg's firm, called Ecological Landscaping, worked in the next summer break, a new fiscal year, and cleared areas around a couple of trees.

After yet another year of working on the clearing by Ecological Landscaping, with some volunteer work by B&G members, the evidence of the efforts has evolved into four areas showing clearing. There are three surviving trees in consideration for further attention, and we have begun uncovering a large area of dense Chinese wisteria rooted deep into the vegetative debris of a ravine on the East side of the property.

Along with this, we had previously started trying to organize a Gardens and Grounds group, to take up making recommendations and suggest design of natural habitat so that the entire plot can be returned to balance and inter-dependency of the various species, instead of competition with aggressive invasives and fast-growing mono-culture. This was partly effective, by yielding a perspective on the numbers of species we find ourselves overwhelmed by on the property.

Besides bamboo and wisteria, there's lots of Chinese privet, Tree of Heaven, nandina, and others. Also, there is scuppernong grape run wild in some areas, covering and shading out other plants when the leaves are on during warm weather months.

Some Friends in those early discussions pointed out that there is opportunity to aspire to and work towards having pollinator gardens, while we are also cognizant of the need to have an appealing-looking and safe natural area adjacent to the schoolhouse as a learning and playing environment. In this mix of possibilities is need for space to compost the abundance of annual leaves accumulated on site, to responsibly handle this resource and return the nutrients to soil through the food chain to the many organisms and organic processes that may be served and fostered to proliferate.

On two chilly mornings this past February, volunteer workers from B&G and CHFM Quaker Earthcare Witness (QEW) spent two Saturdays working on the East side ravine, and removed a lot of wisteria, bamboo, and scuppernong. Many thanks go out to John Hite, Naveed Moeed, Wendy Michener, Tom Ludlow, Cecilia King and a Friend from Durham, Mike Rychener, for those two work days in February.

Throughout all this, Greg Walker has been a very valuable source of instruction by himself and labor by his employees to work over several days in each of the two past summers towards our constant goal of saving the few trees still alive along the North boundary.

Greg also introduced us to the work of Douglas Tallamy at University of Delaware, and Tallamy's body of work was easily found: having several titles of books, as well as an abundance of videos that comprise lectures which are very instructive. <a href="Tallamy playlist">Tallamy playlist</a>>

One major project that Dr. Tallamy has undertaken is forming a non-profit organization which encourages and facilitates a national grass roots approach to individual responsibility named "Homegrown National Park" <a href="https://homegrownnationalpark.org/">https://homegrownnationalpark.org/</a> which is explained in the video

"Our National Parks, no matter how grand in scale, are too small and separated from one another to preserve species to the levels needed by each and every human on earth. Thus, the concept for Homegrown National Park, a bottom-up call-to-action to restore habitat where we live, work, play, pray, learn, farm and graze, effectively extending national parks to our yards and communities" YOU can make a groundbreaking change by planting native, whether it is in a container, on one square foot, or across acres of land. Track your contributions to our science-based, grassroots movement while enjoying almost immediate gratification where you plant; as birds, bees and other wildlife flock to your new habitat!"

- Doug Tallamy - co-founder HNP

There are literally billions of birds and small mammals disappearing from the planet for lack of adequate life-sustaining habitat.

Meanwhile, millions and millions of acres of land we have taken out of natural forest and converted to non-sustaining land (lawns and ornamental gardens) offer an opportunity to shift these lands back to natural habitat simply by changing our conception of what makes a "nice-looking" yard space around our homes and businesses.

Solutions are readily at hand, and not expensive, but require a vision and some persistent expenditure of physical effort engaged with caring for the environment.

Making our open land areas into habitat that supports natural populations is the focus of the grass roots organization Homegrown Natural Parks, and has already seen a large public interest and the commitment of enrollment as is tracked on the HNP website.

We have asked for a few minutes in a Forum to make a brief statement about what we think is practically achievable in reclaiming the natural habitat on the CHFM property, using the best practices we have identified, and are able to utilize with a combination of professional services and work of volunteers.

On June 2, we will offer a brief on steps ahead to save the trees, need for planning for new keystone plantings, and discussion around these topics, interests, and concerns of attenders in forum.