Bringing Community Food Forests to South Chattanooga: A Proposal

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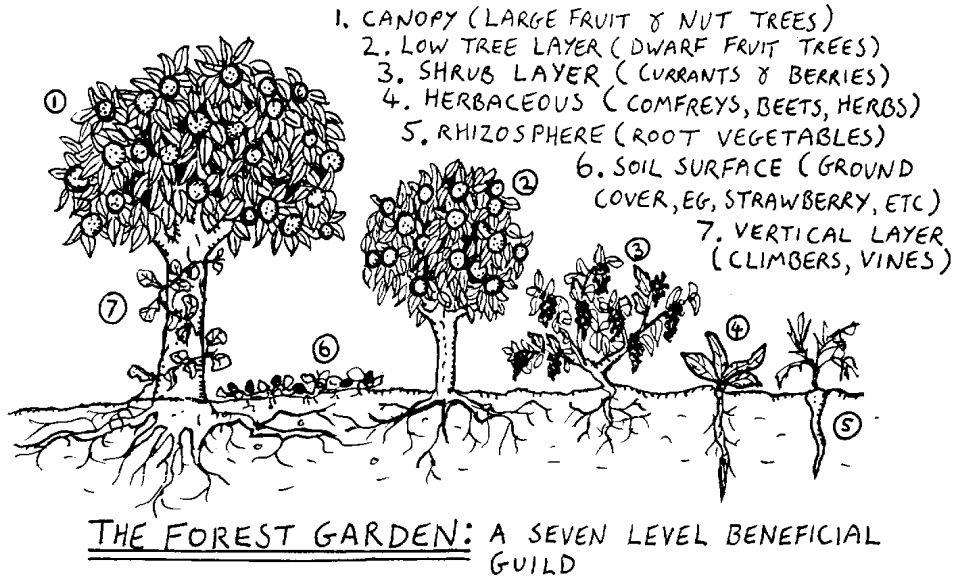

(Image credit: Beacon Food Forest)

I. Introduction: What is a Food Forest?

"Food forest," community or otherwise, is not yet an especially well known concept, only emerging in recent years first as an individual permaculture practice, but is now increasingly becoming part of the urban agriculture and greenspace toolkit across America and beyond. What exactly is meant by a food forest varies, but the following description from the Beacon Food Forest project provides a good idea to get us started:

> [A food forest] is a land use system in which trees, shrubs and agricultural crops are interspersed. This creates a multi-story ecosystem that can mimic the self-sustaining functions of a natural forest while incorporating food plants for human consumption. The result is a semi-natural landscape that requires far less maintenance than row crops, provides habitat for pollinators, bugs and birds, and can sustain perennial as well as annual food plants. In a food forest, each fruit or nut tree is at the center of a plant guild. A guild is a beneficial grouping of plants that support one another in all their functions.

The long-term project/organization proposed here would work to bring a small (at least initially!) network of community–that is, publicly accessible and supported–food forests, adapted to our city's particular needs and resources, to southern Chattanooga neighborhoods (and the immediately adjacent town of Rossville) that are currently underserved by urban agriculture initiatives and which have a real lack of public green space, and no parks or other spaces currently devoted to ecological restoration of any sort. What public green spaces these neighborhoods have are dominated by lawn grasses and a handful of tree species. Long-term, this project could grow to encompass all of Chattanooga and the greater metropolitan area, not just the southern tier of neighborhoods, as many of the needs of the core target neighborhoods are hardly unique to them but exist everywhere to some degree.

The various benefits of the envisioned community food forests and community gardening spaces are enumerated below, but two major ones should be highlighted from the start: one, these will be public green spaces devoted to the growing and sharing of food, primarily food produced by perennial plants–trees and shrubs but also parts of the understory and edge habitats. Second, these will be spaces with a carefully cultivated ecological richness, providing many ecosystem services to the communities adjacent to them, and giving residents of all income levels the opportunity to encounter a large diversity of plants and animals that might otherwise be absent or unnoticed in urban environments. In short, these food forest installations would combine aspects of a public nature park with the community garden. And while the centerpieces of this urban agro-ecological network will be the individual food forest sites, each site will also act as a "hub" for other projects and goals, and will feature a range of features from small libraries for tools and written material to plots of raised beds for demonstration gardening of annuals and garden-scale perennials. As the project matures–or, more to the point, as the trees and shrubs themselves mature–they can act as sources for neighbors to produce their own miniature food forests, pocket orchards, and the like, making what are often expensive or hard to find fruiting trees and shrubs much more widely and easily available. Over time the food forest network can potentially become a system of anchoring points for neighborhood food systems, community formation, ecological restoration, and social regeneration.

II. Outline of the Project:

Key to the initial stages of this project will be the work of coordinating the various agencies and other institutions whose cooperation and/or permission will be crucial to the long term viability of such a project; but even more important will be the work of genuine community input and involvement, ensuring that these food forests are truly community projects and can become the sites of direct democratic governance and interaction. They will also be sites of horizontal skill transfer and teaching, both within neighborhoods and without them, bringing together people in the city and in its hinterlands with different skills and knowledge bases. One of the important pedagogical and social goals of this project will be to encourage experimentation and expansion of home garden techniques, strengthening and expanding the

already robust food growing cultures active across these neighborhoods, reflecting different traditions and approaches which do not need to be replaced but which can be made more productive and more resilient through the integration of contemporary organic, regenerative, and permaculture based techniques and appropriate technologies. Central to my own vision is the conviction that healthy and regenerative forms of livelihood should not be the preserve of the affluent or privileged, but should be available to everyone regardless of class, ethnicity, location, or anything else. Obviously this project by itself cannot accomplish everything necessary to realize such a vision but it can be a powerful starting point.

Our focus will remain initially very localized to the neighborhoods along the Tennessee-Georgia line, starting, most likely, with the St. Elmo and East Lake neighborhoods, as well as the immediately neighboring municipality of Rossville in Walker County. The primary reason for this geographic focus is the current lack of similar projects or sites in the southernmost tier of Chattanooga neighborhoods/Rossville. Crabtree Farms is the closest similar urban agriculture entity, but it is not within walkable distance from any of the neighbors in the target area, nor are any of the other community gardens currently active in Chattanooga within walking distance of these southern tier neighborhoods. Not only is there a paucity of urban agriculture across these neighborhoods, easily accessible public outdoor spaces are very thin on the ground, with only a handful of small neighborhood parks present, leaving many sections of these neighborhoods with no public green space within walking distance. Nor do any of the existing parks currently feature landscapes beyond conventional grass and urban tree plantings: the available ecological services are poorly developed, to say the least.

The South Chattanooga network of food forests will cross a diverse landscape that encompasses several distinct human and natural ecologies and embraces a truly wide range of communities, from the relatively affluent to some of the most economically disadvantaged in our metropolitan area. Our western anchor will be on the slopes of Lookout Mountain, the eastern anchor in the shadow of Missionary Ridge, with sites located on mountain slopes and in the limestone valley bottoms between the ridges. Historically this landscape would have featured a mosaic of ecosystems of varying degrees of human presence and intervention; remnants of historic ecosystems remain scattered around the metro area, and will provide reference points for our food forest development, as will the long history of human occupation and agriculture, from the Woodland Period to the present. The human history of this landscape is even more diverse, and has encompassed various indigenous peoples as well as people of European, African, and Mesoamerican origins, each bringing new species of food-bearing plants to our region, many of which we can incorporate into our food forest installations. One of the goals of our community food forest initiative is to incorporate that rich human history and present, drawing upon the agricultural traditions represented by the residents of these neighborhoods as well as reflecting indigenous practices that were once a part of the landscape, and drawing upon and realizing in a temperate climate Mesoamerican forest gardening practices that are likely be familiar to residents whose roots go back to those regions.

These are also landscapes with troubled human histories: most immediately for our purposes, the land carries the traces of heavy industry and its pollution, with various substances remaining present in the soil and the water long after the culprits closed down and shipped away. One of the advantages of the food forest model is the fact that perennial agriculture is much better suited for soil remediation, and carries much less risk to human health; where in many of the available pieces of land raised beds or extensive soil remediation would be necessary, a food forest can work with higher levels of contamination without passing them on to human consumers. These neighborhoods are also marked by the long legacies of institutional racism, various forms of violence and social disorder, inequitable economic regimes both here and elsewhere in the world, and other legacies that have shaped our city and with which we must continue to grapple. Crucially, our goal is for this project to incorporate all of the residents of these neighborhoods so as to strengthen the communities around them. Direct community participation and decision making is crucial to realizing such a vision, with the support and guidance in particular of existing community structures such as churches, libraries, locally owned businesses, neighborhood groups and associations, and the like being especially important.

III. Primary Goals of the South Chattanooga Community Food Forest Project:

1) *Direct local food production and distribution*: perhaps the most central goal of any food forest is to provide food–particularly fruit but also certain types of vegetables (and potentially the full range of garden vegetables), as well as nuts, mushrooms, and herbs for culinary and medicinal purposes; cut flowers also figure into this equation, with a robust food forest potentially providing sustainable populations of wild or semi-wild blooms for community gathering. While no single food forest is going to solve problems of food availability single-handedly, it can indeed provide healthy and tasty produce to populations who might not otherwise have any such access at all, and it can begin to address these problems in its additional roles as anchor sites for other activities and projects. Unlike a traditional community garden, a food forest can be browsed by anyone, and will support high levels of use; it can further encourage people to expand their horizons in terms of fresh and locally available food, whether through accessible farmers' markets or through urban foraging for semi-wild fruits and other edible plants (which will be further supported by deliberate pedagogy, on which see below).

2) *Recreational and socially oriented green space*: the southern tier of Chattanooga is severely lacking in accessible green spaces, to say nothing of high-quality and ecologically and socially rich green spaces. Only a handful of public parks are located in these neighborhoods (and in adjacent Rossville), and those that do exist

remain relatively meager in terms of facilities. Each food forest would be a de facto public park, providing different sorts of appropriate recreational and meeting and gathering spaces, and giving area residents a very different park experience than the standard model of closely clipped grass fields with a few trees and landscaping. As dynamic places, the food forests would offer new experiences and sights to neighbors as they matured and grew and changed, providing beautification for neighborhoods to boot, especially when repurposing otherwise vacant lots.

3) *Community formation and equity building:* these are some of the most diverse neighborhoods in our region, with a wide variability in terms of income gradient, languages spoken at home, and socio-cultural backgrounds. Bringing different distinct communities together in a democratic and open way, over the shared issue of access to and use of the land itself, is a potentially powerful way of mitigating social stresses and bridging divides–but also building real equity and access, giving power and resource allocation to the people who actually inhabit these neighborhoods and who will themselves care for and enjoy the fruits of the land. One of our central goals will be to ensure that the land used for our urban agriculture and ecological restoration sites will remain in long-term trust to the communities who use these places, and so help to avoid potential dynamics of displacement in the future.

4) *Ecological services*: while there are many vacant lots and riverine corridor across these neighborhoods, it is worth noting that mere lack of use does not automatically equal robust ecological dynamics or resulting ecological services such as support of pollinators, rebuilding of soil, filtration of water and air, or support of other forms of urban wildlife and biodiversity. As is true virtually everywhere on the planet in the twenty-first century, aggressive invasive species are a constant presence and threat, and will frequently overwhelm unmanaged natural spaces, preventing the formation of subsequent ecological assemblies absent human intervention. Our food forests will act as anchors and refugium for ecological restoration, both active and passive, providing robust and diverse ecological services simultaneous to and convergent with the food, social, and other benefits provided for humans.

5) *Agricultural, ecological, and cultural/historical education*: the pedagogical potential of the initiative would be threefold: first, our overall coordinating organization, the Chattanooga Food Forest Cooperative [placeholder name, would be nice to find something a bit more original!], would work to reach local households, particularly those of lower-income residents, who were interested in

gardening, permaculture, home-scale food forests, food preservation, and the like, and do hands-on teaching and facilitate peer-to-peer instruction that would help small-scale producers increase yields, households to conserve energy and better store and utilize food, how to safely and effectively forage urban wild plants for food and medical uses, and so on. A crucial part of this plan would involve perambulatory teaching, using a diversity of instructors and especially drawing upon local gardeners and producers. Ecological teaching would be related, with a stress on cultivating individual household and neighborhood public spaces in ecologically sensitive ways conducive to restoring habitat in a manner congruent with human needs and capabilities. Such pedagogy would also involve instruction in existing and historical ecological systems and their plant and animal assemblies native to our region. Finally, both our teaching and our instillation signage would be integrated into a historical awareness of agriculture and ecology in our area, incorporating historical ethnobotany on the plant names and uses employed by the Cherokee and other native peoples in the region, as well as the history of agriculture on the part of later residents of the land, whether of European, African, or Mesoamerican descent. All of the above forms of pedagogy would also be realized in part through interpretive signage and rotating temporary exhibits based in our core food forest installations.

6) *Community nursery stock and seed library*: home-scale agriculture is already practiced by many people in our communities here in and around Chattanooga, in particular in the neighborhoods intended for food forest installation. This project will aim to not only bring together home-scale producers and share expertise, seed stock, and resources, but to also directly provide perennial plants in the form of seedlings and graft stock for planting. Perennial fruit bearing plants are generally fairly expensive when purchased from nurseries, which can be a real impediment for lower income residents; plus not everyone in our neighborhoods has easy access to motorized vehicles, nor is the knowledge necessary for grafting especially widespread.

7) *Environmental remediation and climate benefits*: a century of heavy industry left many Chattanooga soils and waters polluted in deep and persistent ways, and while pollution is not as severe as it was a couple of decades ago, many pollutants persist, some of an industrial nature, others of the quotidian sort found in any city lot, such as lead derived from paint. Food forests can not only provide a way to grow healthy food with minimal or no effect from such pollutants, they can be designed in such a way to actively remediate and heal polluted soils and waterways, and to prevent future routes of pollution through control of runoff, reduction of pesticides/herbicides, and the routing of landfill-destined materials

into compost and other uses. In terms of confronting anthropogenic climate change the benefits are somewhat more abstract: certainly the gardens themselves will act as sequestration sites for carbon, though given their size this direct benefit is probably pretty minimal, likewise the cessation of things like fossil fuel powered grass cutting have small climate benefits, while localized food production can help to reduce methane-producing food waste and vehicular transport. More significantly, the formation of local green spaces that act as in-neighborhood destinations and anchors can encourage reduced vehicle use and more localized forms of production, education, recreation, and the like, building-blocks in developing infrastructure far less dependent on fossil fuel use. Bringing residents into closer contact with living ecosystems from which they directly and tangibly benefit in the form of fresh food and enjoyable green spaces is also vital in encouraging individual and community investment in other solutions, in highlighting the value that healthy food and ecological systems have for all of us.

IV. Possible Routes of Funding, Publicity, and Exchange:

[Here we'll want to list agencies, funding bodies, businesses, churches, non-profits, etc, we will want to contact for support or publicity of some sort, including for issues of land use–for instance, I suspect that the Lookout Mountain Conservancy could be a crucial partner for the St. Elmo side of things, while in Rossville a business like Flora del Mer seems like a good possible partner.]

V. Preliminary Initial Timeline of Project:

My goal for the remainder of this year is to begin organizing and to continue researching and gathering resources, while getting in touch with other organizations, agencies, and the like, all the while refining our plan(s). A core of three or four people, in addition to myself, is necessary given the scope of the project–preferably a balance of folks in the three initial "target" neighborhoods.

One of the first things I'd like to do is hold some face-to-face meetings, perhaps read and discuss a couple of books on food forests–I've some in mind that would be good for core members to all read and interiorize. I'd like to aim for meetings in September and October, with a target goal of getting something really off the ground by spring of next year, and initial groundbreaking (or perhaps better sod-covering!) in the fall of 2024, which seems doable if we can build up a dedicated core of participants.

Once we've gotten things going initially we can sketch a much more detailed plan and timeline here; we'll also want to produce a streamlined version of this document for grant proposals etc.

VI. Potential Difficulties and Challenges:

The project proposed here is ambitious and ultimately large in scale and forecast impact. Unlike many food forest projects it is not limited to a single circumscribed site, but really aims at integrating agroecology into the entire fabric of south Chattanooga, and ultimately our larger region. While we hope that this aspect of scale will help to ensure long-term viability and sustainability, it also introduces problems of coordination and cooperation, especially as we aim to cross social, cultural, racial, and economic lines, bringing together communities that are often very far apart despite geographical proximity.

That a project such as this would become the object of political opposition does not seem likely, but we live in unusual times, and one can imagine the possibility that residents who are opposed to combating climate change, or who embrace various conspiracy theories, might see some nefarious in the project.