

From the USDA Forest Service and Partners

The Many Benefits of Accessible Trees and Forests

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Trees and forests in our cities and towns are assets to all who live there. Whether on public or private property, tree canopy and woods or forests add beauty, habitat, and a cooling, calming presence for all to see, feel, and enjoy, if only from a distance. Accessibility implies a different level of engagement, however, and for public trees, lands, and easements this means that everyone can peaceably enjoy these natural and cultural resources in perpetuity.

Arborists and urban foresters can play a role in helping residents to sustainably enjoy the many benefits derived from trees. This article explores foraging for food, medicine, and other materials by diverse communities with examples from two cities in the United States. We also suggest opportunities to enrich the values provided by nature in the city by encouraging public access for sustainable harvesting and enjoyment.

City Trees = Food and Fun

In cities throughout the world, foraging for fruits, nuts, and other materials creates deep connections with urban forests (Shackleton et al. 2017; Hurley

and Emery, 2018). Foraging contributes to physical and emotional wellbeing by supplementing diets with nutrient-dense foods and motivating active time in the outdoors (Synk et al. 2017). Foraged species vary across cities and cultural communities but many are abundant, with invasive species frequently found in foragers' baskets (McLain et al. 2014). In order to obtain this bounty, foragers must be careful observers of nature and many engage in stewardship of the trees and woodlands in their city (McLain et al. 2017).

In the U.S., both immigrant and African American communities may connect or re-connect to the land and their heritage via foraging; it may also be a means of developing greater food security (Linnekin, 2018). For African Americans in particular, foraging may also relate to a legacy of land separation; a recent article profiling several Black foragers notes they may contend with "conflicted histories of disconnection from the land and a present in which they don't always find nature a sanctuary." ("How Black Foragers Find Freedom in the Natural World," New York Times, July 30, 2021). The research highlighted below reveals some lessons learned about the hands-on benefits of urban foraging. >>



Vacant lots can be sources of wild and naturalized food. A woman with family roots in the central highlands of Mexico reaches through a chain link fence to forage for epazote (*Dysphania ambrosioides*) from a vacant lot in Queens, New York. When epazote is available in markets near her New York City home, often it is wilted and expensive. Foraging for epazote provides her with a source of food, pride, happy memories, and important flavors for family meals. Photo by Maite Lascurain Rangel



Although regarded as noxious or invasive in many of the regions in which it has naturalized, the wineberry shrub (*Rubus phoenicolasius*) produces delicious fruit treasured by foragers. Photo by Michelle Sutton



Pecan foraging on private property in Athens, Georgia.
Photo by Cassandra Johnson Gaither, USDA Forest Service

Pheasant back mushrooms (*Cerioporus squamosus*) grow on dead and dying hardwood trees like maples. Easy to identify, they have virtually no toxic lookalikes and smell like sliced cucumber or watermelon when freshly cut. Also called dryad's saddle, young pheasant back mushrooms can be added to soups, sautés, and stir fry dishes. (For this and any wild mushroom, it is recommended to get expert confirmation of identity before consuming.) Photo by Mark J. Twery



Atlanta, Georgia

The [Urban Food Forest at Browns Mill](#) (UFFBM) in Atlanta, Georgia, is an illustration of the opportunities presented when land is made purposely available and accessible for neighborhood programming. The 7.1-acre (2.9 ha) public space located in a predominantly African American community on the city's southeast side was established by a consortium of public and private interests, including the USDA Forest Service, in response to the lack of fresh food sources in this part of the city.

UFFBM contains both cultivated and wild plants, including nut-producing canopy trees, fruit trees, berry bushes, and ground covers such as strawberries, muscadine vines, herbs, and root vegetables—all of which mimic the distribution of edible foods in southern woodlands. Site managers have remarked that nearby residents tend to glean foods from cultivated sections of the site, while mostly avoiding the canopied forest, which is also rife with edibles. This penchant for the gardens is not surprising; home vegetable gardens have played a prominent role in the cultural history of southern African Americans.

Historically, wild foods and medicinal material were also integral to African Americans' lives, but it appears there may be less familiarity with these traditions today, perhaps for city dwellers especially.

A recent study of residents in communities near the UFFBM indicated that 20% had foraged in the past five years. Study participants also said that two main obstacles to neighborhood foraging were lack of information on where wild foods were located and how to begin (Johnson Gaither et al. 2020).

Arborists and urban forest managers have an opportunity to assist economically challenged communities like those near the UFFBM in achieving better access to locally grown wild foods. To do so, subject matter experts should approach communities with the intention of learning about existing knowledge of wild and cultivated foods. This tactic respects culturally specific historical experiences by indigenous and non-indigenous peoples who understood and relied on the bounty of wild foods.

After understanding this context, experts can relay information about wild food identification and their benefits. This information might complement existing knowledge of these foods or be an introduction to the concept. Also, if wild edibles have not been mapped in the neighborhood, this exchange might present an opportunity to bring together neighborhood residents and local foraging groups to identify the extent of wild foods in the community as well as any safety concerns and social constraints on foraging and how these might be overcome. >>

Philadelphia, Pennsylvania

The [Philadelphia Orchard Project](#) (POP) has for nearly fifteen years worked to establish local orchards and food forests in a variety of neighborhoods, often on vacant land. POP also works with community members or through partnerships on institutional lands (e.g., University of Pennsylvania) and public parklands (Bukowski and Munsell 2018).

Beyond its designed food forests and orchards, Philadelphia is home to a vibrant community of urban foragers. For example, the efforts of [The Wild Foodies of Philly](#) span more than a decade and focus on sharing knowledge about the usefulness of native and non-native species found in the city’s diverse site types (e.g., formal parklands, riparian areas in parks, and street trees) (Hurley et al. 2015). Using social

media and online tools, The Wild Foodies have facilitated dozens of meet-ups or tours throughout the years, growing the network and introducing young and old to a range of species to forage across the city.

Even during the pandemic, when access to parks was curtailed, the group’s email communications focused on how “stay-at-home” orders still allowed for outdoor exercise and how foraging could be incorporated into walking, running, or biking trips. Weekly email newsletters continued to focus on edible species that were beginning to appear in the landscape, including along sidewalks in cities or road-sides in the countryside, and spotlighting little-known species. Other emails announced locations where curbside pick-up of wild gathered foods could be found in the city. As parks began to reopen, meet-ups flourished and waitlists for events became a regular



Less manicured areas in parks can offer an abundance of forageable foods, medicines, and materials. Dandelion greens foraged in Kissena Park in Queens, New York are a much valued early spring green. Photo by Ricardo A. Rodriguez



Visitors to Atlanta's Cascade Springs Nature Preserve, an urban forest patch containing numerous wild edibles. Photo by Cassandra Johnson Gaither, USDA Forest Service

occurrence. With the arrival of winter, the group used Zoom calls to great success, launching a regular series of monthly virtual meet-ups that feature ten different useful species and how to prepare them as meals.

A recent unpublished analysis of Philadelphia’s urban forest found that of the 87 distinct tree species identified in a U.S. Forest Service assessment (Nowak et al. 2016), more than 80% (72 species) had documented uses, whether as foods, medicines, or for craft-related purposes (Hurley et al. In review). The study found that 50 of these species corresponded to the documented harvesting and educational activities of the Wild Foodies group. Some species, such as Mulberry (*Morus* spp.), American linden (*Tilia americana*), and Hickories (*Carya* spp.) remain more prized than others, but these results suggest

that urban foragers may be interested in harvests from a wider range of species found in cities than arborists or urban forest managers realize.

Opportunities to support sustainable urban foraging

As the Atlanta and Philadelphia examples illustrate, there are opportunities for arborists and urban foresters to make the benefits of sustainable foraging available to the residents of the cities they serve. Asking strategic questions and thinking in terms of spaces, species, times, and techniques can help promote good outcomes for people while avoiding harm to urban ecosystems. >>

Spaces

Are there places where you could allow foraging without damage to valued trees and landscapes? Creating places such as food forests is a growing strategy for delivering the benefits of foraging. But many other locations in urban forests and greenspaces may be suitable, including more natural woodland areas.

Species

Are there fruits, nuts, etc. that can be harvested without causing damage? Are there species that foraging could help you control? Fallen fruit and nuts often are abundant and may even be a nuisance you wouldn't mind having removed (think ginkgo nuts!) As mentioned, many foraged plants are invasive. Provided care is taken not to spread them, foraging may help control an unwanted species.

Times

Are there times when foraging in a place might do harm and other times when it might not? At some times of year, you may want to protect nesting sites from disturbance or saturated slopes from footfalls. Once young are fledged and soils dry, these sites may no longer be sensitive.

Techniques

Are there foraging tools and techniques that do no harm? The effects of harvesting on a tree or shrub can vary widely according to how it is done. Guidance can help steer new foragers toward approaches that will let them enjoy the activity year after year.

The scope for making trees and forests accessible as sources of food, medicine, and other materials is wide. Arborists, urban foresters, and foragers can be allies in caring for the urban forest and broadening the benefits it provides. 🌿

Citations

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