Foodscaping: revolution or evolution?[©]

B.G. Arthura

7624 Troy Stone Drive, Fuquay-Varina, North Carolina 27526, USA.

Marketing horticultural relevance is the best way to describe my passion of foodscaping. The idea is simple: add purpose to landscapes in developed areas such as suburban neighborhoods, office parks, school campuses and retirement communities—and engage landscape professionals to manage these properties. With an education in design, an enthusiasm for ornamental horticulture and a hunger for local, organically raised produce—I see potential to grow food in every cultivated space. From simple plants like garlic to low maintenance cover crops and grains—open mulch space is an opportunity for green industry professionals to develop recession-proof services for long term gains.

Cultivating food is more than a trend; it is a tremendous opportunity for the greenhouse and landscape industry to meet a demand that will not be going out of style. People have to eat! Moreover, local food sales in the US grew from \$5 billion to \$12 billion between 2008 and 2014 (Food Industry Research Firm Packaged Facts, 2017) (https://www.packagedfacts.com/about/release.asp?id=3717). The same study predicted local food sales will jump to \$20 billion in 2019—leading to new consumer recognition of the potential value of their home landscape.

Foodscaping is simply the integration of edibles in a traditional ornamental landscape. It is a means of covering open mulch space to reduce weeds and chemical usage—while contributing to the local food movement. This design strategy is meant to empower the green industry by positioning the products and services provided as a necessity rather than a luxury.

This is not a new idea; it is a modern take on the way past generations utilized land. Foodscaping is just a new term for a logical and easy way to grow meaningful amounts of food in landscapes that already exist. Thanks to experts like Rosalind Creasy the groundwork has been set for homeowners to understand how their yards could be used to grow beauty and bounty. By connecting the expertise of growers and landscapers to the local, sustainable food movement, horticulture professionals are poised to play a critical part in the literal food chain.

Woody ornamentals are a key component of foodscape design. Regionally appropriate flowering trees and shrubs offer structure and year round interest while representing the biological diversity needed to attract beneficial insects. The maintenance of the traditional (and often existing) plant pallets of trees, shrubs and perennials is well understood by landscape contractors. Ornamentals make up more than 70% of a designed foodscape (Figure 1).

The addition of perennial edibles such as ground covers of strawberries, blueberries hedges and living grape walls provide bounty with similar maintenance requirements as commonly used landscapes plants like hollies, azaleas and roses. Fruit and nut trees offer long-term harvests while contributing habitat for wildlife and shade. Herbaceous perennials, including asparagus and figs create seasonal bounty and textural contrast. Herbs have long been utilized in landscapes for their heat and drought tolerant qualities. By growing oregano, rosemary and thyme a landscape can offer high culinary impact and nectar for beneficial pollinators.

_

^aE-mail: brienne.gluvna@gmail.com



Figure 1. Foodscapes start with a professional landscape plan drawn to scale illustration by Preston Montague.

Seasonal edibles enhance landscapes by displaying recognizable plants that engage the public in a unique capacity. They also offer a multitude of health and economic benefits that positively impact communities. The inclusion of flashy annual crops like tomatoes, peppers, kale and chard add brilliant colors that blend beauty and abundant harvest. Growers and retailers can shape the foodscaping movement by offering interesting edible plants including heirloom varieties and AAS award winning selections. Choose plants that thrive in your region and promote the unique qualities that make your area the perfect climate for a specific collection of edibles and ornamentals. This will result in increased consumer confidence and success. With thousands of edibles to choose from—growers have the ability to promote a diverse collection of annuals, perennials, trees and shrubs, making every landscape an authentic space of beauty and bounty (Figure 2).



Figure 2. Foodscapes at Epcot are used to produce food for park restaurants.

Landscapes that present nutritional, ecological and aesthetic value, meet the needs of the evolving consumer. As the Millennial generation rises to be the largest group of American home buyers, now 34% for the fourth consecutive year (National Association of Realtors, 2017) (https://money.usnews.com/money/personal-finance/articles/2015/08/05/why-millennials-are-dominating-the-housing-market), meeting their landscape needs has become a profitable endeavor. However, it is not just the millennial age consumer that is demanding evolved products and services from the green industry. Many baby boomers, like my parents, are retiring and downsizing. They are approaching landscape services with a different sensibility and have a desire to make the most of less square footage. They are steering away from large lawns, high maintenance hedges and spray regiments. What they are looking for now is "garden-landscape fusion" with fresh tomatoes alongside the boxwood hedge and a ground cover of fresh salad greens adjacent to the knock-out rose. And they want all of this without the risk of exposure to herbicide and pesticide. They have grandkids and pets to protect!

Sustainable management in the form of weekly or monthly visits is the profitable, long term component of a foodscape. Following in line with the increased value created by the "Local and Organic" labeling of produce—foodscape maintenance is worth more than traditional "mow and blow" services. When the customer has the expectation of eating from the landscape they are willing to pay more – upwards of 50% higher!

Successful plantings always start with healthy soil. The addition of organic matter is

essential to ensure the plantings will thrive. Transitioning from salt based fertilizers and hard chemistries (fungicides, herbicides and pesticides) can seem overwhelming, but there are effective organic products and bio-control programs that can easily be applied to every landscape ensuring a safer world courtesy of green industry services.

With more than 110 million acres of suburban development in the USA, (USDA Extension Service Data, 2017) (https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=51) it is important that as we nurture this emerging market. We need to recognize that there are misconceptions revolving around how to grow food in modern landscapes. Many homeowners believe property values will go down with a rogue farmer on the cul de sac, hence restrictive HOA covenants. It is important to communicate and recognize that landscapes are not meant to be farms. Instead, the goal of a foodscape is to cultivate supplemental amounts of produce while meeting the aesthetic standards of the surrounding community.

Start by thinking "outside the box". Lumber encased beds are NOT the only way to grow food. In fact, these infamous raised beds are generally the cause for the "no food in the front yard" mantra of suburbia. Boxed beds can cause decreased production due to over planting which invites insect and disease to wreak havoc. Additionally this method of containing edibles creates monocultures, as our food crops lack bio-diversity. Home gardeners generally grow edibles from only four plant families: (1) *Amaranthaceae*: beats, quinoa, spinach and Swiss chard; (2) *Brassicaeae*: cool season crops such a broccoli, cabbage, cauliflower and kale; (3) *Fabaceae*: beans, peas and peanuts; and (4) *Solanaceae*: warm season crops like eggplant, peppers, potatoes and tomatoes.

Instead, look at the bed edges of common areas like foundation plantings and property borders. This is an ideal place to grow edible plants that help deter mammal browse. Arugula, basil, garlic, onions and potatoes are candidates for this open square footage. The bed edge location provides easy access for watering and harvesting. It is likely free of the woody ornamental root systems and is often not utilized. Most importantly, EVERY SINGLE landscape has a bed edge. This adds up to millions of square feet that could be used to grow something consumable.

This approach of engaging green industry professionals in food production offers a solution to the food miles crisis while helping eliminate food deserts around the country. A newly emerging market revolves around the harvesting, processing and distribution of the crops grown in professionally managed foodscapes. Commonly designed like community supported agriculture (CSA), produce can be handled in a number of ways including weekly crop shares distributed to paying members. Another effective approach is partnering with local restaurants. Programs such as Ample Harvest (http://ampleharvest.org) can be utilized to donate produce directly to food banks serving the community.

As professional horticulturist I strive to meet the needs of a growing population and focus on ways to extend horticultural relevance in the American society. I am proud to see plants being recognized for all of the attributes they represent: beauty, ecology, health, wellness, nutrition and lifestyle. Foodscaping is a design technique that embraces the heritage of home gardening while developing a new level of sophistication for modern day living. Green industry professionals are poised to become more essential than ever by designing, installing and maintaining foodscapes that will feed our communities in a sustainable way. Join the Foodscape Revolution and harness the sun, soil and irrigation systems of the everyday landscape and start using your skills to nourish community while setting a high standard for beautiful, ethical land care!

Biography: Brie Arthur is an author and public speaker residing in Fuquay Varina, North Carolina (Figure 3). Her debut book, *The Foodscape Revolution* was published in 2017 by St Lynn's Press. Formerly the grower and propagator at Plant Delights and Camellia Forest Nurseries, she is nationally recognized for her work with the PBS television show: *Growing A Greener World*. Brie studied landscape design at Purdue University and works as a consultant to landscape contractors and wholesale growers. She is the national director of GWA Region IV, sits on the board of the North Carolina Botanic Garden Foundation and is on the executive committee of IPPS SR.



Figure 3. Brie Arthur is an author and public speaker residing in Fuquay Varina, North Carolina. Photo credit: Elizabeth Galecke.

Literature cited

 $Food \quad Industry \quad Research \quad Firm \quad Packaged \quad Facts. \quad (2017). \quad https://www.packagedfacts.com/about/release.asp?id=3717.$

National Association of Realtors. (2017). 2017 home buyer and seller generational trends study. https://money.usnews.com/money/personal-finance/articles/2015/08/05/why-millennials-are-dominating-the-housing-market.

USDA Extension Service Data. (2017). https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=51.