Returning to Their Roots

A look at how scalable agriculture can create more sustainable suburban communities.

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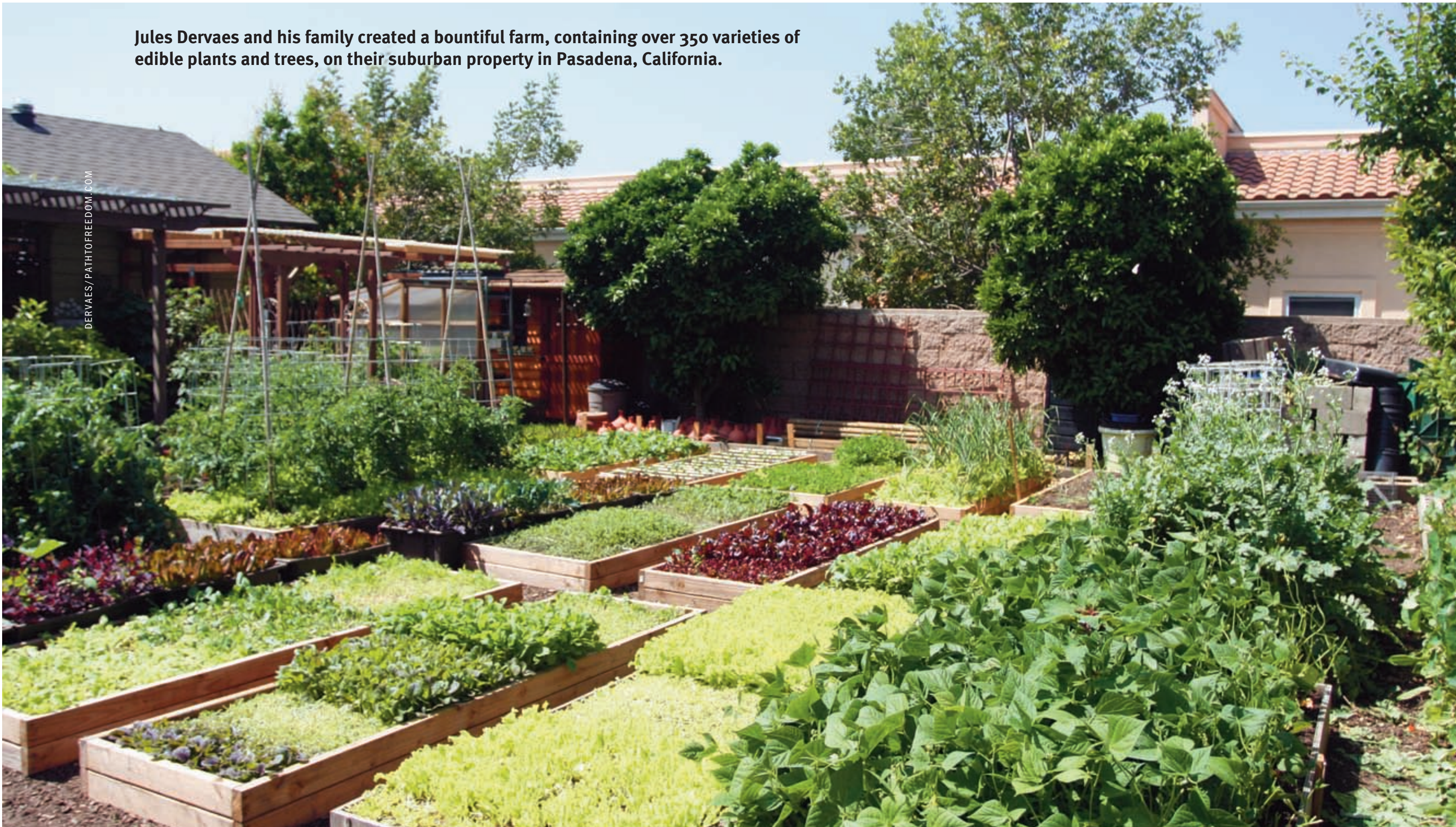
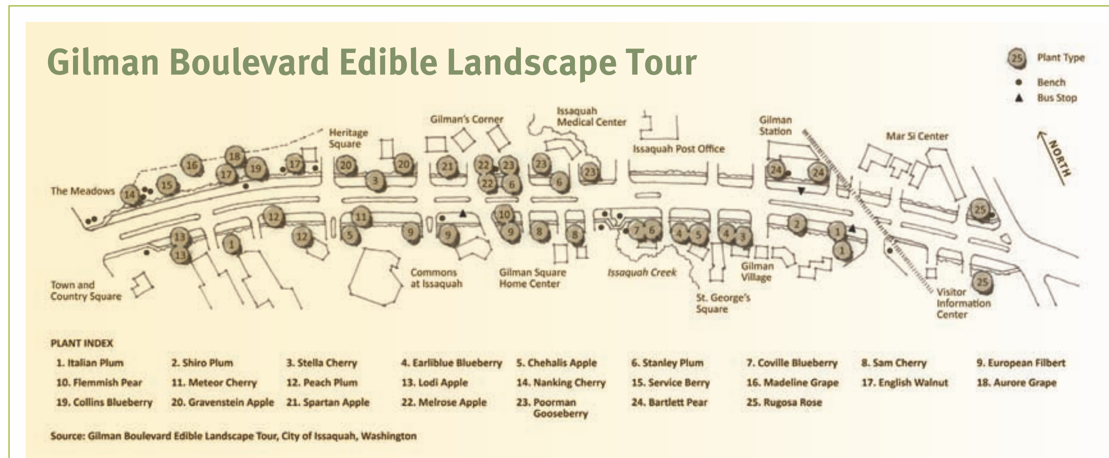
AMERICAN GROCERY STORES are a land of plenty, built on illusion. Shoppers are accustomed to seeing grapes for sale in February, melons in December, apples year-round—and have come to expect nothing less. The grocery store has become the epitome of the instant gratification society that we have created. However, the cost of sustaining that illusion has resulted in major environmental and social consequences. Changes need to occur.

A growing concern throughout the country is the concept of food miles—the distance food is transported from the time of production or harvest until it reaches the consumer. In the United States, the average grocery store's produce travels nearly 1,500 miles (2,400 km) between the farm and the buyer's refrigerator. Over 20 percent of the country's fresh fruits and vegetables are imported annually, and even though broccoli is likely



Jules Dervaes and his family created a bountiful farm, containing over 350 varieties of edible plants and trees, on their suburban property in Pasadena, California.

DERVAES/PATHTOFREEDOM.COM



The Gilman Boulevard Edible Landscape Tour provides visitors with a variety of fruit and nuts, including Stella cherries, Lodi apples, European filberts, and Bartlett pears, for up to six months a year.

grown within 20 miles (32 km) of most U.S. homes, the stalks consumers place in their cloth reusable bag at the grocery store traveled an average of 1,800 miles (2,900 km) to get there. Close to 10 percent of red meat is imported from foreign countries, including locations as far away as Australia and New Zealand.

For decades, communities have moved farther and farther from working agricultural lands, creating unsustainable patterns of suburban development. In the attempt to reduce the country's ecological footprint, many city planners, developers, and environmentalists are seeking ways to improve the sustainability of suburban communities.

Typical suburban land uses—residential, commercial, and office—were viewed as independent from agricultural uses. However, agriculture does not have to mean factory farming, crop dusting, or heavy spraying. The practice of organic gardening, an expanding segment of the agricultural world, can be introduced at a variety of scales into the suburban setting as a compatible and beneficial use of land. Suburbia is in the unique position to revisit and incorporate its agrarian roots.

Suburban Roots

Many suburban areas began life as farmland, cultivated by early settlers, homesteaders, and family farmers. As development pressures increased and the rise of the automobile expanded people's employment and housing options, agricultural lands were acquired and developed into suburban housing tracts.

The suburban pattern of development proved popular and, after the end of World War II, the pace of suburbanization accelerated, accounting for some 84 percent of the nation's population increase during the 1950s. Despite its popularity, suburbia has been widely maligned as the most unsustainable pattern of development.

The suburbs find themselves in planning purgatory: they are too dense to be rural, resulting in the import of almost all their food stocks, and are too sprawling to be urban, necessitating travel to a system of dispersed distribution points to obtain the imported food. However, the fact remains that most Americans reside in suburban areas, and suburban population growth has continued to outstrip that of central cities.

The logical questions then become: How do we create a sustainable suburbia? How do we capitalize on the very things that make suburbia unsustainable? How do we get suburbia to return to its roots?

Suburbia offers a unique opportunity to reintroduce agriculture into the everyday environment. Unlike urban areas, where agriculture projects can be found in the form of a few rooftop gardens or small plots of undeveloped land, suburbia offers a vast array of arable land, such as:

- front-, back-, and side yards of low-density, single-family lots;
- drainage channels and electrical transmission corridors;
- street medians and parkways; and
- schoolyards, churches, and public parks.

Scales of Agriculture

These and other opportunity areas for suburban agriculture can be addressed at six scales or levels.

▷ **Regional/jurisdictional.** At the broadest level, governmental agencies can adopt and implement policies and programs that celebrate the benefits of agriculture, preserve prime farmlands, and dedicate funds to introduce agricultural uses to suburban communities.

▷ **Master-planned community.** In a trend that appears to have originated in the eastern United States, a handful of master-planned communities have incorporated working farms and large community gardens. The food products grown or raised within the community can then be sold to the local residents and businesses.

▷ **Underused land feature.** Large swaths of land sit idle in the suburban landscape, overlooked or fenced off but holding untapped soil that could support acres of small organic farms. Key areas include drainage channels and electricity transmission corridors, many of which are already used for nursery sites.

▷ **Neighborhood.** Community gardens are springing up in existing neighborhoods at schools, parks, or shopping centers to foster a greater sense of community and introduce organic produce.

▷ **Institutional.** Many colleges and universities incorporate working farms, often open to the public, as part of a larger educational program. Small farm plots and programs in primary schools expose younger children to the complex systems of the natural world.

▷ **Individual residence.** While the smallest unit of suburbia is the individual residence, this is perhaps the scale where the greatest impact can be made. The low-density nature of suburbia, with its blanket of lots covering 5,000 to 10,000 square feet (465 to 930 sq m), promises hundreds of thousands of acres of land that is already irrigated and maintained.

The two least-explored scales of suburban agriculture are the underused land feature and the individual residence. Two examples of each follow to illustrate the potential of suburban agriculture and provide models for future work.

Underused Land Feature

Examples of agricultural use of an underused land feature can be found in Issaquah, Washington, and Long Beach, California.

▷ **Gilman Boulevard edible landscaping.** In 1985, the small town of Issaquah was in the process of developing a new commercial area. Working with landscape architect Richard Haag, the city was looking for something different. According to city arborist/horticulturist Alan Haywood, the resounding feeling and primary motivation at the time was that the city did not want to be like neighboring Bellevue; it wanted to maintain its identity and pay homage to its agricultural history. The result was a mile (1.6 km) of what few cities will even consider: edible landscaping.

Gilman Boulevard has more than 25 different shrubs and trees, producing fruits and nuts for the public to sample up to six months of the year. "Education and a staggered availability of produce were primary in Haag's design of the plan," says Haywood.

THE PLANNING CENTER

Plots at the Long Beach Community Garden in Long Beach, California, use mulch and manure from community partners and local stables.

Issaquah now offers an edible landscaping tour along the corridor. "People love to take the walk, become educated about the shrubs and trees, and sample the produce," he notes.

However, Haywood also cautions that the project requires intensive maintenance, and a similar project would need to be carefully planned. Not all the trees and shrubs on the walk are adapted to western Washington, and the city has had problems with pest control and fungus in the cool, humid climate. "If the city undertook this project again, its first consideration would be the utilization of more disease-resistant

trees and shrubs," Haywood says. "However, the project is a beautiful thing."

▷ **Long Beach Community Garden.** The Long Beach Community Garden (LBCG) was originally conceived on the site of a former trustee camp, a self-sustaining facility used to incarcerate people convicted of minor crimes. In 1974, a group of Long Beach seniors petitioned the city to allow them to create a community garden on the 6.5-acre (2.6-ha) site and the city agreed. Several decades later, the LBCG was moved to a different plot—an 8.5-acre (3.4-ha) site once used as a tree farm to supply trees and shrubbery for the city's streets.

The garden now has 308 members with 86 people on a waiting list, says Lonnie Brundage, first vice president of the LBCG. "Most of the people who are members are growing crops in the garden to put food on their tables, especially in these tough economic times," he says. "We have a lot of families, but some of our older members grow produce to supplement their Social Security incomes." Over the years, the LBCG has received significant support from the Long Beach Parks, Recreation, and Marine Department, and is currently the largest organic community garden west of the Mississippi River.

While the LBCG has a rather large lot for a suburban location, Brundage says that small, underused plots of land, ones that the city deems too small for development, are dotted throughout Long Beach and would be ideal for growing crops.

"The entities that have land in most suburban and urban communities are churches and schools," notes Brundage. "What is great about these sites is there is usually very little cost associated with starting up a community garden because generally there is water nearby. It might just be as simple as extending a water line to serve the plot.

"There are several churches here in Long Beach that have dug up their lawn areas and turned them into community gardens to serve the members of their congregation," says Brundage. "Many of our schools have small gardens that are used for educational purposes, but that could be enlarged and used to serve families within the school district.

"I believe we should be looking at our government buildings, which generally have large asphalt parking lots that are the size of two and three city blocks and are usually only 50 percent full," adds Brundage. "Our tax money pays for those lots, so it makes sense to dig up the asphalt, green the area with produce, and let those parcels of land help feed the community."

Individual Residences

Examples of the use of individual residences for suburban agricultural use can be found in Pasadena, California, and Boulder, Colorado.

▷ **Path to Freedom.** Since 1985, Jules Dervaes and his three adult children have gradually transformed their 8,700-square-foot (800-sq-m) Pasadena property, which includes a 1917 craftsman bungalow, into a bountiful suburban homestead.

Its central feature is a 4,300-square-foot (400-sq-m) organic garden containing more than 350 varieties of edible and useful plants and producing more than 6,000 pounds of fresh fruits and vegetables annually. The garden is a testament to Dervaes's belief that small properties can be used efficiently to "produce in every way possible." For example, he continues, "A fence line is not just a marker for privacy, but an opportunity to grow peas and beans."

The expansive garden, however, is just one illustration of Dervaes's holistic approach to independent living in a suburban environment. The Dervaes family also raises chickens, ducks, and goats, not just to provide eggs and milk, but also to manage the garden waste. The animals eat leftover greens and, in turn, supply fertilizer for the garden. The family's home features technological elements, including solar panels, energy-efficient appliances, and a biodiesel processor, to decrease reliance on nonrenewable energy resources. And the Dervaeses purchased these and other items with money made from the sale of homegrown, specialty salad greens to local restaurants.

While the Dervaeses move toward self-sufficiency, they recognize the importance of community and interdependence. The homestead adapts well to its context, and the frontyard landscaping is a carefully considered blend of herbs, vegetables, fruits, and flowers that provides visual appeal and continuity with the surrounding single-family homes. "I give a nod to the city lifestyle and then try to change people's minds about responsible use of the land," acknowledges Dervaes.

▷ **Community Roots Urban Gardens.** Kipp Nash wanted to find a way to support himself and his family through agriculture, but his suburban neighborhood in south Boulder did not provide the typical rural acreage. So Nash founded Boulder's Community Roots Urban Gardens and began transforming front- and backyard spaces into miniature farms, with produce sold either at the Boulder Farmers Market or through the Community Roots CSA (community-supported agriculture) program. All volunteers and participating homeowners receive a share of the produce as well.

In addition to the environmental and nutritional benefits that locally grown food is providing, Nash says the main idea is "that we support each other on a community scale. In fact, instead of community-supported agriculture, I like to term this 'neighborhood-supported agriculture.' This project was started intentionally for the production and distribution of locally grown food and the development of neighborhood interaction and community." Members, volunteers, and interns work together to tend the gardens, share knowledge, trade recipes, and simply connect.

Community Roots continues to expand, now involving the yards of 12 homes and a church. Some 25 families, in addition to the families of the contributors, are now fed by what amounts to less than one acre (0.4 ha) of land.

Nash sees energy and support for similar initiatives developing. "I've heard of many similar programs beginning to develop in Denver, Colorado Springs, and Fort Collins," he says. "There is a huge trend toward community building and environmental responsibility."

Nash recently started the Community Fruits backyard harvest program, in which members and volunteers glean fruits from residential backyards that would otherwise be left to rot because the homeowner lacks the time or the ability to pick it. The fruit is then distributed through the CSA. Community Roots also donates a certain share of CSA produce to low-income families.

Conclusion

For too many years, agriculture has been removed from the people's everyday life. Most Americans have little concept of where food comes from or how much energy it takes to bring it to market. The price of convenience and unrestricted variety may be too high for the planet to bear. Landmark legislation in California—the Global Warming Solutions Act of 2006—may be only the first of many major government acts nationwide that mandate greenhouse gas emission reductions to discourage the conventional pattern of suburban development.

The suburbs, however, can be made more sustainable. Reintroducing agriculture into suburbia's unique land resources decreases the cost of food production and transport and improves the health of suburban communities and their residents. Suburbia can save itself by returning to its agricultural roots. **ULG**

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KIPP NASH, COMMUNITY ROOTS URBAN GARDENS

A dozen homes and a church in Boulder, Colorado, have transformed their suburban lawns into aesthetically pleasing edible landscapes with the help of Community Roots Urban Gardens, a program founded by Kipp Nash.