As a growing portion of the urban open space network, community gardens and gardeners are contributing to land preservation, access to open space, and sustainable uses of usually otherwise vacant land. This typology promotes healthy communities and provides food security for many. Aside from the main function of food production, community gardens have exhibited a plethora of ecological, social, and economic benefits. Community gardens contribute to an increasing diversity of land use by both humans (cultural traditions) and biota (biodiversity). More specifically this includes aesthetic improvements, a reduction in transportation costs, increased soil health, increased public health; and increased interactions between humans, other life forms, and biological processes.

Introduction and Definition

In 1996, the American Community Gardening Association estimated that there were more than 6,000 community gardens in thirty-eight U.S. cities (including Boston, Newark, New York, Pittsburgh, Philadelphia, and San Francisco). Of these, more than 30 percent, or about 1,800 community gardens, were started after 1991, reflecting the growing trend of interest. Today the number has been estimated as high as 10,000.

According to Mark Francis, a community garden/park is defined as:
• neighborhood space designed, developed, or managed by local residents on vacant land;
• possibly including viewing gardens, play areas, and community gardens;
• often developed on private land;
• not officially viewed as part of open space system of cities;
• often vulnerable to displacement by other uses such as housing and commercial development

Current and future measures to secure this land-use are changing that definition.
“Along with providing a source of food, a deeper understanding of and dependence on natural systems result.” ~Erin Williamson, A Deeper Ecology

Context

Urban Agriculture: Community gardens fall under the umbrella of urban agriculture, defined as “the growing, processing, and distribution of food and other products through intensive plant cultivation and animal husbandry in and around cities.” Community gardens belong to a system linked to the larger urban context of food production and distribution. Community gardens join urban commercial farms, market gardens, and private gardens in this category.

Community Gardens: The distinguishing characteristic is that community gardeners grow their produce on shared lots that have been divided into smaller plots of land for each household’s use (usually for a small fee). Distribution of land does not come without much organization and program development to coordinate gardeners, manage land and resources, and facilitate educational or social activities and disputes. Some gardens may have larger goals of education, community supported agriculture entrepreneurship, or food bank gardening.

Users and Land Tenure: As a grassroots effort, these gardens are often established by its own users, i.e.: individuals, philanthropic groups, educational and social reformers, civic improvement groups, governmental agencies, environmentalists, among others. The process may utilize local non-professional development, but also rely on a network of citywide, national, and international sources (staffed organizations and policies) for advisory, technical, financial, and political support.

Some primary users include (but are not exclusive to) immigrant populations, elderly, low-income / public housing residents, and more. These lots may be owned by the municipality, an institution, a community group, a land trust, or some other entity. They may be leased private land, but the movement is towards public ownership to secure permanency as open space. Plots may be located on institutional grounds, vacant land, right of ways (steep slopes, dead ends, under power lines), or old grounds (military bases, schools, landfill).

Ecological Benefits: Bringing sustainable agriculture into the city relieves some pressure on rural farmlands, and the necessary expenditure of fossil fuels for food transport. The outside farmlands would not have to be cultivated as intensively, and could perhaps be reestablished as wildlands. When we examine water flow, the garden habitat serves as permeable surface. Efforts could also be made to harness rainfall for irrigation. Other benefits include:

- Providing food and shelter for birds and insects
- Preserving heirloom flowers and vegetables
- Organic farming practices - prevent introduction of chemicals into the system
- Compost (cycling outputs back into the system)
- Ecological and Environmental Ethic (Stewardship)

Socio-economic Benefits:

- Physical Health and Recreation: nutritious food access, and active living - “a way of life that integrates physical activity into daily routines”
- Psychological health (Kaplan research, restorative)
- Social interaction and self-reliance
- Empowerment – community activism (associated youth training programs)
- Cultural identity (ethnically-appropriate foods)
- Social Justice (access to fresh food and open space)
- Social cohesion between generations and ethnicities
- Economic opportunity and security
- Increased land value / Revitalize neighborhoods

“Community gardens build and strengthen the community, promote environmental stewardship, provide economic opportunity and security, and increase social equity.” ~P-Patch Strategic Plan
Elements
(in somewhat order of importance)

**Food Production (Biophysical):**
- Soil (amendments usually required)
- Seeds and tools
- Sunlight (sun exposure, not a shady area)
- Water (sources from spigots, drip irrigation)
- Amendments (Compost + Natural Fertilizers, Fish Emulsion)
- Well-Defined plots (raised with borders; typically 10’x10’, 10’x20’)

**Access:**
- Proximity to residences, parks, community centers, schools
- Proximity to bike paths
- Parking for Car/Bike
- Paths; Fencing + Gates
- Physical ability (ADA accessibility: ramps, wide paths, raised beds; sensory gardens; children’s);
- Signage (may be in different languages, for wayfinding and educational)
- Food Bank plots / Weighing + Pickup station
- Access for maintenance vehicles

**Communication / Social:**
- Central area / plaza;
- Seating areas / picnic tables
- Mailboxes or bulletin boards / kiosks
- Toolshed / Mini-Kitchen
- Firepit / Pig roasting pit
- Dinner bell / Gong ...

**Art in the Garden:**
- Grassroots “organic”
- Incorporating art with functional elements
- Mosaic, cob, scarecrows, water spigots...

**Design:**
- User-initiated: low-tech and evolving
- Professional: often necessary when community garden is part of a park system or serving other programs and institutions (public sector)
- Landscape architects – pro bono and as part of Parks and Recreation Departments, institution or nonprofit organization
- Other professionals such as engineers.

**Maintenance:**
- Different from parks and other public places because most of the maintenance falls on its users. City gets a “good deal” through free public labor (gardener volunteers)
- Larger equipment. Bringing in trucks for amendments or managing large compost/debris loads
"Flowers grow in flower gardens
and vegetables grow in vegetable gardens...

Acquisition / Implementation Mechanisms

Community garden programs are typically administered by the community development or parks department. The challenge for garden implementation is that there are no dedicated government grants for community garden development. Community gardens were also not officially viewed as part of open space system of cities. Rather they were viewed as an opportunistic interim use of underutilized land (Lawson, 2005). For a while, gardens also met the challenges of the parks departments arguing that gardening was a private use on public land. But just the same golf courses and tennis courts can be considered as “private recreation” on public land.

Today, local governments can write gardens into their general plans establishing them as permanent land uses. Madison, Philadelphia, Portland, Seattle, and Somerville reported provisions for community gardens in their city plans.

As an exemplary example, Seattle’s city-wide community gardening program is under the Department of Neighborhoods. There is a P-Patch office staff and link with the non-profit, P-Patch Trust (see Case Study).

Local governments also need the support of private foundations to increase garden funds. Existing federal programs, such as those linked to nutrition and education, will need to be expanded and reoriented to support gardening. New federal programs through the US Departments of Agriculture (USDA) and Housing and Urban Development (HUD) will need to be created specifically to fund gardening initiatives. And most importantly, they will need the commitment of gardener volunteers.

Case Study: Seattle P-Patch Program

Founded in 1973 with ten sites, Seattle’s was one of the first community organic gardening programs in the nation. The concept for the Seattle P-Patch Program was formed in 1971 when a University of Washington student, decided it was important for young people to learn how to grow vegetables. The “P” was in honor of the Picardo family, who made the original land available. But it also stood for “passionate people producing peas in public”. Today as a model for other cities, it is the largest municipally managed community gardening program in the States.

In 1974, City of Seattle Human Services took over the entire administration. In 1997, the P-Patch Program moved to the Department of Neighborhoods Community Building Division. All P-Patch’s are managed and maintained with the partnership of the City, P-Patch Trust, and countless volunteers. The Cultivating Communities project was begun in 1995 to address a need by Seattle Housing Authority to establish safe, healthy communities and economic opportunity through the development of community gardens and community supported agriculture (CSA) enterprises in public housing. In the first year, seven community gardens were developed. During 1996 and 1997 the project added two income-generating gardens, continued to build new community gardens, and worked with gardeners to develop leadership to help manage and operate the gardens.

Today P-Patch includes about 62 gardens, and the number is growing to about four new gardens per year. The program owns 17 acres that support about 2000 garden plots (ranging from 100-400 square feet each). Visitors will find burgeoning gardens along steep slopes, under powerlines, and atop old city dumps and military bases.
Pattern:

The Pattern Language suggests that for vegetable gardens of sustenance, one should set aside one piece of land either in the private garden or on common land. About one-tenth of an acre is needed for each family of four. Make sure the vegetable garden is in a sunny place and central to all the households it serves. Fence it in and build a small storage shed for gardening tools beside it. May be part of a system of Fruit Trees, Common Land, and contain Compost Provisions. (Vegetable Garden, Alexander, The Pattern Language).

In order to produce all the food needs of a single person, a 4000 square foot bed is necessary, provided they are vegetarian (John Jeavons, authority on intensive vegetable cultivation). Usually, produce is grown simply as a supplement to a one’s food needs.

The P-Patch Strategic Plan requests one garden for every 2500 households in dense neighborhoods, with the addition of four new gardens per year. There should also be at least one community garden in every Urban Village.

Case Study: Philadelphia Green

Philadelphia Green is one of the largest citywide garden advocacy programs in the nation. It is funded in part by the Philadelphia Flower Show, as well as grants, contracts and donations. It has had one of the strongest and most comprehensive programs in the nation. In 1978, shortly after its founding (1977), The program hired ten full-time horticulturists for four program areas of vegetable gardens, sitting gardens, street-tree planting and window-box/ tire-urn plantings.

From 1980 to 1993, Philadelphia Green developed eight community projects under its Greene Countrie Towne program- name derived from William Penn’s plan for one acre of cultivated land for every ten acres of development.

In 1995, with over 15,000 vacant lots and 27,000 vacant structures in the city, Philadelphia Green started promoting collaborations with community development corporations in open space efforts. This resulted in the New Kensington Project open space management plan that incorporated several elements of vacant land management. By 1999 community residents had taken part in cleaning 370 parcels, building sixty-two community gardens, improving 158 side yards, developing a demonstration garden, and initiating various education programs. Today, Philadelphia’s gardening future includes the ownership of twenty-one gardens through the Neighborhood Gardens Association/A Philadelphia Land Trust.
Case Study: New York City Green Guerillas

Green Guerillas, founded in 1973, was first to organize advocacy of community gardens in New York City.

The Liz Christy garden in the Lower East Side received the first lease for a community garden. Today it is preserved under the Parks Department, abuts a new housing development plan, and features a pond and a wildflower habitat, a grove of weeping birch trees, fruit trees, a dawn redwood, vegetable gardens, berries, herbs and flowering perennials.

In 1978, Operation GreenThumb was established to administer programs and issue leases of city-owned property to community groups for one dollar per year for establishing neighborhood-sponsored pocket parks, children’s play areas, and community gardens.

In 1996, six gardens in Brooklyn and seventeen in Harlem had their leases cancelled to make way for housing. In response to these losses to subsidized housing developments (much-needed), activists strategized ways to develop plans that blended housing with gardens.

Clinton Community Garden in New York City illustrates an innovative strategy for preservation that resulted in ownership. This locked garden of ninety plots plus communal space distributed 400 keys to neighborhood residents. When the city decided to sell the parcel, Trust for Public Land (TPL) and Green Guerillas, among others, acquired the necessary money to save the garden by selling $5 per square inch. Again in 1999, TPL came in to purchase 113 gardens. TPL acts as an interim land trust and the goal is to develop multi-neighborhood land trusts to own the sites permanently and maintain the gardens into the future.
Community Gardens

Sand Point Magnuson Park, Seattle - A Community Garden within a City Park (previous military base). Notice the proximity to Dog Off-Leash Area.

(source: map-Magnuson Park, photo-Vanessa Lee)

Resources


American Community Garden Association
www.communitygarden.org

City Farmer, Canada’s Office of Urban Agriculture
www.cityfarmer.org

Green Guerillas
http://www.greenguerillas.org

Municipal and Research Services Center of Washington
http://www.mrsc.org/subjects/parks/ComGarden.aspx