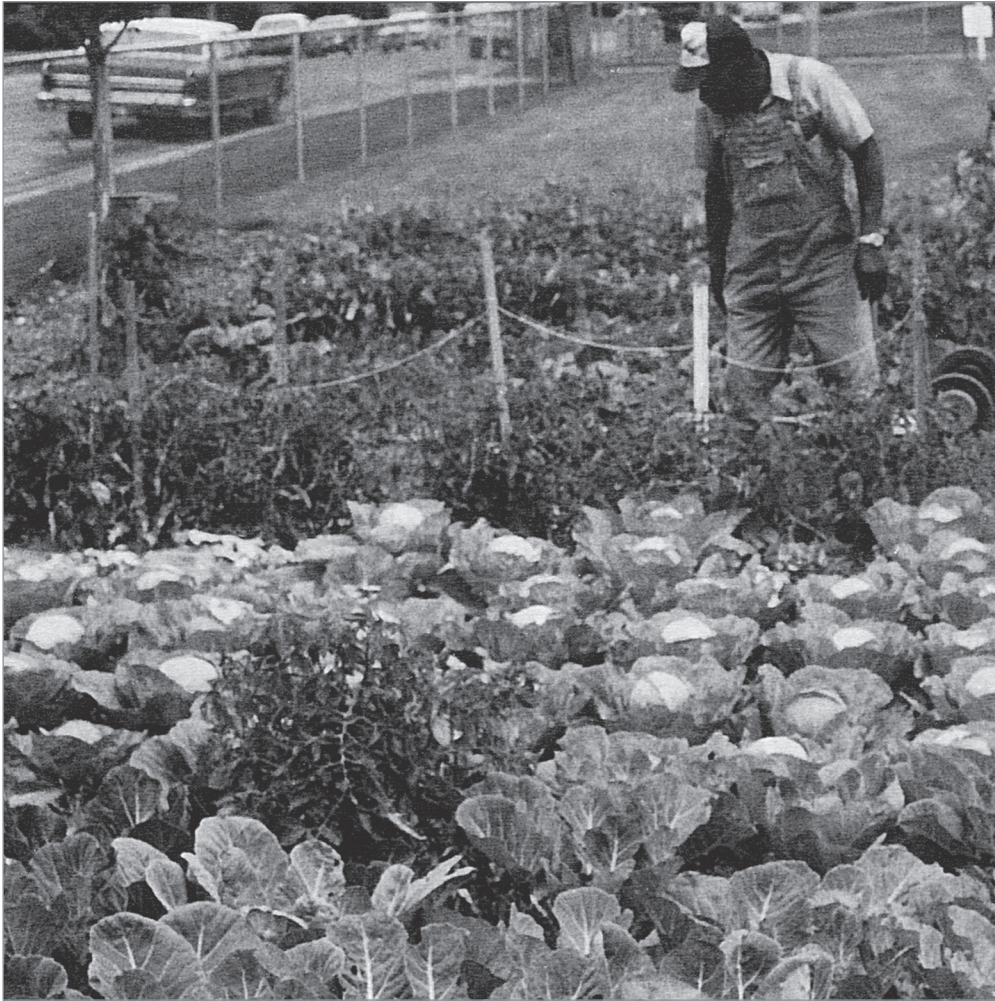


What good is community greening?

DAVID MALAKOFF • CGR 1995



YOU'VE SPENT AN HOUR tending your tomato vines, but now it's time to go to that meeting about the garden. They are threatening to take the garden away, to bulldoze the lot and erect an electric power substation where flowers now dance in the breeze and the neighbors gather to admire old Bill's pumpkins.

At the meeting, everyone is polite and proper until . . . until that dour-faced junior executive rises with her

Photo • Gardener Elvin Collins, Denver, Colorado (Colorado State Coop Extension photo, CGR 1992)

Powerpoint presentation and her charts and graphs, and "proves" how your garden is more "valuable" to the community with a concrete slab and 10 tons of machinery slapped on top of it.

"Look," she says in her best this-is-between-you-and-me voice, "What good is that little patch of weeds and carrots anyway?"

Now, you're angry. You jump to your feet and start to speak. "What *good* is our garden?" You ask in disbelief. "I'll

tell you what good it is . . . ” But after you’ve had your say – after you’ve talked about quality-of-life, commented on the pride and tranquility that has come from coaxing new life from the soil, and told the story of how the neighborhood really turned around after that trash-filled lot was transformed into a garden – the junior executive only looks at you blankly.

“Those are nice stories,” she says. Then, gesturing to her charts and graphs, she asks: “But where are your facts and figures . . . where is your *proof*?”

What good is community greening? And how do you prove it?

The answers to these basic questions are obvious to most community greeners, whether they are gardeners, tree planters, or open-space advocates. They know from their own experience that plants are good for people and their communities. Proof? They’ve seen it with their own eyes.

But, these days, speaking from experience often isn’t enough to convince people that spending time and money on plants and green space is a good idea. Increasingly, politicians, developers, and taxpayers demand evidence, facts and figures showing that greening is a good investment.

Luckily for community greeners, researchers have made some remarkable discoveries in recent years that powerfully demonstrate the benefits of greening. The discoveries come from a dizzying array of disciplines, ranging from psychology and economics to sociology and medicine. They confirm that people, even in this technological age, need plants for more than just food, and need green space for more than just pleasure.

In the words of University of Michigan psychologist Stephen Kaplan, the studies prove that “Nature is not just ‘nice’ . . . It is a vital ingredient in healthy human functioning.”

While highway builders and developers can produce

reams of data to demonstrate the social and economic benefits of their projects, greeners are often armed with little more than heart-warming anecdotes about cabbages sprouting amidst urban squalor.

The lack of hard data on greening “can create the impression among decision-makers that there is an absence of tangible, credible evidence regarding the benefits,” say Roger S. Ulrich and Russ Parsons of Texas A&M University. “Unfortunately, intuitive arguments in favor of plants usually make little impression on financially-pressed local or state governments, or on developers concerned with the bottom line. Politicians, faced with urgent problems such as homelessness or drugs, may dismiss plants as unwarranted luxuries.”

Greeners got a painful reminder of this fact of life in 1993, when Congress essentially eliminated funding for the US Department of Agriculture’s Urban Gardening Program, which helped over 150,000 low-income gardeners in 23 of the nation’s cities.

MODERN RESEARCH

Luckily, today there is more evidence than ever before of the benefits of greening. Diane Relf, a horticulture professor at Virginia Polytechnic Institute, who studies “people-plant interactions”, says people-plant research generally falls into one of several broad categories.

One category is the study of “background theories” which try to explain the underlying reasons why people have positive responses to plants and green spaces. Ulrich and Parsons, for example, theorize that people are overwhelmed by the noise, movement, and visual complexity of the modern world, and that quieter, less chaotic plant environments such as a gardens reduce stress. Research by Ulrich and others suggests that human evolutionary history may help to explain why we like plants and green spaces.

Our ancestors living on the broad African plains may have learned to associate trees and plants with food and water, creating positive feelings that we still carry today. Eminent Harvard biologist Edward O. Wilson and Yale professor Stephen Kellert assert in *The Biophilia Hypothesis* (Island Press, 1993) that human evolutionary history makes a human connection with nature a necessity, not a luxury.

A second type of research into people-plant interactions has focused on how individuals respond to plants and green spaces. Among the many remarkable results of this research are findings by Ulrich and his colleagues that *simply looking at a plant* can reduce stress, fear, and anger; and lower blood pressure and muscle tension. Other studies have found that prison inmates in cells with windows overlooking greenery need less medical care and report fewer symptoms of stress, such as headaches, than other inmates.

Other researchers, such as Mary Honeyman of the University of Illinois, have documented that people shown urban scenes with some vegetation recover more quickly from stress than people exposed to urban scenes without vegetation. In a conclusion likely to seem wildly understated to most community greeners, Honeyman concluded that “the introduction of green vegetation into the urban landscape may be of important psychological benefit to humans.”

Stephen and Rachel Kaplan have also extensively studied how individuals respond to natural settings, especially the role nature plays in reducing mental fatigue; improving ability to focus attention on important tasks, such as managing work; and easing the stress of day-to-day life. The Kaplans believe that nature provides the fatigued human mind with a “restorative” change of pace. A visit to even a small garden, for example, gives a person the feeling of “being away” from a stressful setting (such as work). Vegetated landscapes appear to offer “fascination” stimulus that evokes seemingly effortless mental activity, as opposed to the strenuous, focused mental activity required for work tasks.

Stephen Kaplan says that a 1990 study by Bernadine E. Cimprich highlights the restorative value of nature. Cimprich, a nurse working with cancer patients, noticed

that even patients with excellent medical prospects reported a severe inability to focus and had difficulty managing their lives after leaving the hospital. Patients who agreed to regularly participate in restorative activities such as gardening, however, rapidly improved. They also returned to work and to their normal lives more quickly than patients who did not participate in restorative activities.

PEOPLE-PLANT INTERACTIONS

A third category of research into people-plant interactions, the category that has attracted the most interest from community greeners, involves the role that plants play in the development of healthy human communities.

According to Relf, researchers have found that plants and greening activities play at least three distinct roles in community development. Plants, gardens and greening:

- Provide a more livable environment by controlling physical factors such as temperature, noise, and pollution.
- Help create a community image that both residents and outsiders view as positive.
- Create opportunities for people to work together to improve communities.

Relf and others note that these three factors translate directly into tangible economic and social benefits, such as reduced crime, higher property values in greened areas, nutritious food from community gardens, and increased business activity in attractive green neighborhoods.

Anyone who has retreated from the hot asphalt of a city street to the shade of a nearby tree understands the importance that plants play in regulating environmental conditions. Energy-saving shade is not the only benefit that plants offer, as a landmark 1994 study of Chicago’s urban forest found. They also play a valuable role in reducing air pollution, controlling climate, and saving energy.

Such physical benefits help explain why a variety of psychological studies suggest that plants help foster positive community images. In a 1985 study of apartment dwellers, Stephen Kaplan found that “the most important factors in neighborhood satisfaction” were the availability of nearby trees, well-landscaped grounds, places for taking

a walk, and opportunities to grow plants. All these “were significantly related to the sense of community.”

In light of these findings, is it any surprise that people are willing to pay more – sometimes a lot more – to have plants in their surroundings?

BUILDING COMMUNITIES

Researchers admit that it is hard to prove the theory that gardens and greening create a friendlier and more cohesive community, better able to tackle the many problems of modern life, because evidence is often anecdotal, incomplete, or tantalizingly subtle.

“How exactly do you put a dollar value on a person’s self-esteem or the fact that someone feels better about driving through your neighborhood?” asks Diane Relf.

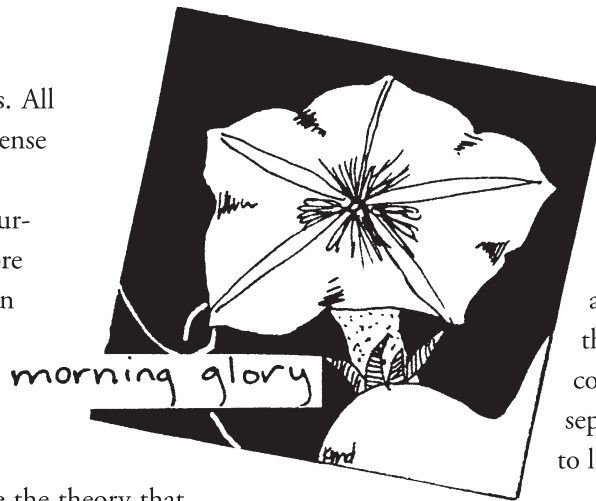
Nonetheless, she and others say there is plenty of evidence that greening can help residents pull together and improve their community.

Mark Francis, a professor at the University of California at Davis (and past Board member of the ACGA) has done extensive studies of the community benefits and perceptions of parks and gardens. He found that gardens built and maintained by community residents have “unique social and economic benefits.”

“The spaces provide opportunities for neighborhood residents to develop and control part of their neighborhood, an advantage not afforded by traditional parks,” he concluded after a 1987 study of park and garden users in Sacramento, California. “Gardens are active places that people make themselves, use for work and socializing, and can “love”.”

Research by Jill Roper, a graduate student at Rutgers University, confirms the theory that community gardens get people talking to each other. Roper’s interviews with participants in the New Brunswick Community Gardening Program in New Jersey reveals that having a garden significantly increased the frequency of interaction among the gardeners, even outside of the gardening season.

As Charles Lewis says:



“A community activity such as gardening can be used to break the isolation, creating a sense of neighborliness among residents. Until this happens, there is no community, but rather separate people who happen to live in the same place.”

“GREENLINING”

Research by Marti Ross Bjornson, a graduate student at Northwestern University in Evanston, Illinois, suggests that these initial conversations eventually lead to bigger things, an empowerment process she calls “greenlining.”

Bjornson decided to look for greening-induced empowerment in inner-city neighborhoods, where, in Lewis’s words, “Just as the light of a candle can be seen more clearly in a darkened room, so can the human benefits of plants be seen more easily in communities lacking in economic and social opportunity.”

After studying community gardening projects in inner-city Chicago, Bjornson coined the term “greenlining” to provide a stark contrast to “redlining,” the term used to describe how banks and insurance agents often withhold services to low-income neighborhoods (the term literally comes from the bright red lines bankers drew on maps to outline neighborhoods where they would not offer loans).

Bjornson notes that while redlining isolates residents of these communities from services provided by business and government, greenlining provides a new access route. By working together with greening advocates and their neighbors, “these formerly marginalized urban residents can gain access to public policy, economic resources and social interaction.”

These pathways to power, Bjornson says, can be relatively modest. Simply attending a community meeting on a garden project, for example, can introduce residents to nonprofit and government officials they might never have known about, and vice versa.

“The process opens eyes on both sides,” she says. “The simple act of starting a garden can teach previously powerless people how to get access to City Hall, and it can change the perception of the people with power who are looking into the community for the first time.”

Greenlining brings together two groups that might once have passed in the night – political activists and gardeners.

“There are people who have political savvy, but don’t see gardening as a valuable forum for social change,” Bjornson explains. “Then, there are gardeners who don’t really see a need for political activism until their garden is threatened.” She tells the story of a Hispanic woman who became a community leader after she got involved in working out a complex land swap designed to protect her community garden.

Bjornson concludes that “the simple human neighborly process of community gardening is ultimately a political activity.” She believes greenlining can provide communities with “greater understanding and success than other more costly, more displacing and more abrasive forms of community political action.”

While researchers have discovered much about the benefits of community greening over the last few decades, there is still much to learn. Finding time and money is no small challenge for interested researchers.

An academic panel coordinated by the PPC’s Relf came up with an imposing list of research questions. The panel noted that the benefits of community gardening and greening “have not been documented scientifically, perhaps because research in this area is complex and potentially costly.” Relf, for one, reports she is getting more inquiries from graduate students around the nation interested in doing research in the field. Mattson and other professors say they have graduate students ready, willing, and able to take on some of the mind-numbing work needed to produce hard data.

Mark Francis believes that “rigorously collected anecdotes can be seen as hard data – you need both qualitative and quantitative information. The real trick is to translate what we already know into public support. Let’s let the

stories people tell about the benefits of greening speak for themselves. They have a strong impact. That often makes the difference with decision-makers. It isn’t always facts – politicians resonate with more than just data.”



SO, WHAT GOOD IS COMMUNITY GREENING?

You and your community gardening allies were ready with answers when the power company went before the city council to ask for its permit to bulldoze the garden. You had graphs demonstrating the economic and social benefits of the garden. You had testimony from a psychologist on the important mental-health benefits of the garden. You were even able to show that the garden provided tax benefits to the city by elevating nearby property values – benefits that would be lost because property values would plummet if the power station were built. You could tell the facts and figures were having an impact, but you really knew you had won when the gardeners and neighbors rose to speak from their hearts about their garden. One by one, the city council members leaned back in their chairs and nodded. The final vote wasn’t even close. 🗳️

Illustration • The creation of plants, from Coverdale’s *Biblia*, 1535.