

ACGA Monograph

# A Research Agenda for the Impact of Community Greening



American  
Community  
Gardening  
Association

September 1992



## A RESEARCH AGENDA FOR THE IMPACT OF COMMUNITY GREENING

American Community Gardening Association  
325 Walnut Street  
Philadelphia, Pennsylvania 19106

The American Community Gardening Association, in its efforts to improve the knowledge and practice of community greening, has developed a research agenda. The agenda consists of critical questions and issues in need of continued research, innovation and testing. The agenda was developed by the ACGA Board with assistance from Mark Francis of the University of California, Davis and ACGA Board member. An expert panel<sup>1</sup> assisted ACGA in refining and expanding the agenda. The final step was the ranking by the Board in 1991 as priority areas of concern.

The agenda is intended to inform the ACGA board and its members as well as researchers and designers interested in urban greening projects. It is especially useful for researchers (including graduate students) interested in examining the many aspects of community greening in need of focused study.

This list is seen as additive and changing depending on the needs of practitioners and public officials involved in greening activities such as community gardening, community open space development, urban horticulture and urban forestry in American towns and cities. The agenda will be revised and updated based on ACGA concerns and changing trends in community greening.

The research agenda is organized around several major categories including individual, group, and economic effects of community greening. A short bibliography of existing literature is included at the end.

### CRITICAL RESEARCH AREAS

The following items were identified by the ACGA Board as the areas most critically in need of research and development. They are ranked in priority order.

1. The effect of community greening projects on property values.
2. The relationship of community greening projects and programs to city wide Open space policies and plans.
3. Participatory planning and design approaches and techniques.
4. Community gardening as an individual empowerment tool.
5. The development of constituencies for community greening.
6. The contribution of community greening to building social cohesiveness.
7. Community gardens as a meeting place for different cultural groups.

---

<sup>1/</sup> The panel included Gary Appel (Life Lab Science Program), Lisa Cashdan (Trust for Public Land), Stevie Daniels (Rodale Institute), Charles Lewis (Morton Arboretum), Douglas Patterson (University of British Columbia), Diane Relf (Virginia Polytechnic Institute), Herb Schroeder (U S Forest Service), W. Gary Smith (University of Delaware), Robert Sommer (University of California, Davis), Roger Ulrich (Texas A & M University), and Sam Bass Warner, Jr. (Boston University).

8. Definition of "community" in community greening projects.
9. National policies and programs for community greening.
10. The relationship of land ownership to project permanency.

In addition to these critical issues, the following items were identified as important community greening issues in need of research and documentation. **Bold** items were selected by ACGA Board members as priority issues.

#### INDIVIDUAL BENEFITS

- \* **Community greening as individual empowerment tool**
- \* **Developmental benefits for children and youth, elderly, etc.**
- \* **Effect on reduction of stress**
- \* **Importance of projects in providing "nearby nature" for urban residents**
- \* Use/non-use/mis-use of community greening projects
- \* Accessibility
- \* Effect on environmental learning and competence
- \* Environmental autobiography/childhood memories of gardens/community greening projects
- \* Importance of "familiar place" in an unfamiliar environment
- \* Gardens as a place to exert individual control
- \* Recreational benefits
- \* Health/healing benefits
- \* Effect on "restorative experience"
- \* Preference for "built" versus "natural" elements
- \* Source of fresh, nutritious food
- \* Workplace satisfaction for nearby office workers/employees

#### GROUP/NEIGHBORHOOD BENEFITS

- \* **Impact on group identity**
- \* **Contribution to building social cohesiveness**
- \* **Meeting place for different cultural groups**
- \* **Cultural differences in use**
- \* **Definition of "community" in community greening**
- \* **A setting to expose and resolve social conflict**
- \* Contribution to public life and culture
- \* Setting for social interaction
- \* Cultural expression
- \* Role in urban neighborhoods
- \* Role in suburban neighborhoods

#### POLITICAL ASPECTS

- \* **Constituency for community greening**
- \* **Greening as a political force**
- \* **Relationship of greening to the environmental politics of 1990s**
- \* Empowerment of the disenfranchised via growing/working with plants
- \* Role in political exchange and education

## **SECURITY/SAFETY**

- \* **Vandalism or lack of due to gardens**
- \* Impact on crime/crime statistics
- \* Garden protection
- \* Sense of ownership

## **AESTHETIC BENEFITS**

- \* Effect on landscape perception
- \* Visual assessment of urban greening projects
- \* Visual diversity and complexity

## **SENSE OF PLACE/LANDSCAPE MEANING BENEFITS**

- \* **Sense of place**
- \* Meanings
- \* Symbolic importance
- \* Sense of stewardship

## **PHILOSOPHICAL/THEORETICAL ASPECTS**

- \* The role of nature and community greening in public life
- \* Ecological diversity
- \* Typologies of projects
- \* Community greening projects as social and political symbols

## **TEMPORAL QUALITIES**

- \* Sounds
- \* Smells
- \* Touch
- \* Seasonal differences
- \* Use of senses and gardens for multiply handicapped people

## **CITY WIDE/REGIONAL BENEFITS**

- \* **Relationship to city wide/regional greening and greenway programs**
- \* Air quality
- \* Role in city wide/regional identity/attachment

## **ECOLOGICAL BENEFITS/IMPACTS**

- \* **Functions as part of larger ecological systems**
- \* **Habitat for birds and animals**
- \* Impact on global warming
- \* Relationship to urban forestry programs and techniques
- \* Effect on air quality

- \* Effect on recharging of water table
- \* Water & energy utilization
- \* Recycling benefits
- \* Soil quality & toxicity
- \* Role of plants in global healing

#### **ECONOMIC BENEFITS/IMPACTS**

- \* **Development costs**
- \* **Maintenance costs**
- \* **Effect on property values**
- \* **Relationship to adjacent housing projects**
- \* **Greening as job training**
- \* **Economic impact of urban greening on green industry**
- \* **Value of food produced**
- \* Relationship to tourism
- \* Effect on retail sales of adjacent commercial properties
- \* Effect on occupancy rates/rental rates of adjacent offices properties
- \* Contribution to city revenue/tax base

#### **HORTICULTURAL ASPECTS**

- \* Arboriculture
- \* Plant care
- \* Planting techniques

#### **HISTORICAL ASPECTS**

- \* **History of community greening**
- \* Historical shifts in attitudes toward community greening
- \* Political history of community greening

#### **DESIGN & PLANNING ISSUES**

- \* **Participatory design and planning processes/impact on empowerment**
- \* **Teaching of community greening in design and planning schools**
- \* **Integration of projects into new and existing housing projects**
- \* Role of the design professional
- \* Importance of project size to success
- \* Relationship to overall community design
- \* Project form & style to project success
- \* Design patterns

#### **PERMANENCY/OWNERSHIP ISSUE**

- \* **Ownership as a strategy for permanency**
- \* **Best type of ownership from gardeners perspective**
- \* Community gardens as part of Park District systems

## PUBLIC POLICY ISSUES

- \* National policy and programs for community greening
- \* Relationship to city wide open space policies and plans

## PERMANENCY

- \* Relationship of land ownership to project permanency
- \* Impact of land trusts

## MANAGEMENT & MAINTENANCE

- \* Successful maintenance programs
- \* Successful project management techniques

## SUSTAINABLE DEVELOPMENT/AGRICULTURE

- \* Relationship of community greening to sustainable agriculture
- \* Perceptions of sustainable agriculture

## METHODOLOGICAL ISSUES

- \* Qualitative measures/methods
- \* Quantitative measures/methods
- \* Research funding
- \* Action-research approaches
- \* Useful/low cost evaluation strategies for local groups

### Selected Bibliography on Community Greening

- Alexander, C., Ishikawa, S., Silverstein, M., Jacobsen, M., Fiksdahl-King, I & Angel, S. A pattern language. New York: Oxford University Press. 1977.
- Altman, I., & Wohlwill, J. F. (Eds.). Behavior & the natural environment. New York: Plenum. 1983.
- Appleton, J. The experience of landscape. New York: Wiley. 1975.
- Bassett, T. J. Reaping on the margins: A century of community gardening in America. Landscape. 25, 1-8. 1979.
- Brower, S. & Williamson, P. Outdoor recreation as a function of the urban housing Environment. Environment & Behavior. 6: 295-345. 1974.
- Carlson, A. A. On the possibility of quantifying scenic beauty. Landscape Planning. 4, 131-172. 1977.
- Carr, S., M. Francis, L. Rivlin & A. Stone. Public space. New York: Cambridge University Press. 1992.
- Carr, S. and K. Lynch. Where learning happens. Daedalus. Fall. 1968.

- Carr, S. and Lynch, K. Open space: Freedom and control. In L. Taylor (Ed.), Urban open spaces. New York: Rizzoli. 1981.
- Cranz, G. The politics of park design. Cambridge: MIT Press. 1981.
- Duncan, J. S. Landscape taste as a symbol of group identity. Geographical Review. 63, 334-355. 1973.
- Fox, Tom, Koeppel, Ian and Kellam, Susan. Struggle for space: The greening of New York City. New York: Neighborhood Open Space Coalition. 1985.
- Francis, M. Some different meanings attached to a public park and community garden. Landscape Journal. 6, 2: 101-112. 1987.
- Francis, M. Urban open spaces. In E. Zube & G. Moore (Eds.) Advances in environment, behavior & design. Vol. 1. 71-106. New York: Plenum. 1987.
- Francis, M. The urban garden as public space. Places. 6, 1. Summer, 1989.
- Francis, M. Control as a dimension of public space quality. In I. Altman & E. Zube (Eds.) Public spaces and places. Vol. 10. Human Behavior and Environment. 147-172. New York: Plenum. 1989.
- Francis, M., Cashdan, L. & Paxson, L. Community open spaces. Washington, D C: Island Press. 1984.
- Francis, M. and R. Hester (Eds.) The meaning of gardens. Cambridge, MA: MIT Press. 1990.
- Gehl, J. The life between buildings. New York: Van Nostrand Reinhold. 1987.
- Gold, S.M. Non-use of neighborhood parks. Journal of the American Institute of Planners. 369-378. 1972.
- Gold, S. M. Social aspects of plants in urban environments. Parks and Recreation, April: 12-13. 1974.
- Hart, R. Children's experience of place. New York: Irvington. 1978.
- Harvey, M. R. Children's experiences with vegetation on school grounds, their botanical knowledge and environmental dispositions. Proceedings of the Environmental Design Research Association. 1989.
- Heckscher, A. & Robinson, P. Open spaces: The life of American cities. New York: Harper & Row. 1977.
- Hester, R. Planning neighborhood space. (2nd Edition). New York: Van Nostrand Reinhold. 1984.
- Holcomb, B. The perception of natural vs. built environments by young children. In Children, nature and the urban environment. Washington, DC: U.S. Forest Service. 1977.
- Hough, M. City form and natural process. New York: Van Nostrand Reinhold. 1984.
- Jackson, J.B. The public park needs reappraisal. In L. Taylor (Ed.) Urban open spaces. New York: Rizzoli. 1981.
- Kaplan, R. Some psychological benefits of gardening. Environment & Behavior. 145-161. 1973.
- Kaplan, R. Preference and everyday nature: Method and application. In D. Stokols (ed.) Perspectives on environment & behavior. pp. 235-250, New York: Plenum. 1977.
- Kaplan, R. The role of nature in the urban context. In I. Altman & J. Wohlwill (Eds.). Behavior & the natural environment. New York: Plenum. 1983.
- Kaplan, R and S. Kaplan. The experience of nature. New York: Cambridge University Press. 1989.
- Kaplan, R. and Kaplan, S. The garden as restorative experience: A research odyssey. In M. Francis and R. Hester, (Eds.). The meaning of gardens. Cambridge: MIT Press. 1990.
- Kitchen, J. W. "Land values adjacent to an urban neighborhood park. Land Economics. 357-360. 1967.
- Lewis, C. A. Healing in the urban environment: A person/plant viewpoint. Journal of American Planning Association, 45, 330-338. 1979.

- Lukashok, A. & Lynch, K. Some childhood memories of the city. Journal of the American Institute of Planners. 22, 3: 142-152. 1956.
- Lynch, K. Good city form. Cambridge, MA: MIT Press. 1981.
- Marcus, C. and C. Francis (Eds.). People places. New York: Van Nostrand Reinhold. 1991.
- Meining, D. W. The interpretations of ordinary landscapes. New York: Oxford University Press. 1979.
- More, T.A. & Payne, B.R. Affective response to natural areas near cities. Journal of Leisure Research, 10,: 7-12. 1978.
- Nicholson, S. Theory of loose parts: How not to cheat children. Landscape Architecture. 30-34. 1971.
- Nicholson-Lord, D. Greening cities. London. 1987.
- Perez, C. & Hart, R. Beyond playgrounds: Children's accessibility to the landscape. In Wilkinson (Ed.). Innovations in play environments. New York: St. Martin's Press. 1980.
- President's Commission on Americas Outdoors. Americans outdoors: Report of the President's Commission on Americas outdoors. Washington, D.C.: Island Press. 1987.
- Riley, R. From sacred grove to Disney World: The search for garden meaning. Landscape Journal. 7, 2: 136-147. 1988.
- Schroeder, H. W. & Anderson, L. M. Perception of personal safety in urban recreation sites. Journal of Leisure Research. 16, 178-194. 1983.
- Schroeder, T. D. The relationship of local public park and recreation services to residential property values. Journal of Leisure Research. 14, 223-234. 1982.
- Spirn, A. The granite garden: Urban nature and human design. New York: Basic Books. 1984.
- Spirn, A. The poetics of city and nature: Towards a new aesthetic for urban design. Landscape Journal. 7, 2: 108-126. 1988.
- Taylor, L. (ed.) Urban open spaces. New York: Rizzoli. 1981.
- Thayer, R. L. & Atwood, B.G. Plants, complexity and pleasure in urban and suburban environments. Environmental Psychology and Nonverbal Behavior. 3: 67-76. 1978.
- Thompson, L. Horticultural therapy in Denver's community gardens. American Community Gardening Association Journal. Spring. 3, 1:19-20. 1984.
- Ulrich, R. S. The psychological benefits of plants. Garden, November/December, 1984.
- Ulrich, R. S. Visual landscapes & psychological well being. Landscape Research. 4, 17-19. 1979.
- Ulrich, R.S. & Addoms, D.L. Psychological and recreational benefits of a residential park. Journal of Leisure Research. 13, 43-65. 1981.
- Ulrich, R. S. View through a window may influence recovery from surgery. Science. 224, 420-421. 1984.
- Ulrich, R.S., & Simons, R. F. Recovery from stress during exposure to everyday outdoor environments. In J. Archa et al. (Eds.), Proceedings of the 17th Environmental Design Research Association Conference. Washington, D.C.: EDRA. 1986.
- Ulrich, R. S. Human responses to vegetation and landscapes. Landscape and Urban Planning. 13, 29-44. 1986.
- Warner, S. B. To dwell is to garden: A history of Boston's community gardens. Boston: Northeastern University Press. 1987.
- Weicher, J.C. & Zerbst, R. H. The externalities of neighborhood parks. Land Economics. 49, 99-105. 1973.
- Wilhelm, G. Dooryard gardens and gardening in the black community of Brushy, Texas. Geographical Review. 1975.
- Zube, E.H., Sell, J.L., & Taylor, J.G. Landscape perception: Research, application and theory. Landscape Planning. 9, 1-33. 1982.