

## **Planning for Urban and Community Forestry A Literature Review**

The *Planning for Urban and Community Forestry* review contains book, article, and government document citations. The list is part of a continuous process and may be considered both a literature review and a resource list for the project.

Each section is arranged first chronologically then alphabetically by author. This allows the newest material to be viewed first.

Texts were chosen for the review based on several criteria, including relevance to the topic of municipal planning, timeliness, and the ability to convey concepts accurately and concisely to an audience of planners

The resource list is arranged under the following topics, Ecosystem Planning which includes green infrastructure and bio-diversity; Urban Forestry, general information; Watershed Planning; Municipal Planning, broken down further into Comprehensive Planning and Area Planning; Ordinances, Regulations, Incentives; Economic Benefits of Urban Forestry; Social Benefits of Urban Forestry; Environmental Benefits of Urban Forestry which has the further sub-topics of Air Quality, Water Quality, Soil, and Urban Heat Island.

This resource list will be updated regularly as new information becomes available. Additional web links and annotated descriptions of related web sites will be added continually.

Last updated May 2006.

## ECOSYSTEM PLANNING

Benedict, Mark A., and Edward T. McMahon. 2006. *Green Infrastructure: Linking Landscapes and Communities*. Washington, D.C.: Island Press.

Duerksen, Christopher, and Cara Snyder. 2005. *Nature-Friendly Communities: Habitat Protection and Land Use Planning*. Washington, D.C.: Island Press.

Details successful nature protection programs across the country. Over a dozen case studies are highlighted. Of particular interest are DeKalb County, Georgia's Greenspace Program; Pittsford, New York's Greenprint; and Loudoun County, Virginia's Green Infrastructure plan.

McDonald, L, et al. 2005. "Green Infrastructure Plan Evaluation Frameworks." *Journal of Conservation Planning* 1, No. 1 (March): 12-43.

The paper provides a more structured definition for green infrastructure plans, "best practices" guidelines, and a framework for evaluating green infrastructure plans for different scales of planning.

Moll, Gary. 2005. "Repairing Ecosystems at Home." *American Forests* 111, No. 2 (Summer): 41-43.

Perlman, Dan L., and Jeffrey C. Milder. 2005. *Practical Ecology for Planners, Developers, and Citizens*. Washington, D.C.: Island Press.

Introduces the science of ecology using the language of planners, architects, and landscape architects. Chapters of particular interest include, "Humans Plan," "An Introduction to Ecology and Biodiversity," "The Ecology of Landscapes," "Nature in the Neighborhood," "Ecologically Based Planning and Design Techniques," and "Principles in Practice."

National Urban and Community Forestry Advisory Council. 2004. *A National Research Plan for Urban Forestry, 2005-2015*. Sugarloaf, Cal.: U.S.D.A. Forest Service.

Randolph, John. 2004. *Environmental Land Use Planning and Management*. Washington, D.C.: Island Press.

An introduction to environmental planning. Of particular interest is the chapter, Landscape Ecology, Urban Forestry, and Wetlands.

Daniels, Tom, and Katherine Daniels. 2003. *The Environmental Planning Handbook: for Sustainable Communities and Regions*. Chicago: Planners Press.

A general treatise on environmental planning for the 21st century. Part III, Planning for Natural Areas, and Part IV, Planning for Working Landscapes contain the most pertinent information for community forestry.

Nolon, John R., Ed. 2003. *New Ground: The Advent of Local Environmental Law*. Washington, D.C.: Environmental Law Institute.

A collection of papers examining local environmental law and its strategic role in shaping an appropriate response to a new generation of environmental and land use challenges.

Williamson, Karen S. 2003. *Growing with Green Infrastructure*. Doylestown, Pa.: Heritage Conservancy.

Report provides communities with a six-step process for developing and implementing a green infrastructure plan. The steps are: Develop an approach, Inventory community resources, Envision the future, Find the hubs and links, Create the plan, and Build the system.

Benedict, Mark A., and Edward T. McMahon. [2001]. *Green Infrastructure: Smart Conservation for the 21st Century*. Washington, D.C.: Sprawl Watch Clearinghouse.

Benedict, Mark A. 2000. "Green Infrastructure: A Strategic Approach to Land Conservation." *PAS Memo* (October): 1-4.

Introduces green infrastructure as a strategic approach for land conservation and provides eight guiding principles for successful green infrastructure initiatives.

Duryea, Mary L., Et al. 2000. *Restoring the Urban Forest Ecosystem*. Gainesville, Fla.: School of Forest Resources and Conservation, University of Florida.

Moll, Gary, and Cheryl Kollin. 2000. "Picture This." *American Forest* 106, No. 3 (Autumn): 44-48.

A review of the CITYgreen software.

Savard, Jean-Pierre L., Philippe Clergeau, and Gwenaelle Mennechez. 2000. "Biodiversity Concepts and Urban Ecosystems." *Landscape and Urban Planning* 48, No. 3-4 (May): 131-142.

Arendt, Randall G. 1996. *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks*. Washington, D.C.: Island Press.

The book describes a four-step process for laying out residential development around the central organizing principle of land conservation. The four steps are: Identifying all potential conservation areas, locating the housing sites, designing street alignments and trails, and drawing the lot lines.

Dramstad, Wenche, E., James D. Olson, and Richard T. T. Forman. 1996. *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*. Washington, D.C.: Island Press.

Rubenstein, Harvey M. 1996. *A Guide to Site Planning and Landscape Construction*. 4th Ed. New York: Wiley.

Burban, Lisa L., and John W. Andresen. 1994. *Storms over the Urban Forest: Planning, Responding, and Regreening: A Community Guide to Natural Disaster Relief*. 2nd Ed. St. Paul, Minn.: USDA Forest Service, Northeastern Area.

This handbook provides a ready reference list of procedures in planning for and responding to natural disasters. It promotes the regreening of communities.

Platt, Rutherford H., Rowan A. Rowntree, and Pamela C. Muick, Eds. 1994. *The Ecological City: Preserving and Restoring Urban Biodiversity*. Amherst, Mass.: University of Massachusetts Press.

A collection of essays focusing on public policy and public-private collaboration. Of special interest is section three, "Urbanization and Terrestrial Ecosystems."

Adams, Lowell W., and Louise E. Dove. 1989. *Wildlife Reserves and Corridors in the Urban Environment: A Guide to Ecological Landscape Planning and Resource Conservation*. Columbia, Md.: National Institute for Urban Wildlife.

McHarg, Ian L. 1969. *Design with Nature*. Garden City, N.Y.: Natural History Press.

## **URBAN FORESTRY**

Grado, Stephen C., et al. 2006. "Status, Needs, and Knowledge Levels of Mississippi's Communities Relative to Urban Forestry." *Arboriculture & Urban Forestry* 32, No. 1 (January): 24-31.

A survey of Mississippi communities to determine levels of knowledge and participation urban and community forestry programs.

Konijnendijk, Cecil C., et al. 2006. "Defining Urban Forestry – A Comparative Perspective of North America and Europe." *Urban Forestry & Urban Greening* 4 : 93-103.

Ries, Paul. 2005. "Applying Leadership Lessons to Urban Forestry." *City Trees* 41, No. 2: 14-16.

Bassuk, N.L., and P.L. Trowbridge. 2004. *Trees in the Urban Landscape*. New York: Wiley.

McPherson, Greg. 2004. "Will there be Space for Trees in our Future?" *Urban Forest Research* (Winter): 1-3.

Ning, Zhu H., and Kamran K. Abdollahi, Eds. 2003. *Urban and Community Forestry: Working Together to Facilitate Change*. Baton Rouge, La.: Southern University.

The proceedings of the first National Urban and Community Forestry Education and Outreach Conference for Minority and Underserved Communities.

Dwyer, John F., David J. Nowak, and Mary Heather Noble. 2003. "Sustaining Urban Forests." *Journal of Arboriculture* 29, No. 1 (January): 49-55.

Elmendorf, William F., Vincent J. Cotrone, and Joseph T. Mullen. 2003. "Trends in Urban Forestry Practices, Programs, and Sustainability: Contrasting a Pennsylvania, U.S. Study." *Journal of Arboriculture* 29, No. 4. (July): 237-248.

The study examined small town tree commissions in Pennsylvania. It explored attitudes of commission members toward urban forestry and contrasted them with actual accomplishments.

Van Elegem, B., Et al. 2002. "A Methodology to Select the Best Locations for New Urban Forests Using Multi-criteria Analysis." *Forestry Chronicle* 75, No. 1 (January-February): 13-23.

Elmendorf, William F., and A. E. Luloff. 2001. "Using Qualitative Data Collection Methods when Planning for Community Forests." *Journal of Arboriculture* 27, No. 3 (May): 139-151.

Leatherman, Courtney. 2001. "Digging out of a Tree Deficit." *American Forests* 107, No. 3 (Autumn): 39-43.

Using technology to locate tree canopy — or lack thereof — and to plan for the future.

Dwyer, John F., Gina M. Childs, and David J. Nowak. 2000. "Forestry in Urban and Urbanizing Areas of the United States: Connecting People with Forests in the 21<sup>st</sup> Century." In Baskaran, K., et al, eds. *Forests and Society: The Role of Research: Sub-Plenary Sessions, 21<sup>st</sup> IUFRO World Congress, 2000, August 7-12, Kuala Lumpur Malaysia*. Vienna, Austria: International Union of Forest Research Organizations.

Elmendorf, William F., and A. E. Luloff. 1999. "Using Ecosystem-Based and Traditional Land-Use Planning to Conserve Greenspace." *Journal of Arboriculture* 25, No. 5 (September): 264-273.

Miller, Robert W. 1997. *Urban Forestry: Planning and Managing Urban Greenspaces*. 2nd Ed. Upper Saddle River, N. J.: Prentice Hall.

A textbook introduction to urban forestry. Appendices include a sample tree ordinance, sample tree protection ordinance, and a sample screening ordinance.

Grey, Gene W. 1996. *The Urban Forest: Comprehensive Management*. New York: Wiley.

Grey defines urban forestry as, “that which must be done to make trees compatible and functional in the urban environment.” This volume is an elaboration on that theme.

Schoeneman, Rita S. 1996. *Trees in the Community: Managing the Urban Forest*. MIS Report 24, No. 5. Washington, D.C.: International City County Management Association.

Bradley, Gordon, A., Ed. 1995. *Urban Forest Landscapes: Integrating Multidisciplinary Perspectives*. Seattle: University of Washington Press.

Divided into four parts. Part 1, “Introduction and Historical Perspective” provides an excellent overview for those new to the topic. Part 2, “The Environmental Setting” includes a chapter on land use controls. Part 4, “Integration: Tradeoffs and Benefits” will probably provide the most insight to planners and foresters.

Petit, Jack, Debra L. Bassert, and Cheryl Kollin. 1995. *Building Greener Neighborhoods: Trees as Part of the Plan*. Washington, D.C.: Home Builder Press.

Arnold, Henry F. 1993. *Trees in Urban Design*. 2nd Ed. New York: Van Nostrand Reinhold.

## **WATERSHED PLANNING**

Capiella, Karen, Tom Schueler, and Tiffany Wright. 2005. *Urban Watershed Forestry Manual: Part 1 of a 3-Part Manual Series on Using Trees to Protect and Restore Urban Watersheds*. Newtown Square, Penn.: USDA Forest Service, Northeastern Area State and Private Forestry.

Meyer, Judy L., et al. 2003. *Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands*. Washington, D.C.: American Rivers.

*The Practice of Watershed Protection*. 2000. Ellicot City, Md.: Center for Watershed Protection.

## **MUNICIPAL PLANNING**

### **Comprehensive**

Galvin, Michael F. 2006. *A Report on Baltimore City's Present and Potential Urban Tree Canopy*. Annapolis, Md.: Maryland Forest Service, Department of Natural Resources.

Nowak, David J. 2005. *Houston's Regional Forest: Structure, Functions, Values*. Washington, D.C.: U.S. Forest Service; College Station: Texas Forest Service.

Steering Committee, Baltimore County Linking Communities to the Montreal Process Criteria and Indicators Project. 2005. *Baltimore County Forest Sustainability Strategy*. Final Draft. Baltimore County Department of Environmental Protection and Resource Management.

Houston Advanced Research Center. 2004. *Cool Houston: A Plan for Cooling the Region*. The Woodlands, Texas: Houston Advanced Research Center.

This plan is divided into three sections, the third of which is devoted to trees and the role they can play in improving air quality, quality of life, and other environmental and social benefits.

Georgia Forestry Commission. 2001. *Georgia Model Urban Forest Book*. Stone Mountain, Ga.: Georgia Forestry Commission.

This handbook was created to provide communities and citizens with the information, tools, and references necessary to begin to plan development with the green infrastructure of the urban forest in mind.

McFarland, Kevin. 1994. *Community Forestry and Urban Growth: A Tool Box for Incorporating Urban Forestry Elements into Community Plans*. Olympia, Wash.: Washington State Department of Natural Resources.

Publication provides examples of how communities have incorporated urban forestry principles into critical elements of growth management planning.

Olympia Community Planning and Development Department. 1994. "Chapter 10: Urban Forestry" in *Comprehensive Plan for Olympia and the Olympia Growth Area*. Adopted by Olympia City Council, July 12. Adopted by Thurston County Board of Commissioners, July 25.

## **Area**

Wolf, Kathleen L. 2004. "Trees and Business District Preferences: A Case Study of Athens, Georgia, U.S." *Journal of Arboriculture* 30, No. 6 (November): 336-346.

The presence of urban trees was associated with higher visual quality ratings and was perceived to be an integral amenity of the central business district. The study utilized an on-site survey of visitors to the Athens CBD. Quantitative and qualitative research outcomes are included.

## **ORDINANCES, REGULATIONS, INCENTIVES**

Bowen, Cynthia A. 2004. "Landscape Ordinances: To Define and Protect." *Zoning Practice*, April.

McElfish, James M., Jr. 2004. *Nature-Friendly Ordinances: Local Measures to Conserve Biodiversity*. Washington, D.C.: Environmental Law Institute.

“The lessons of ecology and conservation biology can enable local decision makers to use their familiar land use tools more effectively in making their development and redevelopment more nature friendly.”

Dickerson, Shawn D., John W. Groninger, and Jean C. Mangun. 2001. “Influences of Community Characteristics on Municipal Tree Ordinances in Illinois, U.S.” *Journal of Arboriculture* 27, No. 6 (November): 318-325.

This study explores the relationship between community characteristics and municipal tree ordinances using data from 151 Illinois communities. There are significant correlations between ordinance provisions and a community’s characteristics relating to wealth and education.

Swiecki, T. J.; Bernhardt, E. A. 2001. *Guidelines for Developing and Evaluating Tree Ordinances*.

A web-based guide to researching and writing a tree ordinance.  
[www.isaarbor.com/publications/ordinance.aspx](http://www.isaarbor.com/publications/ordinance.aspx)

Whitehead, Hugh C. 2001. “Transplanting Existing Trees on Development Sites.” *Land Development* (Winter): 12-16.

A review of methods to meet tree cover requirements in rezoning or new development. The article focuses on the relocation of trees from the site to conservation areas.

Galvin, Michael F., Becky Wilson, and Marian Honeczy. 2000. “Maryland’s Forest Conservation Act: a Process for Urban Greenspace Protection during the Development Process.” *Journal of Arboriculture* 26, No. 5 (September): 275-280.

Burgess, Joe. 1999. *Tree Ordinance Development Guidebook*. Stone Mountain, Ga.: Georgia Forestry Commission.

Abbey, Buck. 1998. *U.S. Landscape Ordinances: an Annotated Reference Handbook*. New York: Wiley.

Ordinances from 41 states. Arranged by state but with an excellent index. Topics include parking lots, buffers and screens, site design standards, tree preservation, and tree protection.

Growth Management Committee. 1998. *Title 3 Model Ordinance*. Portland, Ore.: Metro.

Title 3 is the section of Portland’s *Urban Growth Management Functional Plan* that refers to “Water quality, flood management, and fish and wildlife conservation”. This particular model ordinance provides for the protection of



the region's floodplains, water quality and reduction of flood hazards, and the implementation of erosion control practices.

Shoup, Donald C. 1996. "Regulating Land Use at Sale: Public Improvement from Private Investment." *Journal of the American Planning Association* 62, No. 3 (Summer): 354-372.

From the abstract, "Regulation at sale offers a pragmatic, low-cost method to improve older neighborhoods [through street plantings] and stimulate local economic development."

Adler, Catherine, and Carol A. Krawczk. 1995. "Tree Preservation". *Environment & Development* (November).

A review of Savannah, Georgia's 1995 Land Clearing and Tree Protection ordinance.

Redwood, Tovah. 1994. "Tree Time: Stronger Tree Planting and Preservation Ordinances are Ahead." *Planning* magazine (September).

Duerksen, Christopher, and Suzanne Richman. 1993. *Tree conservation Ordinances: Land-Use Regulations Go Green*. Planning Advisory Report No. 446. Chicago: American Planning Association.

Chapters include "Establishing the Value of Trees," "Legal Aspects of Tree Conservation," "Crafting an Effective Tree Conservation Ordinance," and "The Politics and Practice of Tree Conservation."

Martz, Wendelyn A., and Marya Morris. 1990. *Preparing a Landscaping Ordinance*. Planning Advisory Report No. 431. Chicago: American Planning Association.

## **ECONOMIC BENEFITS OF URBAN FORESTRY**

McPherson, Greg, Et al. 2005. "Municipal Forest Benefits and Costs in Five U.S. Cities." *Journal of Forestry* 103, No. 8 (December): 411-416.

City trees are viewed as a best management practice to control stormwater, an urban-heat-island mitigation measure for cleaner air, a CO<sub>2</sub>-reduction option to offset emissions, and an alternative to costly new electric power plants. Measuring benefits that accrue from the community forest is the first step to altering forest structure in ways that will enhance future benefits. This article describes the structure, function, and value of street and park tree populations in Fort Collins, Colorado; Cheyenne, Wyoming; Bismarck, North Dakota; Berkeley, California; and Glendale, Arizona.

Coder, Kim D. 2004. *Denuding Communities: Tree Canopy Loss Calculations and Public Perceptions*. Warnell School of Forest Resources. Athens: University of Georgia.

A method for calculating past, present and future tree canopy. Intended to be used during community visioning events.

Hartel, Dudley. 2004. "Trees as Capital Assets." *City Trees* 40, No. 2: 10-12.

Wolf, Kathleen L. 2004. "Economics and Public Value of Urban Forests." *Urban Agriculture Magazine* 13 (December): 31-33.

\_\_\_\_\_. 2004. "Trees and Business District Preferences: A Case Study of Athens, Georgia, U.S." *Journal of Arboriculture* 30, No. 6 (November): 336-346.

The presence of urban trees was associated with higher visual quality ratings and was perceived to be an integral amenity of the central business district. The study utilized an on-site survey of visitors to the Athens CBD. Quantitative and qualitative research outcomes are included.

Kollin, Cheryl. 2004. "Money in the Tree Bank." *American Forests* 110, No. 1 (Spring): 45-47.

Jensen, Ryan R., James R. Boulton, and Bruce T. Harper. 2003. "The Relationship between Urban Leaf Area and Household Energy Usage in Terre Haute, Indiana, U.S." *Journal of Arboriculture* 29, No. 4 (July): 226-230.

This study provides a mixed methodological approach, combining remote sensing technology with standard statistical analysis. It is intended to provide planners, landscape architects, and governmental officials with a method of demonstrating the economic importance of urban forests.

Kollin, Cheryl. 2003. "San Antonio: Ripples of Change." *American Forests* 109, No. 1 (Spring): 7-10.

Mahon, Jill R., and Robert W. Miller. 2003. "Identifying High-Value Greenspace Prior to Land Development." *Journal of Arboriculture* 29, No. 1 (January): 25-33.

This paper provides a methodology for locating high-value greenspace. Stevens Point, Wisconsin was used as a case study. Parcels were identified and the ecologic, recreational, and aesthetic value of each parcel was rated.

Wolf, Kathleen L. 2003. "Public Response to the Urban Forest in Inner-City Business Districts." *Journal of Arboriculture* 29, No. 3 (May): 117-126.

Previous studies on the effects of urban vegetation have focused primarily on parks and residential settings. This study attempts to link urban vegetation

and forest canopy to inner city central business districts and demonstrate the economic development benefits.

Nowak, David J., Daniel E. Crane, and John F. Dwyer. 2002. "Compensatory Value of Urban Trees in the United States." *Journal of Arboriculture* 28, No. 4 (July): 194-199.

Werner, Jan E. Bisco, et al. 2001. *Trees Mean Business: A Study of the Economic Impacts of Trees and Forests in the Commercial Districts of New York City and New Jersey*. New York: Trees New York with Trees New Jersey.

McPherson, E. Gregory, et al. 2000. *Tree Guidelines for Coastal Southern California Communities*. Sacramento, Cal.: Local Government Commission.

Guidebook analyzes the benefits — economic and environmental — that trees can provide to communities. Case studies focus on Southern California.

McPherson, E.G., and R. A. Rowntree. 1993. "Energy Conservation Potential of Urban Tree Planting." *Journal of Arboriculture* 19, No. (): 321-331.

Brabec, Elizabeth. 1992. *Trees Make Cents*. Scenic America Technical Information Series 1, No. 1. Washington, D.C.: Scenic America.

Dwyer, J.F., et al. 1992. "Assessing the Benefits and Costs of the Urban Forest." *Journal of Arboriculture* 18, No. 5 (September): 227-234.

Hull, R. B. 1992. "How the Public Values Urban Forests." *Journal of Arboriculture* 18, No. 2 (March): 98-101.

## **ENVIRONMENTAL BENEFITS OF URBAN FORESTRY**

Dwyer, Mark C., and Robert W. Miller. 1999. "Using GIS to Assess Urban Tree Canopy Benefits and Surrounding Greenspace Distributions." *Journal of Arboriculture* 25, No. 2 (March): 102-107.

An analysis of Stevens Point, Wisconsin using CITYgreen software to assess the environmental and budgetary benefits to urban trees.

Kollin, Cheryl. 1997. "Designing with Nature and Showing the Benefits." *Land Development* (Winter): 30-34.

A discussion of the environmental benefits of conserving trees. The Campus Club Apartment complex in Gainesville, Florida is used as an example. Focus is given to the CITYgreen GIS program and the stormwater management benefits of tree preservation.

## **Air Quality**

Nowak, David J., Daniel E. Crane, and Jack C. Stevens. 2006. "Air Pollution Removal by Urban Trees and Shrubs in the United States." *Urban Forestry & Urban Greening* 4: 115-123.

Geiger, Jim. 2005. "Air Pollution Control: The Tree Factor." *Urban Forest Research* (January): 1-6.

McPherson, E. Gregory. 2004. "Parking Lots and Ordinance Compliance." *Western Arborist* (Fall): 30-32.

Nowak, D. J., Et al. 2000. "A Modeling Study of the Impact of Urban Trees on Ozone." *Atmospheric Environment* 34, No. 10: 1601-1613.

Schwab, Jim. 1992. "Urban Trees, Air Quality, and Energy Conservation." *Environment & Development* (March)

A primer on the role trees play as pollution filters and air coolers.

## **Water Quality**

Nisenson, Lisa. 2006. *Using Smart Growth Techniques as Stormwater Best Management Practices*. Washington, D.C.: Environmental Protection Agency.

Nonpoint source pollution is a main contributor to water quality problems in developed areas. This report looks at how stormwater management can be tackled at the site planning level through such principles as minimizing impervious surfaces, preserving contiguous open space areas, and making maximum use of existing infrastructure.

Keating, Janis. 2002. "Trees: The Oldest New Thing in Storm Water Treatment? How Much do Tree Canopies Really Affect Runoff Volume." *Stormwater* 3, No. 2 (March/April): 56-61.

[Portland] Metro. 2002. *Green Streets: Innovative Solutions for Stormwater and Stream Crossings*. Portland, Ore.: Metro.

"This handbook communicates basic stormwater management concepts, case study examples of how this approach has been successful elsewhere, practical design solutions and methodologies, and a strategy for implementation of 'green' streets in the Portland Metro region." From the introduction.

Mitchell, Martha S. 2001. "Green Solutions: Planting Trees for Healthy Watersheds." *Erosion Control* 8, No. 5 (July/August): 36-43.

Beattie, Jeff, Cheryl Kollin, and Gary Moll. 2000. "Trees Tackle Clean Water Regs." *American Forests* 106, No. 2 (Summer): 18-19.

A discussion of the use of canopy cover to improve water quality.

Herson-Jones, Lorraine M., Maureen Heraty, and Brian Jordan. 1995. *Riparian Buffer Strategies for Urban Watersheds*. Washington, D.C.; Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds.

Welsch, David J. 1991. *Riparian Forest Buffers: Function and Design for Protection and Enhancement of Water Resources*. Radnor, Pa.: U.S. Forest Service, Northeastern Area.

## **Soil**

Craul, Phillip J. 1999. *Urban Soils: Applications and Practices*. New York: Wiley.

Gershuny, Grace, and Joe Smillie. 1999. *The Soul of Soil*. White River Junction, Vt.: Chelsea Green Publishing.

Craul, Phillip J. 1992. *Urban Soil in Landscape Design*. New York: Wiley.

Lindsey, P., and N. L. Bassuk. 1992. "Redesigning the Urban Forest from the Ground Below: A New Approach to Specifying Adequate Soil Volumes for Street Trees." *Journal of Arboriculture* 16, No. 1 (January): 25-39.

## **Heat Island**

Maco, S. E., and E. G. McPherson. 2002. "Assessing Canopy Cover over Streets and Sidewalks in Street Tree Populations." *Journal of Arboriculture* 28, No. 6 (November): 270-276.

Environmental Protection Agency. 1992. *Cooling our Communities: A Guidebook on Tree Planting and Light-Colored Surfacing*. Washington, D.C.: Office of Policy Analysis, Climate Change Division.

## **SOCIAL BENEFITS OF URBAN FORESTRY**

Lohr, Virginia I., et al. 2004. "How Urban Residents Rate and Rank the Benefits and Problems Associated with Trees in Cities." *Journal of Arboriculture* 30, No. 1 (January): 28-35.

A report of the partial results of a nationwide survey of residents in the 112 most populated metropolitan areas in the continental U.S. This reports focuses on the knowledge and attitudes of urban residents regarding trees in cities; how much urbanites agree that trees are important to their quality of life; whether demographic factors influence responses; and whether people's attitudes toward trees and quality of life influence their attitudes toward other characteristics of urban trees.

Hammitt, William E. 2002. "Urban Forests and Parks as Privacy Refuges." *Journal of Arboriculture* 28, No. 1 (January): 19-26.

Results of a survey of park users in Cleveland, Ohio indicate that "reflective thought" is a popular use of forests and parks. Visitors spend an average of two-plus hours within these settings.

## **Allied Organizations and Websites of Interest**

### [American Forests](#)

American Forests is the nation's oldest nonprofit citizens' conservation organization. It is a world leader in planting trees for environmental restoration, a pioneer in the science and practice of urban forestry, and a primary communicator of the benefits of trees and forests.

### [Center for Urban Forest Research](#)

One of 13 research work units affiliated with the Pacific Southwest Research Station, a USDA Forest Service Organization. As part of the center's vision they work to provide communities with an increased understanding and appreciation of the urban forest and choose to make an investment in the care and maintenance of community trees to ensure continued health of the urban forest.

### [Center for Watershed Protection](#)

Provides local governments, activists, and watershed organizations around the country with the technical tools for protecting some of the nation's most precious natural resources: our streams, lakes, and rivers.

### [GreenInfrastructure.net](#)

Green Infrastructure is our nation's natural life support system — an interconnected network of protected land and water that supports native species, maintains natural ecological processes, sustains air and water resources and contributes to the health and quality of life for America's communities and people. The Conservation Fund and the USDA Forest Service cosponsor the site.

### [Human Dimensions of Urban Forestry and Urban Greening](#)

Featuring research on people's perceptions and behaviors regarding nature in cities.

### [i-Tree](#)

i-Tree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service that provides urban and community forestry analysis and benefits assessment. It currently integrates four urban and community forestry tools: UFORE (Urban Forest Effects Model), STRATUM (Street Tree Resource Analysis Tool for Urban Forest Managers), MCTI (Mobile Community Tree Inventory), and the Storm Damage Assessment Protocol.

### [International Society of Arboriculture](#)

The International Society of Arboriculture (ISA) has served the tree care industry for over eighty years as a scientific and educational organization.

### [National Alliance for Community Trees](#)

The Alliance for Community Trees (ACT) is both the nucleus and catalyst for the fast-growing field of citizen-forestry. Along with its 68 community-based member organizations nationwide, ACT's concern is the environment where 80 percent of Americans live and work — our cities, towns, and villages. Through information sharing, training, technical assistance, policy and program development, and advocacy, ACT pulls together the pioneering work of citizen foresters across the country to improve the quality of life for all of us.

### [The National Map](#)

*The National Map* is a framework for geographic knowledge needed by the nation. It provides public access to high quality, geospatial data and information from multiple partners to help support decision-making by resource managers and the public. *The National Map* is the product of a consortium of federal, state, and local partners who provide geospatial data to enhance America's ability to access, integrate, and apply geospatial data at global, national, and local scales. The U.S. Geological Survey (USGS) is committed to meeting the nation's needs for current base geographic data and maps. Our vision is that, by working with partners, we will ensure that the nation has access to current, accurate, and nationally consistent digital data and topographic maps derived from those data.

### [National Urban and Community Forestry Advisory Council](#)

The National Urban and Community Forestry Advisory Council is an organization that supports education, projects, and groups related to urban and community forestry.

### [Society of Municipal Arborists](#)

The SMA is an organization of municipal arborists and urban foresters. The membership also includes consultants, commercial firms and citizens who actively practice or support some facet of municipal forestry.

### [TreeLink](#)

An urban forestry portal. TreeLink's vision is to provide the best technology resources to grow the movement and discipline of urban and community forestry to the widest audience. We plan to expand the canopy of knowledge about Urban and Community Forestry and reach into widespread community roots with potent, accessible communications resources.

### [U.S. Geological Survey. Comprehensive Urban Ecosystem Studies.](#)

CUES utilizes USGS data and science expertise to develop decision support tools and other science applications to address critical issues facing the nation's urban areas, including, the consequences of urban growth, and conservation and protection of parks, wildlife refuges, and other natural resources.

### [Urban Forestry South](#)

The Internet partnership of the Southern Center for Urban Forestry Research & Information, Southern Regional Extension Forestry, the Southern Group of State Foresters, and the Warnell School of Forest Resources at UGA. It also hosts the Southern Cooperative Council's work.