

urban forests

From Tree to Forest

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To paraphrase Jusuck Koh, a Korean landscape architect, design of the past was about abstraction and symbol; design of the future is about meaning and connection. "Green infrastructure" is a recent conceptual approach to planning (and marketing) the urban forest. It derives from extensive research that demonstrates the multiple benefits and services that trees in cities provide. While many of the benefits have long been intuitively recognized by landscape professionals, recent studies augment the hunches with more exhaustive understanding and precision. Many of the nature services afforded by urban forests are translated into economic benefits, an essential message in the policy arena. Budget demands for transportation, education and community security are often deemed more important than trees.

How do we engage people at different psychological or sociological scales in stewarding and sustaining the urban forest? While managers trained in science are intellectually comfortable with the hierarchical description of natural systems (i.e. cell, organism, population, ecozone), they rarely think as systematically about the equivalent scales of human systems (individual, household, community, city, region) that interact with the urban forest. The reverse can often be said for planners and designers.

Cities have launched innovative programs to recruit, train and promote citizen activity in local forest systems - Tree Stewards, Neighborwoods, Adopt-A-Forest, Arbor Day celebrations. Can we expand these efforts to help people move from seeing only individual trees to seeing and valuing a forest in an urban context?

Japan may provide some clues, based on what I learned there as a visiting professor. While most Western study of Japan's cultural nature has focused on traditional garden design, there are lessons to be learned beyond the garden walls. America's most exciting urban planning efforts are generating mixed-use, higher density communities, not unlike the conditions the Japanese have lived in for centuries. What are the meanings of trees in the hearts and minds of Japan's people; how might these translate to U.S. cities?

First, multi-functional spaces are essential in high-density urban conditions. Green belts and urban forests should be evaluated for other functions, besides preserves. For example, in the aftermath of the Kobe earthquake disaster planners are analyzing how these green spaces can be used as staging areas for emergency response, without damaging the resource.

Japan also offers insights on plants in confined spaces. If we are to weave trees and forests throughout the city, the desired form and character of trees may need to be reconsidered. Americans are inclined to consider nature and urban as separate; "real" nature is a refuge far from the city in a wilderness area or national park. Consequently, "real" trees are full canopied, field-grown beauties that are rarely suited to small spaces. In contrast Japanese tree management includes pruning practices that would make many arborists cringe, yet the result acknowledges both spatial constraints and diverse human perceptions.

Some of the oldest tree specimens in Japanese cities are found in the "sacred groves" of Buddhist temples and Shinto shrines. The spiritual centers and their associated forests are the sites of the most significant rituals of Japanese life. Environmental psychology studies suggest that big trees are a highly

meaningful landscape element for all people. While American public secularism doesn't lend itself to plantings for spiritual purposes, designers could incorporate dramatic trees in civic spaces and let individuals find their own symbolic meaning.

"Hazard tree" management reduces liability risk. Yet removal of all misshapen, aged trees leaves a sterile urban forest that provides few niches for other organisms, or for human appreciation of the cycles of life. Declining trees are revered in Japanese arts; they express the notion of "sabi," a patina of beauty and the fulfilled wisdom of older age. Our built environment shapes attitudes in subtle ways. Old trees in our modern midst may prompt reflection on personal and community attitudes towards everything from biodiversity to respect for elder Americans.

New technologies and science, old values - this may be the combination needed to expand the presence, health and meaning of urban forests in U.S. cities. Design plays a critical role in helping people understand why this once-ignored resource should become an urban priority. Personal experiences shape collective public values. Designers can help translate experiences of connection and meaning at the site scale to a greater and more diversified vision of forests as a vital element of meaningful cities.

For more information about research on the human benefits of urban greening see: www.cfr.washington.edu/research.envmind and www.hertl.uiuc.edu/

Kathleen Wolf was a visiting professor at the Awaji Landscape Planning and Horticulture Academy (Kobe, Japan) October 2002 through February 2003.



8. Many people make pilgrimages to this sacred grove each year to seek good fortune for boats and seafarers.
Credit: Kathy Wolf



9. The twisted form of this tree contrasts sharply with the formal, controlled layout of Horyuji. Science suggests it has many ills, yet it emanates great emotional power.
Credit: Kathy Wolf