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Encouraging an Urban Forestry Ethic: A Comparison of “Tree City USA” and China’s “National Garden City” Programs

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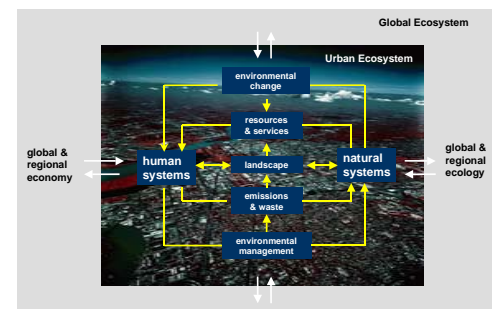
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Two Programs with Similar Goals

Urban forests are influenced by both natural and anthropological factors. Urban forests are fundamentally a human dominated ecosystem; that is, the role that humans play in the urban forestry environment is critical. The education level and environmental consciousness of urban residents plays a decisive role in the demand for urban forests and in determining the composition, management, and multiple functions of the urban forest.

Generally, the urban forest includes the collection of trees, shrubs and herbaceous plants naturally and artificially grown in urban, suburban and peripheral areas in and around human settlements. Urban forestry is multidisciplinary, involving ecological, economic and social benefits apart from fiber production and other traditional forestry purposes.

The US has played a leading role studying and developing urban forestry. Sponsored by the Arbor Day Foundation in cooperation with the USDA Forest Service (USFS) and the National Association of State Foresters, the Tree City USA program (TCUSA) was launched in 1976 to provide direction, technical assistance, public attention, and national recognition for urban and community forestry programs. Over three thousand cities, towns and communities have been awarded TCUSA recognition since the program’s inception. Urban forestry concepts and study methodologies were introduced mainly from the US to China in the late 1980’s, and in 1992, the Chinese Ministry of Construction initiated a similar program entitled, the National Garden City (NGC) award, which recognizes urban forests meeting certain appraisal criteria.



Humans are the primary component in urban ecosystems and their behavior greatly influences the structure and function of the system. This study examined the effectiveness of how Tree City USA and National Garden City work with this human element in urban forestry development.

Study Methodology

- Literature review and analysis of criteria and appraisal standards of the two programs
- Interviews with government officials involved in urban planning and urban forestry management in Portland, Eugene, and Wilsonville
- Interviews with urban forestry NGOs, including Friends of Trees, Eugene Tree Foundation, Tree Stewards, and NeighborWoods
- Talking with tree planting volunteers in Portland and Eugene
- Participating in citizen tree planting activities in Portland and Eugene; attending volunteer tree pruning training program, Project Learning Tree and other educational activities



StreamTeam planting with McKenzie River Trust in Eugene, Oregon



An urban forest in China

Comparing Criteria and Awards Process

	Tree City USA	National Garden City
Sponsoring agency	Arbor Day Foundation, USFS, National Association of State Foresters	Ministry of Construction
Motivation	Standards established to encourage cities and communities to have viable tree management plans and programs. Many codes and laws set to ensure public involvement.	Standards are set to check achievements.
Development process	Stresses stewardship among government agencies, NGOs, stakeholders, neighborhoods, and urban residents.	Primarily involves government agencies and employees.
Criteria	Encourages cities to have urban forestry plans, with greater focus on actual accomplishments. E.g. there are only 4 standards to apply (mostly qualitative) but the program also has a Tree Growth Award system to encourage continual progress.	NGC has a very high bar with preconditions that must be met, with an overall stronger emphasis on quantitative criteria.
City size and location	All communities are judged by the same standards.	Cities are classified by population and jurisdiction level, with different criteria in southern and northern regions. Criteria remain unfair to cities with harsh natural conditions.
Appraisal procedure	Appraised by State Foresters.	Complicated process involving many government levels.
Terms	1 year	3 years
Follow up	Growth Awards are continual motivator with emphasis on process.	Initial process is difficult to pass. Standards rechecked every 3 years.
Plaque	Street sign to be shown in public near community boundaries.	Office plaque not for public display.

Fundamental Criteria for China’s National Garden City Program

Population	Public greenspace (m ² /capita)		Greenspace to land ratio (%)		Greenspace canopy coverage ratio (%)	
	S. China	N. China	S. China	N. China	S. China	N. China
>1.0 mil	7.5	7.0	31	29	36	34
0.5-1.0 mil	8.0	7.5	33	31	38	36
<0.5 mil	9.0	8.5	35	34	40	38

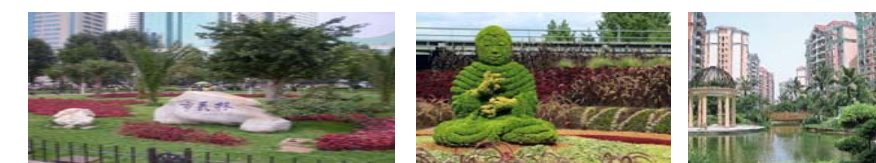


Left: TCUSA encourages NGOs such as Portland’s Friends of Trees to get residents involved in urban forestry. Volunteers plant thousands of street trees and urban natural areas each year. Right: China’s Arbor Day poster encourages greening.



Similarities and Differences

Tree City USA	Process orientated	Bottom-up	Involves the public
National Garden City	Output oriented	Top-down	Government-centered
Both Programs	Similar goals on national level	Encourage planting of native species	Integrated with “Heritage Tree” and “Ancient and Famous Tree” programs



China’s public green spaces reflect historical, cultural, and aesthetic values.

Participation Encourages Stewardship

Urban forestry development relies not only on investment and technology, but largely on the attitude and involvement of urban residents. The fundamental difference between TCUSA and NGC programs lies in how the programs’ set up and criteria encourages stewardship and development of an urban forestry ethic.

Integrated with Tree City Growth Awards, the standards of TCUSA encourage communities to make progress in developing sustainable urban forestry. Backed up by a series of laws and ordinances, there is a large arena for urban residents and communities to be involved.

NGC in China sets a high initial standard that exceeds TCUSA criteria, but basically ignores the role of urban residents from building to maintenance, neglects public participation and future development. It is critical to reinforce China’s urban forestry laws and to improve the corresponding criteria and appraisal procedures for sustainable development of urban forestry.

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