Urban ecological stewardship: understanding the structure, function and network of community-based urban land management

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Abstract

Urban environmental stewardship activities are on the rise in cities throughout the Northeast. Groups participating in stewardship activities range in age, size, and geography and represent an increasingly complex and dynamic arrangement of civil society, government and business sectors. To better understand the structure, function and network of these community-based urban land managers, an assessment was conducted in 2004 by the research subcommittee of the Urban Ecology Collaborative. The goal of the assessment was to better understand the role of stewardship organizations engaged in urban ecology initiatives in selected major cities in the Northeastern U.S.: Boston, New Haven, New York City, Pittsburgh, Baltimore, and Washington, D.C. A total of 135 active organizations participated in this assessment. Findings include the discovery of a dynamic social network operating within cities, and a reserve of social capital and expertise that could be better utilized. Although often not the primary land owner, stewardship groups take an increasingly significant responsibility for a wide range of land use types including street and riparian corridors, vacant lots, public parks and gardens, green roofs, etc. Responsibilities include the delivery of public programs as well as daily maintenance and fundraising support. While most of the environmental stewardship organizations operate on staffs of zero or fewer than ten, with small cohorts of community volunteers, there is a significant difference in the total amount of program funding. Nearly all respondents agree that committed resources are scarce and insufficient with stewards relying upon and potentially competing for individual donations, local foundations, and municipal support. This makes it a challenge for the groups to grow beyond their current capacity and to develop long-term programs critical to resource management and education. It also fragments groups, making it difficult for planners and property owners to work in partnership with them. The organizational networks are self-contained and do not include business or even legal groups, which may point to a gap between stewardship and environmental justice organizations.

Key Words

Urban ecology, stewardship, environmental planning.

Much of the literature on civic environmentalism focuses on national and global campaigns and actors. There is a great deal of analysis on how social movement organizations and international NGOs interact with nation-states, intergovernmental entities, and other transnational NGOs (Wapner 1995; Keck and Sikkink 1998; Dalton et al. 2003). While these relationships are both critical and relevant, it is no less important to explore the nature and nuances of locally based, urban environmental stewardship organizations. Comprised of both informal and formal organizations and networks, these groups interact at multiple scales ranging from the household, to neighborhood, to urban area, to cross-regional scales. Scholars are beginning to recognize the gap in our understanding about the structure, function, and relationship between these groups and to question whether theories based on national organizations are applicable at the sub-national scale. For example, a recent study of environmental organizations in North Carolina examined organizational networks, coalitions, issues focus, membership characteristics and participation, financial resources, organizational practices and formality, leadership, and media engagement (Andrews and Edwards 2005). In this paper, several similar issues are considered for urban ecology organizations comparing cities in the Northeastern United States.

Local is the primary scale where abstract environmental principals or values intersect immediate quality of life concerns. There is a vibrant "backyard" environmentalism in the United States that goes beyond NIMBYism and beyond the rubric of environmental justice to include groups that are proactively managing sections of the landscape and planning for sustainability, both in urban and rural areas (Grove and Burch 1997; Weber 2000; Dalton 2001; Agyeman and Evans 2003)

Yet, the literature on civic environmental organizational strategies tends to neglect stewardship as a role or strategy, focusing instead on lobbying, letter writing, media campaigns, protests, boycotts, sit-ins, and even internet-based tactics (Coban 2003). Urban land stewardship is a strategy that includes elements of direct action, self-help, and often education and community capacity building. Ideologically, it is less rooted in oppositional social movements and more in accessing the rights to space through collaborative, community-based resource management. A fair amount has been written about community-based resource management in rural areas and developing nations, but this paper hopes to highlight how the same principles are being pursued in urban areas in the U.S (Burch and Grove 1993; Westphal 1993).

Carmin et al. (2003) identified communication, leveraging, and community development as the three main strategies used by regional environmental NGOs. While stewardship, itself, clearly focuses on the latter of those three strategies, the support offered to stewardship groups by civil society intermediaries can include the other two strategies as well. This paper suggests that urban environmental stewardship combines land management with the desires of civil society, the private sector and government agencies. Dynamics between and across scales of action are important to consider in trying to understand and parse out the actors and relationships within the network of urban land stewardship (see Figure 1).

Figure 1. Multi-scaled model of Socio-Organizational Ties
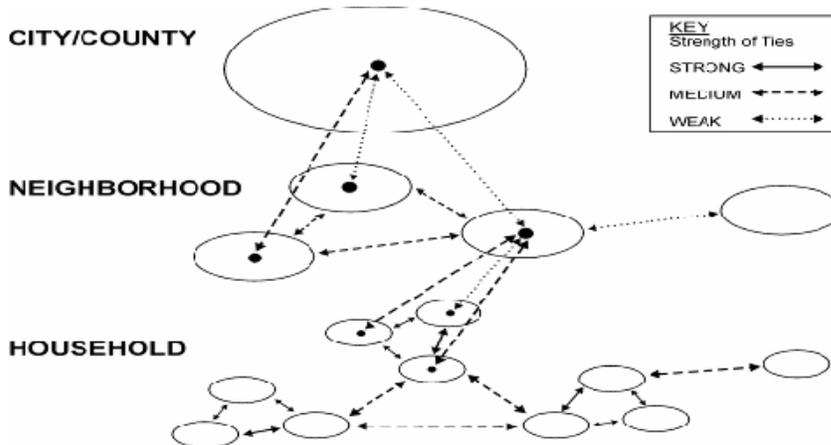
Source: Grove et al. 2002

In particular, this paper hopes to shed light on active organizations that are dedicated to using ecological strategies to create, restore, reveal or maintain any part of the urban landscape in six large urban areas in the Northeastern U.S.: Boston, New Haven, New York City, Pittsburgh, Baltimore, and Washington, D.C. These organizations include informal community groups, formal nonprofits, as well as municipal, state, and federal partners. While public, private and civil society entities will be discussed in this paper, each will be distinguished in the overall analysis. In order to support groups' stewardship efforts and improve their effectiveness as agents, a better understanding of their basic functioning as individual organizations and as a network is required. Using data from the Urban Ecology Collaborative (UEC) assessment, this paper examines how these organizations interact with critical biophysical resources (e.g. land, water, soil, air) and social institutions (e.g. government, commerce, education, non-profits) through the flow of materials, energy and information (e.g. human capital, funding, partnerships, science). The findings challenge three recent debates in urbanism, which claim that participation in civic associations is declining (Putnam 2000); that the urban environmental movement is place-based and fragmented (Harvey 1999) and that there is a waning public interest in issues pertaining to environmental quality (Greenberg 2005).

Human Ecosystem Framework:
A context for understanding the challenges of urban stewardship

Urban areas are ecosystems with interdependent resources and flows that are no less complex than wilderness or forested ecosystems (Burch and Grove 1993; Grove and Burch 1997; Pickett et al. 1997; Redman 1999). One might argue that in the urban context, the environment is nested within larger quality of life issues such as public health and well-being, economic development and social justice which are collectively driving social motivations for land based stewardship. The Human Ecosystem Approach is used as a framework to aid in revealing interactions that drive particular system at a particular point in time (see Figure 2). In this sense, the city-as-ecosystem is more than just a clever metaphor. Rather, it allows us to have a holistic understanding of the relationships between individuals, groups, organizations, culture, and norms—not just as sociological concerns, but as key contributors to the biophysical functioning of our cities. While one could choose any number of aspects from this Human Ecosystem Framework (HEF) for study, this paper considers the role of organizations as a critical "cultural resource, for they provide the structural flexibility needed to create and sustain human social systems" (Machlis et al. 1997). Stewardship groups, in particular, are chosen because they are literally agents that interact with both the biophysical resources and the social system of the human ecosystem (see Figure 2). From a

practical or managerial standpoint, determining how best to manage the urban ecosystem requires a consideration of these human organizations as vital parts of the urban ecosystem.

Figure 2. Human Ecosystem Framework
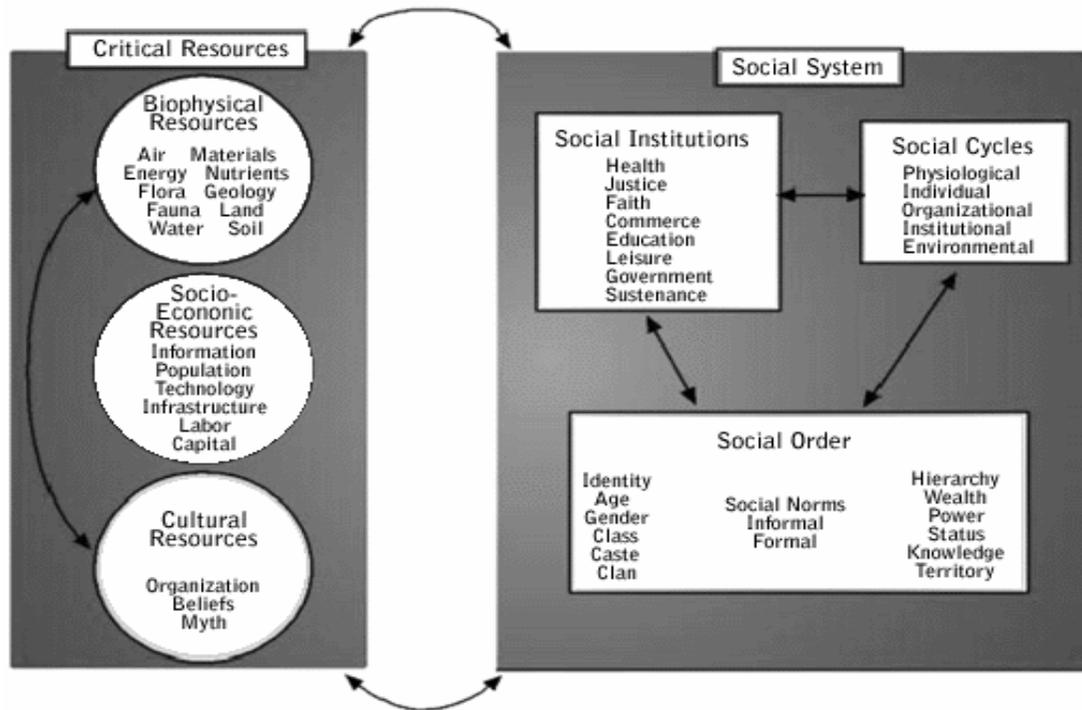
Source: Machlis, Force, and Burch 1997

Application of the HEF model to the analysis of the UEC assessment's stewardship organizations frames a number of key challenges that must be considered, which are described below.

Biophysical challenges

The largest percentage of the world's population living in urban areas was recorded at the turn of the 20th Century. It is no longer a question of whether urbanization affects ecosystem functions but rather, to what degree they do so and how positive externalities can be created within this highly manipulated system (Millennium Assessment 2005). At the metropolitan level, urban growth affects the heterogeneity of the landscape through landcover change and affects the spread of disturbance through invasive species, to name a few critical and documented examples (Alberti 2005). Within cities themselves, there is a range of open space areas from protected wildlife habitats, to contaminated and fallow sites, to highly managed and used parks. Habitats are fragmented, both discontinuous and small in size, yet species diversity can still be quite high in these disturbed landscapes (Niemela 1999). Basic urban infrastructure has major impacts on the environment. Landscape and social ecologists are still on the frontiers of knowledge regarding the management needs of highly urbanized areas. Yet, management and use of the landscape both by public authorities and the private sector continues regardless, despite a lack of understanding of how "best" to support certain ecosystem services. Often urban sites are not managed for biophysical function at all, instead serving social functions as recreation sites and as promoters of neighborhood efficacy (Sampson and Raudenbush 1999). It is in the interest of environmental planners to ascertain where, how and when community-based management of street trees,

planter beds, lots, greenways, parks, and forests is occurring. And in urban areas, one simply cannot divorce the sites from their property jurisdiction, regulations, or users.

Social and organizational challenges

Stepping back from concerns about the ecosystem, there is a need for discourses on social capital, resource management and civic environmentalism to engage with the issue of urban stewardship, for it lies at a nexus of these issues.   The debate over the proclaimed "death of associations" and accompanying dearth of social capital in American cities cites low membership in traditional civic and social groups like the American Legion, PTA and sports leagues (Skocpol and Fiorina 1999; Putnam 2000). In terms of the HEF model, Putnam is arguing that there is a decline in the (socioeconomic) resource of social capital as a function of where our society is in the current macro social cycles of participation and volunteerism, as influenced by media and technology like the television. While Putnam's hypotheses and methodology has been challenged, his contribution to the public perception of local involvement is great (Edwards and Foley 1998). To this critique, this paper adds another argument. A new class of ecologically-minded nonprofit and community based groups is emerging in urban areas as 69% of the civil society groups surveyed in the UEC assessment were formed in 1980 or later; and 55% of the civil society groups consider their service areas to be at the city or sub-city level.   While Skocpol emphasizes the change rather than decline of civic environmental associations in the 1970s, the focus remains on groups organized nationally for direct political purpose (Skocpol and Fiorina 1999). These national organizations have been the basis of environmental organization research and typically have small constitutions at the local level. Both Putnam and Skocpol's work differs from the UEC research, which suggests that vital social organizations emerge and expand from local, place-based and laterally networked issues. At the same time, the UEC findings hint that environmental motivations are nested within larger quality of life issues.

Similarly, activists and scholars alike have proclaimed that we are experiencing "the death of environmentalism", citing the institutionalization of environmental non-profits, fragmentation and their inability to achieve necessary, radical environmental change (Harvey 1999; Shellenberger and Nordhaus 2004). A version of this argument read through the HEF model is: the environmental movement's current cultural resources are inadequate (or, misappropriated) to achieve its goals, given the existing social institutions (government, business) and the social order (power, hierarchy, norms). Authors focusing on national organizations and surveys are typically discussing issues at a particular scale, such as international climate change or environmental quality (Fisher 2004; Fisher and Green 2004; Greenberg 2005). Criticism therefore focuses on policy-oriented and broad membership organizations, which wholly ignores that the rhetoric of "death of environmentalism" is not relevant to community-based stewardship groups that are actively integrating biophysical and social goals. Evidence of this emerges in this assessment as groups straddle the divide between environmental protection and community development. Based on the coding of open-ended reporting of missions and major programs, these groups focus on improvement of environmental quality (22.5%), community development (39.2%), and environmental education (38.3%).

Collaboration challenges

Some of the most visible efforts at collaborative natural resource management occur in high profile land use conflicts in the Western United States. Many forest, rangeland, and coastal managers attempt to achieve stakeholder-inclusive, ecosystem scale management (Weber 2000; Wondolleck and Yaffee 2000; McCreary 2001). However, recent studies have shown that similar patterns of non-oppositional strategies are emerging within the urban frame (Sirianni and Friedland 2001). This suggests that while there may be a wide range of urban environmental actors using multiple strategies, there can be cohesive management and policy-making, given the time and space to negotiate. While partnership strategies and coalitions certainly exist, the concentrated problems—particularly in low income urban communities—of water quality, air quality, soil quality, availability and distribution of open space, and

toxics far outpace the political power or organizational capacity of any single group to add them adequately (Bullard 1990). As such, there remains a great deal of work to be done in the coordination of urban ecosystem management. This is not to suggest that all management in cities should be *centralized*, but these findings suggest the need to recognize and harness the degree of diversity, autonomy and effectiveness among public and private sector stewardship regimes. Any attempt to understand who these groups are, why they are involved with caring for the urban landscape, and what can be done to help them work more effectively in light of the many challenges can increase the likelihood of coordinated urban ecosystem management.

Methods

The assessment was conducted in 2004 by the research subcommittee of the UEC, with supporting funding from the USDA Forest Service. The goal of the assessment was to determine the status of organizations and community-based urban stewardship initiatives operating in selected major cities in the Northeastern U.S. Specifically, it intended to:
- "Discover the gaps between biophysical and social resources, organizations, and programs;
- Highlight specific stewardship opportunities, priorities and resources in each major city;
- Examine the current capacity of organizations to use urban and community forestry activities in the improvement of the physical environment and quality of life issues common to large urban areas;
- Determine strategies for the exchange of urban and community forestry tools and techniques." (UEC 2004)

There was some slight variation by city in terms of methodology; as the established process was that each city would generate (or use existing) lists of organizations that are currently engaged in urban ecology initiatives. These initiatives could range from tree planting, to open space design, to environmental education, with the common criterion being that the groups must be actively supporting or caring for a particular piece of the urban landscape. From these lists, a sample of organizations was selected for study, stratified by management type, which consisted of: non-profit, federal, state, and local government, for-profit, community-based groups and individuals (usually independent environmental contractors). The outreach strategy to those organizations varied by city: New Haven convened a meeting and distributed surveys in person; Pittsburgh, Washington, D.C., and Boston relied upon emailing and phone outreach. The New York City methodology is described here in greater detail, as it may be most useful as a model for expanding research on a more expansive sampling framework.

New York City Sampling Methodology

The sample of 100 organizations and informal groups for the New York City assessment was drawn from a population of 2,027 groups compiled from the combined stewardship databases, participant rosters, and organizations tracked by the largest urban ecology intermediary groups in the city and in some cases region. This chart represents the groups used for this assessment who were tracking explicit stewardship information.

Partnerships for Parks	1,000 active, park-based volunteer groups
Council on the Environment for New York City (CENYC)	600 community gardens
NYC Department of Parks and Recreation GreenThumb Program	324 community gardens
Harbor Estuary Program (HEP)	300 regional stewards

These core databases were supplemented with additional groups categorized as relating to environmental issues from the New York City Nonprofits Project citywide survey of projects, as well as attendees of meetings included in the Open Accessible Space Information System (OASIS), Metro Forest Council databases, listed partners from the Earthpledge website, and groups listed on the Neighborhood Open Space Coalition's Hub website.

After the databases were assembled, they were merged along all common characteristics and duplicate listings were eliminated. Then two fields "scale" (region; city; borough; neighborhood/block) and "management type" (public agency federal; public agency state; public agency city; for-profit; nonprofit; community group) were ascertained for each group, based on information in the existing databases and input from the staff of organizations maintaining the databases. Some unknowns remained for which management type and scale could not be determined, and these were excluded. The fields were then used to stratify the sample. A four percent sample was taken from all community groups and non-profits. Because of the limited number of organizations, with many of the natural resource groups being known entities, federal, state, and local agencies were purposively over sampled in the assessment. For-profit groups were randomly sampled. The sampling is summarized in Table 1.

Table 1. Type of Environmental Management by Geographic Scale

MANAGEMENT TYPE

	Unknown	Public agency federal	Public agency state	Public agency local	For-profit	Nonprofit	Comm group
Unknown	1	0	0	0	0	42	3
Region	1	16	8	0	7	87	1
City	0	1	1	12	16	96	5
Borough	1	0	2	7	0	74	25
Neighborhood/ block	7	0	0	23	9	432	1150
SUBTOTAL (excluding unknowns)		17	11	42	32	689	1181
TOTAL= 2,027 including unknowns; 1,972 after excluding unknowns							
Sampling Methodology		Purposive Selection	Purposive Selection	Purposive Selection (4) + Random Selection (3)	Random Selection	Random selection (4% of total), stratified by scale	Random selection (4% of total), stratified by scale
Surveyed (n=100)		9	6	7	4	27	47
Returned (n=34)		2	4	7	0	12	6 (+2 indv)

(Left vertical label: **SCALE**)

The 100 selected groups were sent the survey by mail, with a follow-up phone call to answer any remaining questions, followed by a postcard reminder to complete the survey and one final round of calls,

all conducted in the summer of 2004.[1] Of the surveyed organizations, 34 completed the survey, eight said the survey was not applicable to their group (because they were actually not engaged in stewardship), and one refused to participate. Clearly, community groups had the lowest response rate, which is not surprising given the challenge of reaching these informal and sometimes temporary groups. It is possible that a number of non-responses were due to groups that no longer exist, given the age of some of the stewardship databases comprising the parent population.

The six cities, combined to survey 135 organizations (34 in New York City, 19 in Baltimore, nine in Boston, 34 in Washington, D.C., 20 in New Haven, and 19 in Pittsburgh), is not comprehensive enough to make any sort of quantitative cross-city comparisons. Because the sample was not drawn randomly, it does not enable the use of predictive statistics (e.g. regressions or means testing) on this dataset. Although this limits the analysis and makes clear the need for further study, the intent of this project was to characterize the basic form and function of an under-studied set of civil society and public actors. Thus, frequencies and percentages will be used to report the overall trends in the data.

Findings and Discussion
Organizational Demographics: Management Type and Age of Organization

Organizational demographics are some of the fundamental attributes of these groups, including management type and age. Because the goal of the UEC assessment was to understand local environmental stewardship, rather than solely the role of civil society, we see that there is a mix of organization types included in the results (see Figure 3). However, despite an attempt to be inclusive of government actors, it is evident that civil society actors outnumber them, with nonprofits, community groups, and individuals comprising 73% of the sample. This is likely a reflection of the fact that government agencies are larger and more centralized, while nonprofits and community groups are more local and place-based. So, for example, while there is one New York City Park Department, there are over 600 community gardens and more than 1000 active park-based stewardship groups in New York City. [2] The level of civil society involvement is significant from a managerial standpoint, since it means that resource managers wishing to make changes on a landscape or to improve ecological functioning in a watershed will need to do so in concert with informal and nonprofit groups. However, this does not suggest the absence of public sector involvement as suggested in the case of advocating for citizen monitoring "bucket brigades" (O'Rourke and Gregg 2003).   Instead, it may suggest the need to reconsider models for shared stewardship or 'governance' of urban land (Durant 2004).

In fact, one could perhaps make the argument that the hard boundaries of public entities and civil society actors begin to blur at the local level. There are numerous examples of intermediaries: Partnerships for Parks is a public-private entity that is a combination of the New York City Parks Department and the City Parks Foundation, dedicated to supporting community groups in their engagement with parks; GreenThumb is a federal Community Development Block Grant (CDBG) supported program of the New York City Parks Department that offers resources, materials, and technical assistance directly to informal community gardening groups; and the Harbor Estuary Program is a National Estuary Program authorized by the EPA that includes participants "from local, state, and federal environmental agencies, scientists, citizens, business interests, environmentalists, and others" (Program 2002). These intermediaries, organized around particular site types, seem to have a more prominent presence in New York City than the other cities studied, which is a function of the size and complexity of the stewardship network. These organizations differ from the majority of the small nonprofits and groups included in this survey that directly carry out volunteer stewardship. Their primary function is to maintain flows of material, information, and resources. They bear some resemblance to intermediaries that work in other areas of the urban environment, such as large CDCs or nonprofit coalitions that

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[1] The New York City assessment was conducted in partnership with New York University's Wallerstein Collaborative. A special thanks to Dr. Mary Leou and her graduate assistant, Lisa Babcock.
[2] Partnerships for Parks and NYC Dept. of Parks and Recreation GreenThumb Program.

coordinate citywide brownfield inventories, such as the Cleveland Neighborhood Development Coalition (Brachman 2003).

Figure 3: Type of Environmental Management
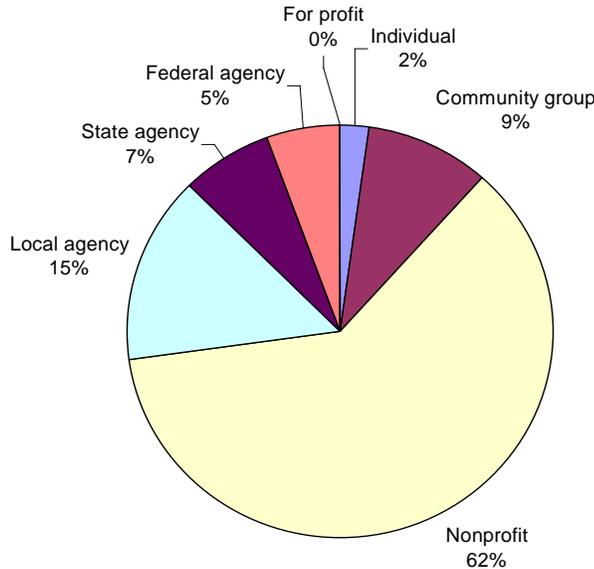
Distinctly missing from this assessment is the business community. This is due to both to the nature of the populations from which the samples were drawn and the criterion applied for inclusion in the survey. The New York City parent population (the combined databases of the environmental intermediaries) illustrates the first issue, with just 32 for-profit entities out of the total 2,004 organizations, the business sector is simply not in this stewardship network as we sampled.[3] Second, the baseline criterion applied was that each respondent had to be able to answer the question on site type, to identify a portion of the physical landscape that they manage. This is not to say, however, that the for-profit sector is not involved in the local environment; it is simply not involved in the stewardship function of public lands in the same way as non-profit groups. Rondinelli and London (2003) describe firm-NGO relationships of differing intensities, with the most common being the "arm's length" relationship, which includes corporate donations and employee volunteerism. The survey shows that 18.5% of respondents listed corporate donations as one of their top three sources of funding, the third highest ranked funding source overall. Also, the involvement of corporate volunteers in large-scale one time park clean-up days and other events is quite common. Sustained environmental stewardship, however, is not generally a long-term function filled by these firms unless representatives function in a dual capacity of citizen and business leaders.

Groups are defined by more than whether they are public or private entities. Organizational culture, which can be understood in a limited way by analyzing missions and major programs, fundamentally contributes to the way a group "does business." Wilson notes (1989),

"Every organization has a culture, that is, a persistent patterned way of thinking about the central tasks of and human relationships within an organization. Culture is to an organization what

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[3] The Business Improvement Districts (BIDs) are an important and engaged stewardship group in the City of New York. However they were not included in this limited sample but are strongly suggested for inclusion in future research.

personality is to an individual. Like human culture generally, it is passed on from one generation to the next. It changes slowly, if at all" (91).

Based on the coding of open-ended reporting of missions and major programs, stewardship groups focus on improvement of environmental quality (22.5%), community development (39.2%), and environmental education (38.3%), showing that the groups have environmental and community values. Situating urban ecological stewardship within the chronology of the environmental movement provides an understanding of how these groups map onto waves of protectionism, conservationism, populist environmental advocacy, and environmental justice (see Figure 4). Generally, urban stewardship organizations are young, with over 90% founded since 1970. This is not surprising, given the rise in urban 'self-help' social movements during the 1960s and 1970s.

Reviewing the data respondent-by-respondent, organizations founded prior to 1960 included government entities like the National Parks Service and the Metropolitan Council of Governments. Comparing civil society and stewardship organizations overall shows that patterns are similar, reflecting the increase across all sectors in environmentalism. The mean founding date of all stewardship groups is late 1981. There is a marked rise in stewardship groups founded since 2000, which may continue to rise given that newer organizations might have been systematically under sampled from a parent population based on databases that are in some cases up to three years old. Further research on these newer organizations is needed.

Organizational Resources: Staff, Budget, Funding Source, and Information

An examination of organizational resources is useful for two reasons: 1) it helps to evaluate one dimension of the capacity of these stewardship organizations to pursue their missions, again framed by the HEF concept of critical resources, and 2) it reveals one layer in the stewardship network, the relationship between funders and recipients, and a capital flow in the HEF model. These resources are examined through questions on staff, budget, funding sources, and information.

Staff size is an important measure of the level of development and formality of an organization, and looking at staff size and community volunteer base together can give a sense of how an organization accomplishes its work and at what scale (see Figure 5). The stewardship groups are generally small in size, with 63.8% of all organizations and 80.7% of civil society organizations having fewer than ten full time staff. The number of organizations with zero full time staff is also notable, with many of the groups operating entirely on a volunteer basis. Groups with zero full time staff were not just the volunteer community groups as one might expect, but were evenly divided between formal nonprofits and informal groups.

Another surprising finding was the large number of groups with zero or less than ten community volunteers, as stewardship is popularly associated with high levels of volunteerism. There were seven civil society groups that reported having *both* zero full time staff and zero community volunteers, relying upon part time staff, part time volunteer staff, consultants, and contractors. These all-volunteer groups serve the community informally by creating public green space and beautifying neighborhoods, but they count *members* as the only participants in their programs rather than users of the site. A count of the latter would reveal broader impact more clearly.

**Figure 4: Human Resources: Staff and Volunteer Capacity**
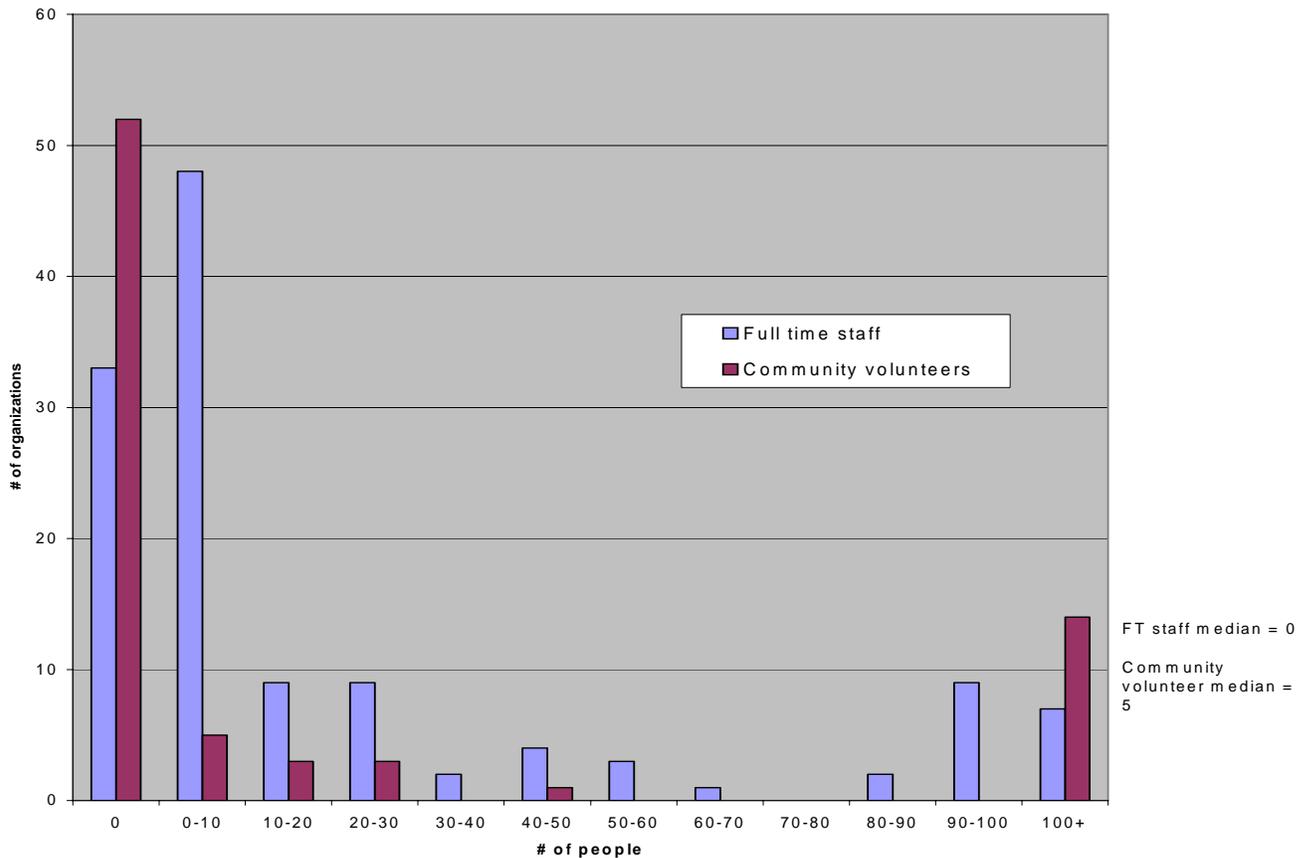
Fisher and Green (2004) argue that staff capacity (among other endogenous resources) can be a barrier leading to disenfranchisement of civil society organizations and developing countries from international sustainability negotiations and politics. Particularly in large metropolitan areas, local political decisions also require time, resources, savvy, and lobbying, which should limit the ability of stewardship groups to participate. While some stewardship-only groups may not be interested in local politics *a priori*, they can become engaged when the sites that they manage are threatened, as was true in the 1990s during the closing, auction, bulldozing, and development of a number of community gardens in New York City (von Hassell 2002). In that case, full time staff was not the limiting factor, as these groups tended to rely upon volunteers working through a community organizing process and building coalitions with likeminded garden groups, using outsider tactics like protest and street theatre. In parallel, larger nonprofits like Trust for Public Land used insider tactics, including discussions with the city and the Attorney General and the buying up of auctioned garden sites. Community organizing around threatened gardens is beyond the scope of this paper, it is raised as one example of the way in which crises can politicize even previously non-political stewardship groups (a 'triggering event,' described in (Carmin and Hicks 2002)), at which point the interaction between resources and political participation becomes even more salient.

Budget can be considered one of a group's most fundamental resources (see Figure 6). Budget—along with volunteer staff and in kind donations—entirely determines the level of possible staffing and on the ground programs. Over 16% of the civil society organizations function with a budget of under $1,000/year, indicating a large, grassroots, under-resourced portion of the network. In contrast, just one organization categorized as a local public agency (a public school environmental group), had a budget of

under $1,000/year. These small budget groups include the site-specific stewardship groups, such as community garden groups, school garden groups, neighborhood park "friends of" groups, and environmental "clubs". The network is not entirely without financial resources, however, as over 64% of these organizations have budgets of larger than $100,000/year. The intermediate-sized nonprofit organizations with budgets of $100,000-$500,000 include citywide groups like the New Haven Land Trust and the Boston Toxics Action Center, as well as larger environmental education groups. Those with resources over $1 million include high profile citywide friends-of parks groups like the Pittsburgh Parks Conservancy, as well as nationally significant nonprofits (many of which were located in Washington, D.C.) like American Forests and the America the Beautiful Fund. Seventy-six percent of public agencies have budgets of over $100,000. The ten organizations with budgets over $5 million include the Parks and Recreation departments of these major cities, as well as some county agencies with responsibility for the metro area (e.g. County of Allegheny Department of Parks) and federal groups responsible for the National Mall in Washington, D.C. The diversity of groups even within the mantle of urban ecology stewardship helps to explain the wide range of budgets that are observed. Figure 6 shows the contrast between the budgets of civil society and government groups.

Figure 5: Percentage of Groups by Budget Category
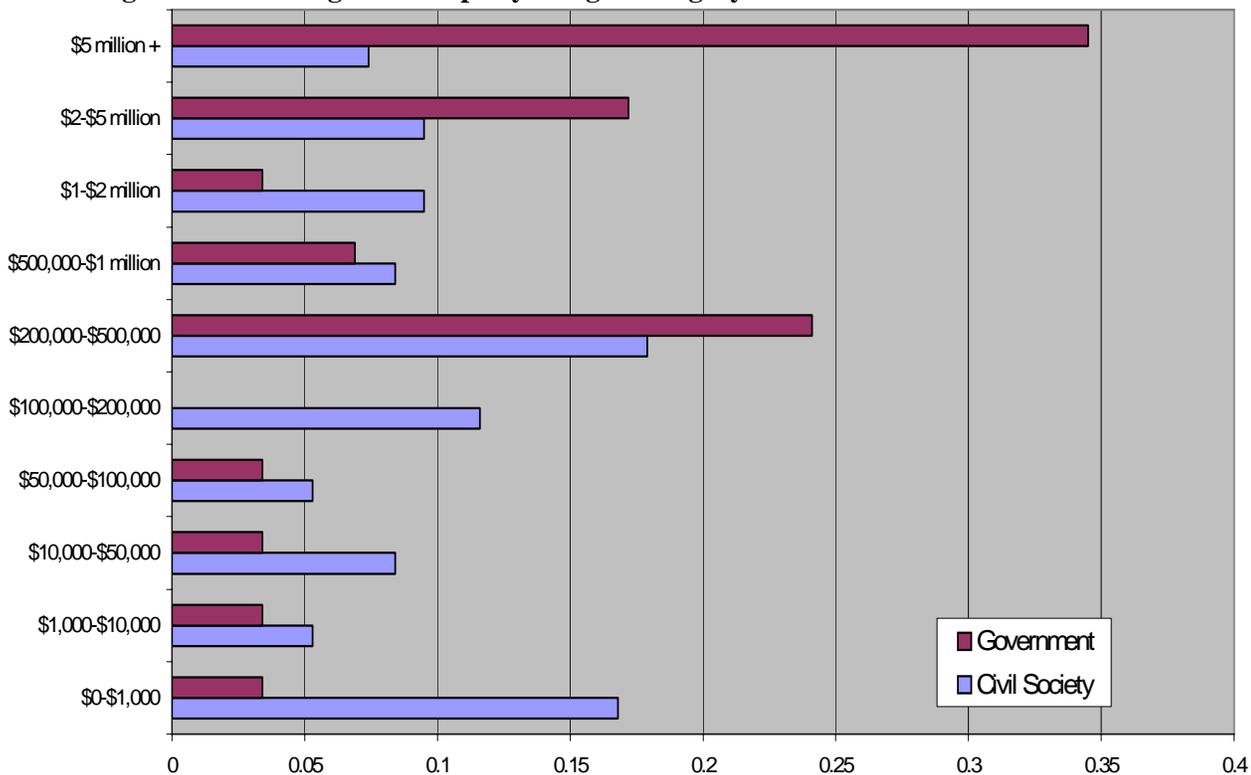
Despite the available resources, 49% of groups in the survey identified "lack of funds" as the top barrier to the successful pursuit of their organizational missions (see Figure 7). The second highest barrier was "lack of staff" at 23%, which is at least partially a function of lack of funds. These responses were generated in response to an open question rather than picking a response from a list. Additional barriers include (in rank order): lack of time, bureaucratic barriers, lack of cooperation, and lack of political power. Moreover, respondents were asked if they agreed with the statement "this budget adequately serves my group's needs." Fifty-three percent of respondents disagreed (and 27% were neutral). Therefore, we can conclude that the current allocation of resources is not meeting the needs of the majority of urban ecology organizations. Whether it is an issue of absolute resources or allocation is not known, but it makes the need for leveraging resources all the more important. Indeed, the potential to

leverage resource and pursue joint fundraising was one of the motivators behind the formation of the multi-city collaborative (the UEC) that supported the assessment discussed here.

Figure 6: Top Identified Barriers to Achieving Mission
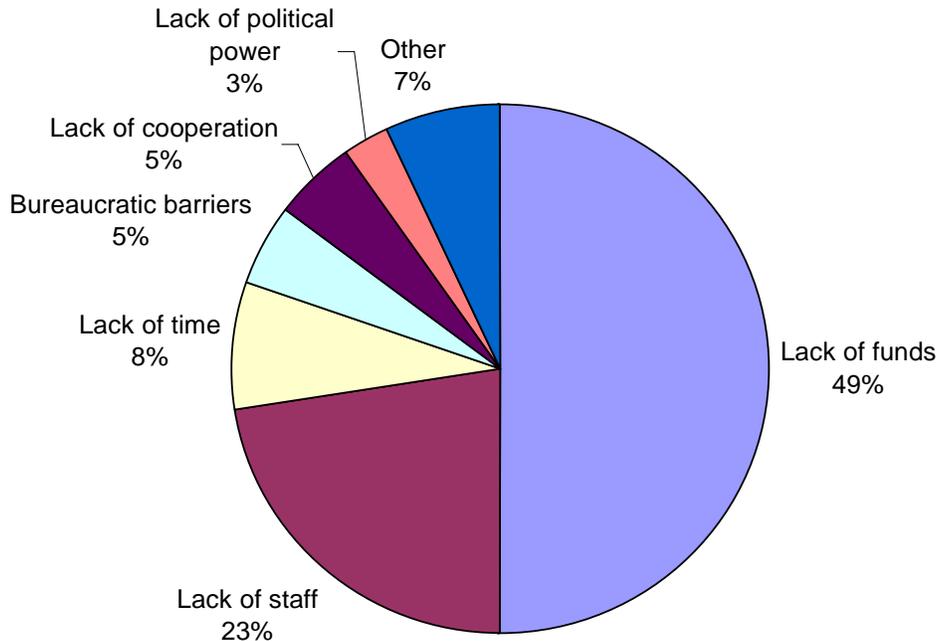
The question on funding sources asked respondents to select their top three funding sources (unranked); figure 8 shows the percent of all respondents that included each funding source in their top three. Unsurprisingly, municipal government (32.1%), state government (22.6%), and federal government (20.8%) were the top three sources of funding for public agencies. All other sources were ranked highly by no more than 11% of public agencies. Local foundations (42.7%) and private giving/membership (32.9%) are the top two sources for civil society organizations. It would have been useful to separate membership fees from private giving. Further confounding these responses was the separation of fees/program income from giving/membership. Despite these potential wording issues in the assessment tool, it is evident that more than 50% of stewardship groups rely on the financial support of individuals (through fees and donations) as one of their primary funders. All government funding sources combined were selected by 41.6% of respondents as being primary funders. The insufficient budgets and small staff sizes combined with a heavy reliance upon local foundations corroborate assessment research that small stewardship nonprofits lack much-needed support for general operating expenses (Svendsen and Campbell 2005). While there is private foundation funding available to support program expenses, general operating resources are scarce, making organizational growth and sustainability a real challenge. Environmental stewardship organizations are also supported by the private choice of individuals through in-kind and volunteer support. Since they are less reliant on public funding, this contribution should be considered a "source" rather than a "sink" of human and social capital. They

should be supported and used as conduits to affect environmental change, rather than ignored or reinvented, as some government-led programs tend to do (Burch and Grove 1993).

Figure 7: Primary Funding Sources
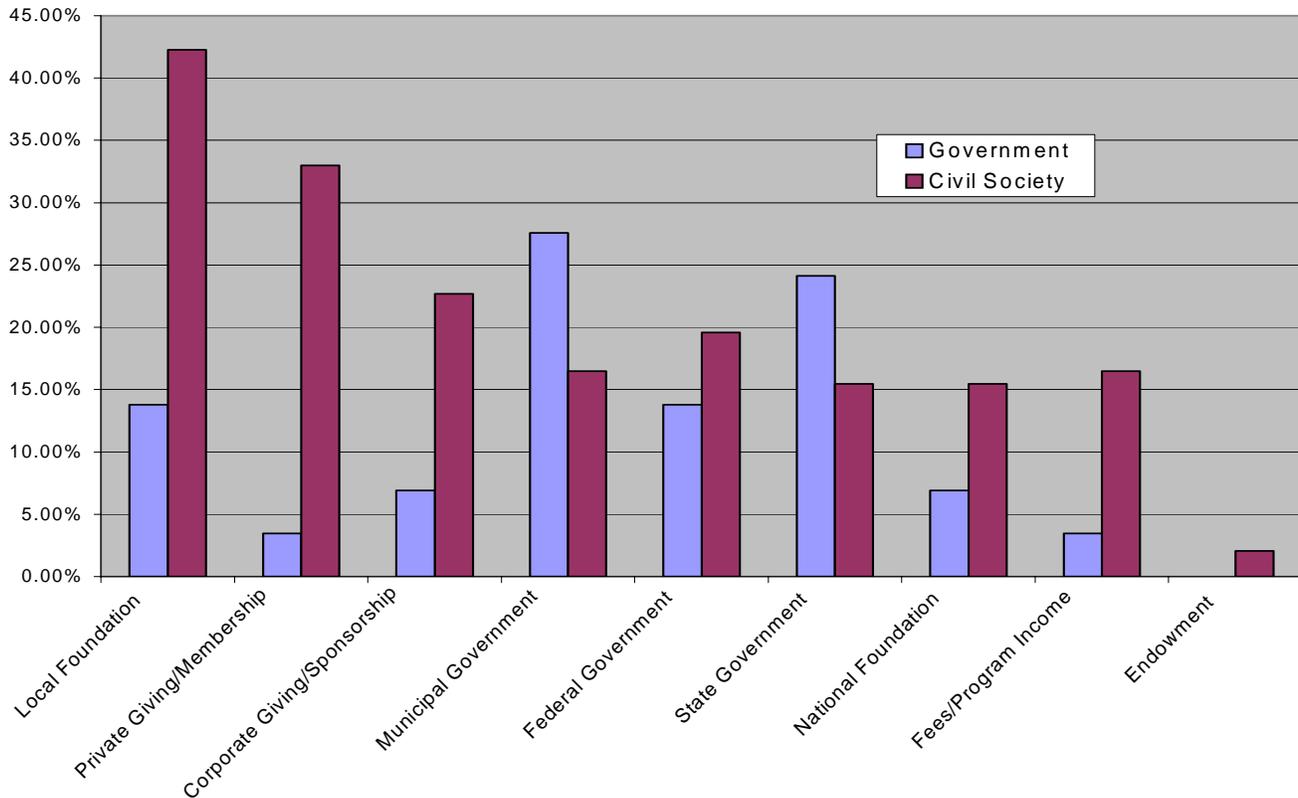
The HEF model categorizes information as a critical socioeconomic resource. Since the UEC was formed in part to support better information exchange amongst stewardship groups, the survey wanted to determine how easily stewardship groups can access information and "successful models" in their field.[4] Over 72% of all organizations and all civil society organizations agreed that they could access these models. This finding was surprising given the perceived programmatic redundancies and inefficiencies that can be observed amongst small, developing nonprofits. What, then, is the role for government and private foundations interested in supporting research, networking, and information clearinghouses? It seems to suggest that these agencies and funders could be encouraged to move away from the current model of 'technology transfer' and more towards one of capacity building through 'technology exchange.' The issue is less one of availability of technical information and more one of co-production of knowledge (Fischer 2000). In this case, stewardship organizations reported that the primary resources they provided to community were: information (54%), hands-on training (41.5%) and volunteers (37.8%); see Figure 9.   These data are used by groups internally to improve programs and services (58.5%), to satisfy funders' requests (54%) and to create legitimacy and a constituency.

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[4] The survey also asked a question on access to *scientific* information, but response rate was extremely low and respondents had difficulty ranking the various choices, so that question is not considered here.

Figure 8: Resources the Group Provides the Community
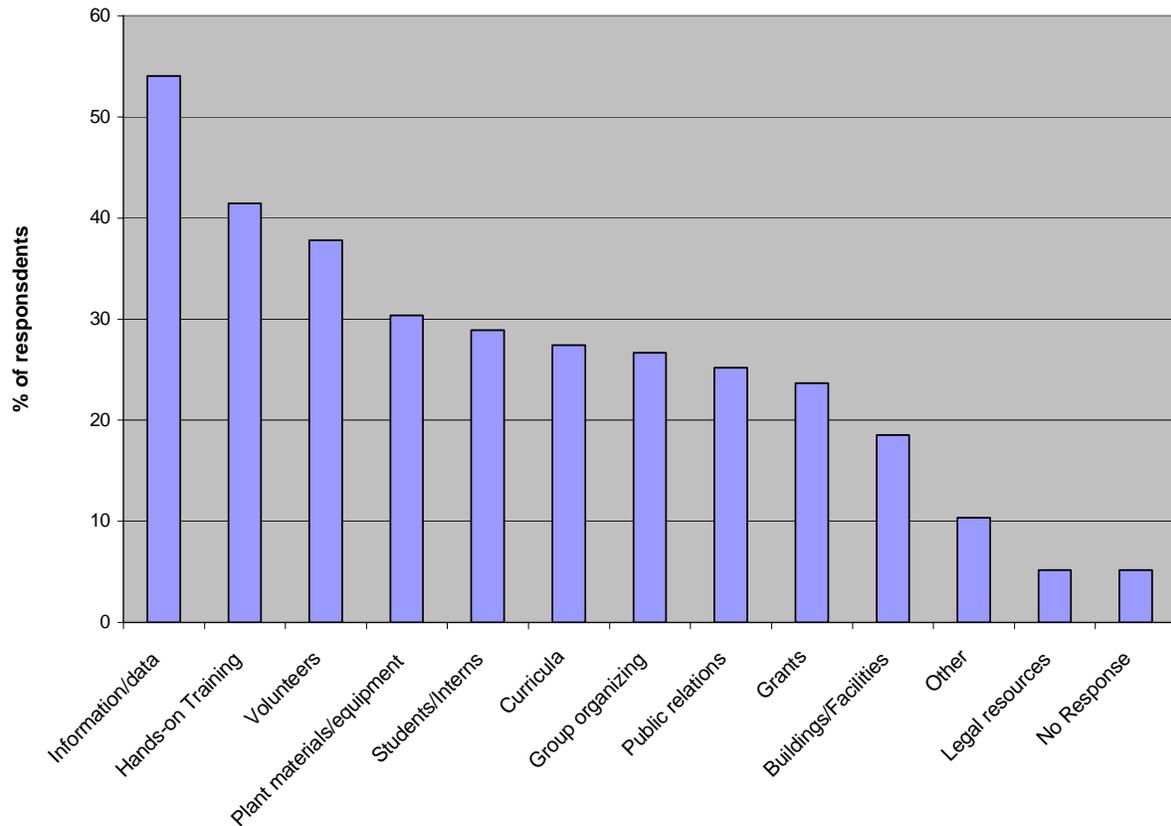
**Organizational Networks: Audience, Partnerships, Networking Strategies**

Stewardship groups, like all organizations, have networks that connect them to other organizations and actors both vertically and horizontally. For instance, government agencies, funders, and intermediaries interact with stewardship groups by providing funding, technical assistance, information, as well as material resources (such as soil, tools, landscaping equipment, etc). The stewardship groups themselves interact horizontally with other stewards, coalitions, and advocacy nonprofits that share a common interest in urban ecology. Finally, stewardship groups interact directly with individual members, neighborhood residents, schoolchildren, and one-time and sustained volunteers. Groups were asked to describe their existing networks in both directions, in terms of audience and fellow stewardship groups. Determining which partners are considered critical to the functioning of these groups and what groups they would like to work with in the future was considered critical for network analysis.

Since the assessment was implemented in two rounds, with Boston and New Haven conducting outreach in late winter/early spring 2004 and the remaining cities conducting outreach in summer 2004, two different versions of one question were asked. For the first set, the question asked "what is the target audience of your programming?" and respondents were asked to choose all groups that apply. Participants conducting the survey reported confusion over the wording in this question, perhaps because stewardship groups do not consider partners or participants "audiences". Overall, civil society organizations selected: individuals (72.7%), community groups (63.6%), and public agencies (59%) as their top three audiences. The question's intent was reconsidered and its' phrasing reconfigured to ask "with what type of organizations does your group most often work?" Here the distribution of civil society organizations responses shifted away from individuals to other community groups (72%), schools

(62.3%), and nonprofits (58.7%) as the top three selected. For public agencies, the top selected partners were schools (61.8%), community groups (61.8%), and nonprofits (61.8%)

By operationalizing the question of partnership in multiple ways, the assessment sought to get a better understanding of relatively who works with whom. Respondents were asked to rank other stewardship groups by the frequency with which they partner. The distribution of partners looked very similar between government respondents and civil society respondents. Both sets of groups ranked government groups as the stewardship group with which they most frequently partnered, (consistently/year round for 54% of civil society and 86% of public entities). Both groups tended to work a great deal with nonprofits, though civil society organizations had more interaction with individuals, and both worked infrequently with business groups. The distribution for just the civil society organizations is shown in figure 10. With the exception of the business sector, the majority of respondents reported partnering with all other stewardship groups frequently or consistently. This result could potentially be a function of the survey design and implementation. If anything, though, this question simply reinforces the lack of involvement on the for-profit sector in this capacity. It also reiterates the fact that government agencies (including municipal, state, and federal parks department as well as less obvious groups like water-based or agricultural agencies) are important stewards.

Figure 9: Frequency with which Civil Society Organizations Partner
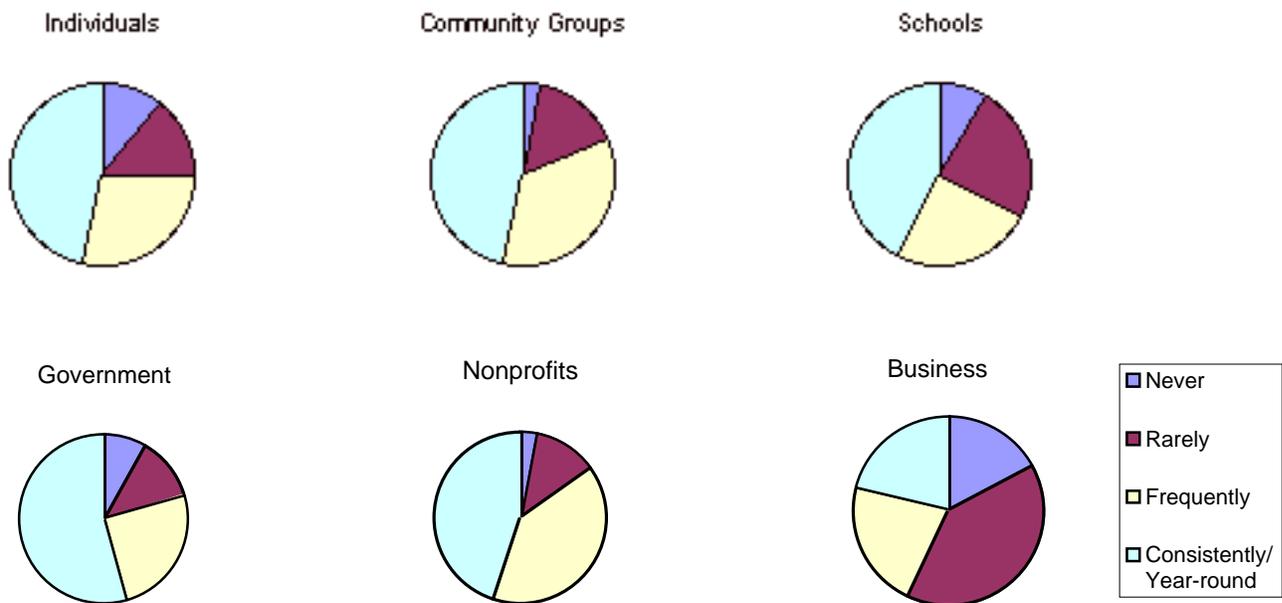
The assessment asked respondents to identify and rank up to six organizations or individuals that were "critical to their work" currently. They were also asked to rank the top six individuals or groups with whom they would like to work with, in the future but are not currently. These two questions, taken together, move towards an understanding of the beginnings of a network—though not as loosely defined as the community of common values that Batterbury (2003) describes.

Comparing these responses side-by-side allows us to understand where this network currently stands and the direction in which it may evolve. Current organizations mirrored the responses to the stewardship partner questions, with city agencies and non-profits being the highest ranked responses. Of the non-profits listed, 19 were specifically environmental nonprofits, three were "cultural" nonprofits, and one was a healthcare nonprofit. Of the city agencies, 15 were specifically referring to parks departments

of the various cities, which continue to play critical roles in urban environmental stewardship. Other named agencies include health, environmental services, planning, and urban forestry departments. Finally, of the 12 organizations listing state agencies as key partners, 10 of these were state natural resource departments.

For the future, respondents ranked highest a variety of environmental groups, government agencies, and research groups. The high ranking of research as a priority area is surprising, and perhaps suggests the potential for community based or participatory research that takes advantage of the existing close relationship between government agencies and local stewards. Also notable is the rather high rank of business groups; it seems that the stewardship groups are aware of this gap in their network. Both grouped lists are shown in Table 2.

Table 2: Top Ranked Current and Future Partners

| Top Ranked Current Organizations	Count	%	Top Ranked Future Partners	Count	%
City Agencies	34	30.63%	Environmental Groups	22	26.19%
Non-profits	23	20.72%	Government Agencies	21	25%
State Agencies	12	10.81%	*City*	*12*	
Community Groups	9	8.11%	*State*	*1*	
School Groups	8	7.21%	*Federal*	*5*	
Federal Agencies	7	6.31%	*None Specified*	*3*	
Business/Industry Groups	5	4.50%	Research Groups	12	14.29%
Grantmakers (local)	5	4.50%	Business/Industry Groups	10	11.90%
Research Groups	3	2.70%	Neighborhood Groups	6	7.14%
Regional Agencies	2	1.80%	City-Neighborhood Planning Groups	2	2.38%
City Policymakers	1	0.90%	Religious Groups	2	2.38%
State Policymakers	1	0.90%	School Groups	2	2.38%
Legal Groups	1	0.90%	Sports Groups	1	1.19%
TOTAL	**111**	**100%**	Funding Groups	1	1.19%
no response	24		Celebrity Groups	1	1.19%
			Preservation Groups	1	1.19%
			African American Groups	1	1.19%
			Volunteer Groups	1	1.19%
			Youth Groups	1	1.19%
			TOTAL	**84**	**100%**
			No Response	51	

Beyond knowing who is in the network or who groups would like to have in the network, the assessment sought to find out what particular networking *strategies* organizations used to connect with other groups. Here, there was little variation between civil society and government actors. The most commonly used strategies by civil society organizations were: attending local community meetings

(76.9%), generating press (71.4%), and participating in regional coalition group (67%). The high response for regional coalition was surprising, given a common perception of a lack of regional information-sharing and formal collaborative entities. Perhaps this reflects some ambiguity of the meaning of the word regional. The partners of the UEC and others are interested in using inter-metropolitan coalition in order to affect change in individual cities. Other common strategies listed were attending national conferences (61.6%) and participating in citywide coalitions (57.1%). For government groups, the top three strategies were public-private partnerships (83.3%), participating in regional coalition groups (76.7%) and 73.3% said they attend local community meetings and generate press. Since public-private partnerships did not rank highly on the strategies of civil society organizations, it remains a question as to what are the groups with whom these government actors are partnering. The lowest ranked strategy in both cases was "participate in list servs", reflecting the reliance on face-to-face rather than virtual collaboration. When urban groups can physically meet, they seem to prefer that to virtual communication.

Biophysical & Social Impacts: Scale of Service, Neighborhood, Site Type, Land Jurisdiction

The final aspect from the UEC assessment that is considered here is how these groups' activities play out across the space of the urban landscape in terms of scale of service delivery and areas of stewardship work by neighborhood and site type. The HEF model includes biophysical resources as a major component of the human ecosystem. While this survey did not involve any physical land assessment or inventory of sites, it does capture where and how these groups organize on the landscape to demonstrate where the overlaps and gaps between groups are, which is a first step to establishing the link between organizations and physical resources.

Figure 10: Scale of Service Delivery
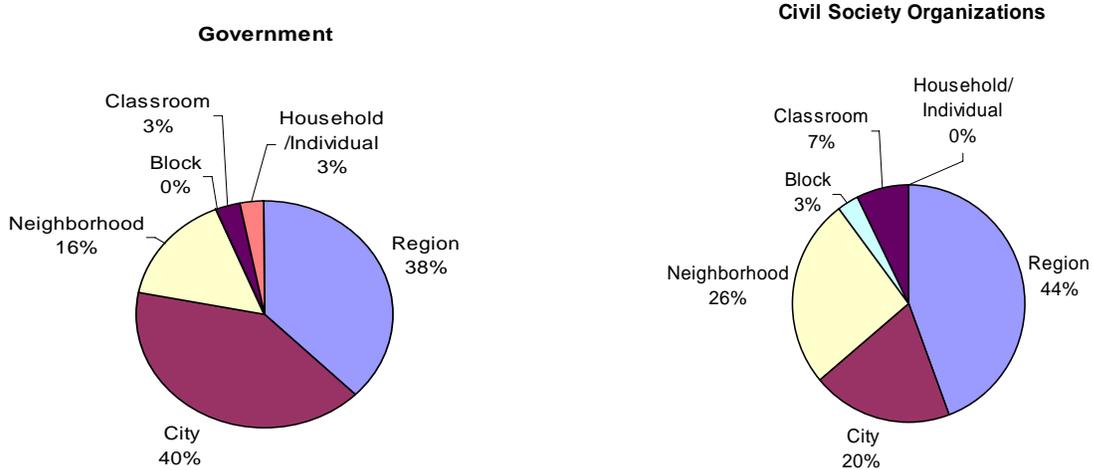
A high number of groups indicated that they work across regions. While this was intended to mean metropolitan areas, upon reviewing the group's missions and self-descriptions, it may have been selected for different reasons. Many of the Washington, D.C. based groups selected "region", perhaps because they thought it better defined the District than did the term "city." Second, a number of watershed, stream, or other groups that were operating on an ecological rather than a political scale, were a selected region because of its more flexible usage. Civil society organizations comprise the strong majority of groups working at the neighborhood, block, and classroom scales, with most government agencies working city and region-wide. This pattern fits with our intuition about the civil society groups,

given that most of them are small in terms of staff and resources; many groups have an intensely local focus. Why is it, then, that there is a perceived chasm between environmental interests and community development interests both on the ground in urban neighborhoods and in the academic literature? (Campbell 1996; Evans 2002). Is there a greater role for stewardship of the environment in the stabilization and development of neighborhoods? Research has documented aspects of this function, particularly in terms of open space's impact on property values and the importance of planning for active living to promote healthy communities (Harnik 2000; Frumkin 2003). But there is a need for further exploration of the links between the *social act* of stewardship/caring for the environment and public health, crime, and social cohesion.   Findings from this assessment suggest that the stewardship motivations conflate improving the physical site, inspiring people to positive action and impacting the overall neighborhood. Figure 12 shows the social and environmental impacts that groups reported achieving.

Figure 11: Social and Environment Impacts
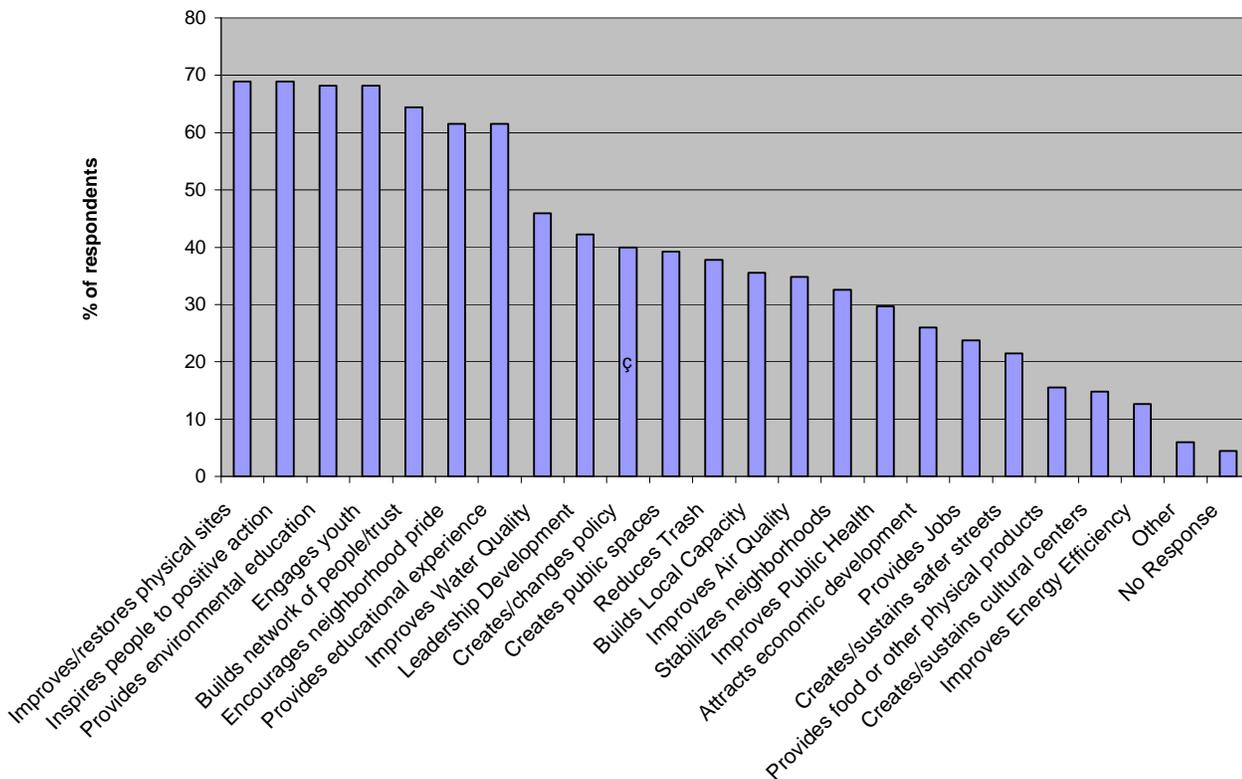
While scale explains one dimension of group influence and describes one dimension of group capacity, geographically locating stewardship "spheres of influence" is suggested as a useful tool for the ecological planner, manager, designer and community organizer. For example, as the ecological planner tries to create recreation and nature corridors such as greenways, it is necessary to know both where the potential users and maintainers of these sites are. The community organizer needs to know where the clusters of high and low stewardship activity are for the purposes of focusing her outreach efforts or coalition building, for example. Groups were asked to identify both the neighborhood in which they work as well as the physical boundaries of where the group works (down to the block and street level). Neighborhood information for the New York City groups was geocoded and made into a sample map shown in figure 13. With further refinement at the neighborhood scale, this map could be developed for long-term use by urban environmental managers.

Figure 12: Spheres of Influence Map
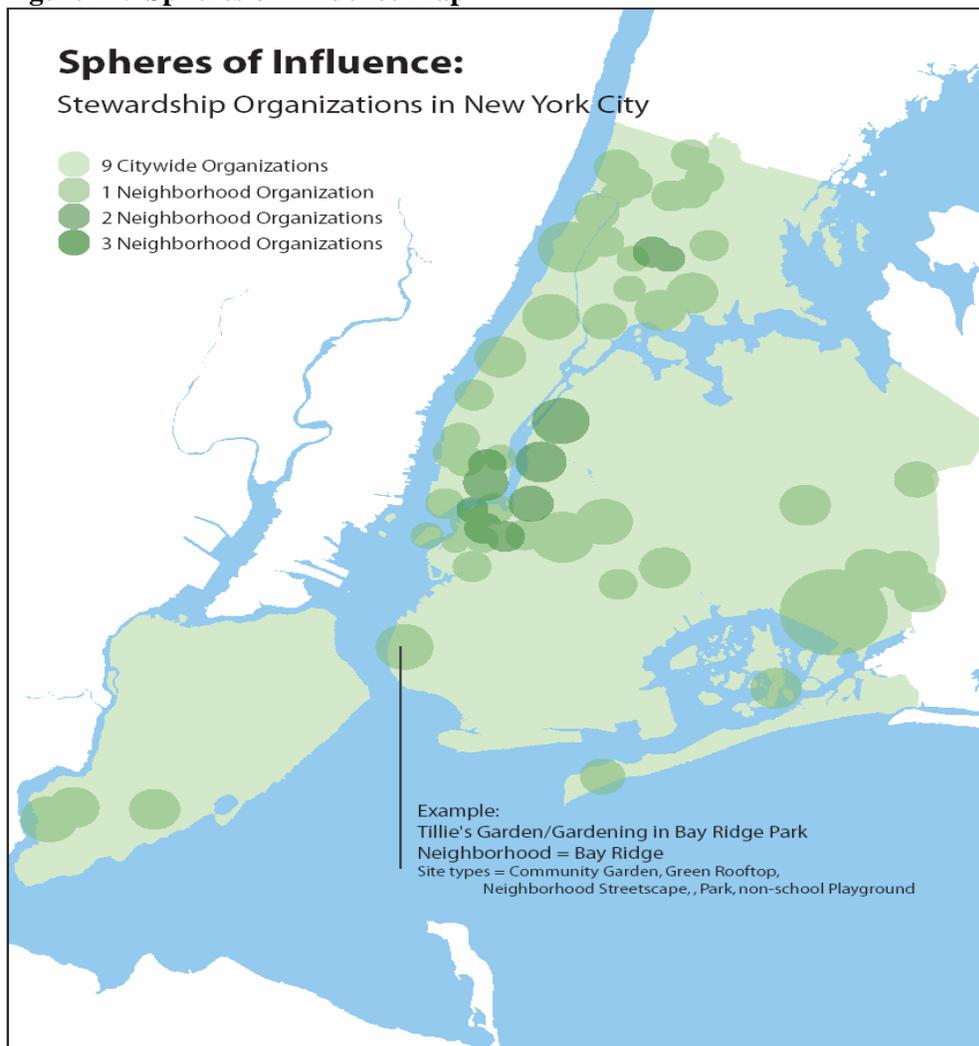
Source: E. Svendsen & L. Campbell, Urban Ecology Collaborative and C. Spielman, Community Mapping Assistance Project, 2004.

Within each city and neighborhood, there exists a diversity of site types. Respondents were asked to select from a list of 36 site types that were developed jointly by the UEC Research Sub-Committee to represent the range of sub-neighborhood site types within the Forest Opportunity Spectrum (Raciti et al. 2006). Overall, the top ranked sites were park, watershed, protected/natural site, stream/river/canal, and waterfront. Every site type was selected by no fewer than nine respondents. The thirty-six site types can be categorized into four general categories. Designated open space, including both recreational space like playgrounds and recreation parks as well as ecological space like natural protected areas, is the most frequently stewarded site type (34.1%). Water related sites (26.8%) include the expected: streams, waterfronts, estuaries, as well as the less conventional: underground streams and sewersheds. Built environment (20.5%) includes any green space on buildings or building sites, including green rooftops and courtyards, but also vacant lots and brownfields. Neighborhood streetscape (18.6%) includes all of the sites that are not on dedicated open space or building parcels, so this includes street trees and planters, but also highway medians, public right of ways, street ends, and traffic islands. Figure 14 shows the ranking of all the site types that were selected.

Figure 13: Number of Organizations Working on Site Types in Rank Order
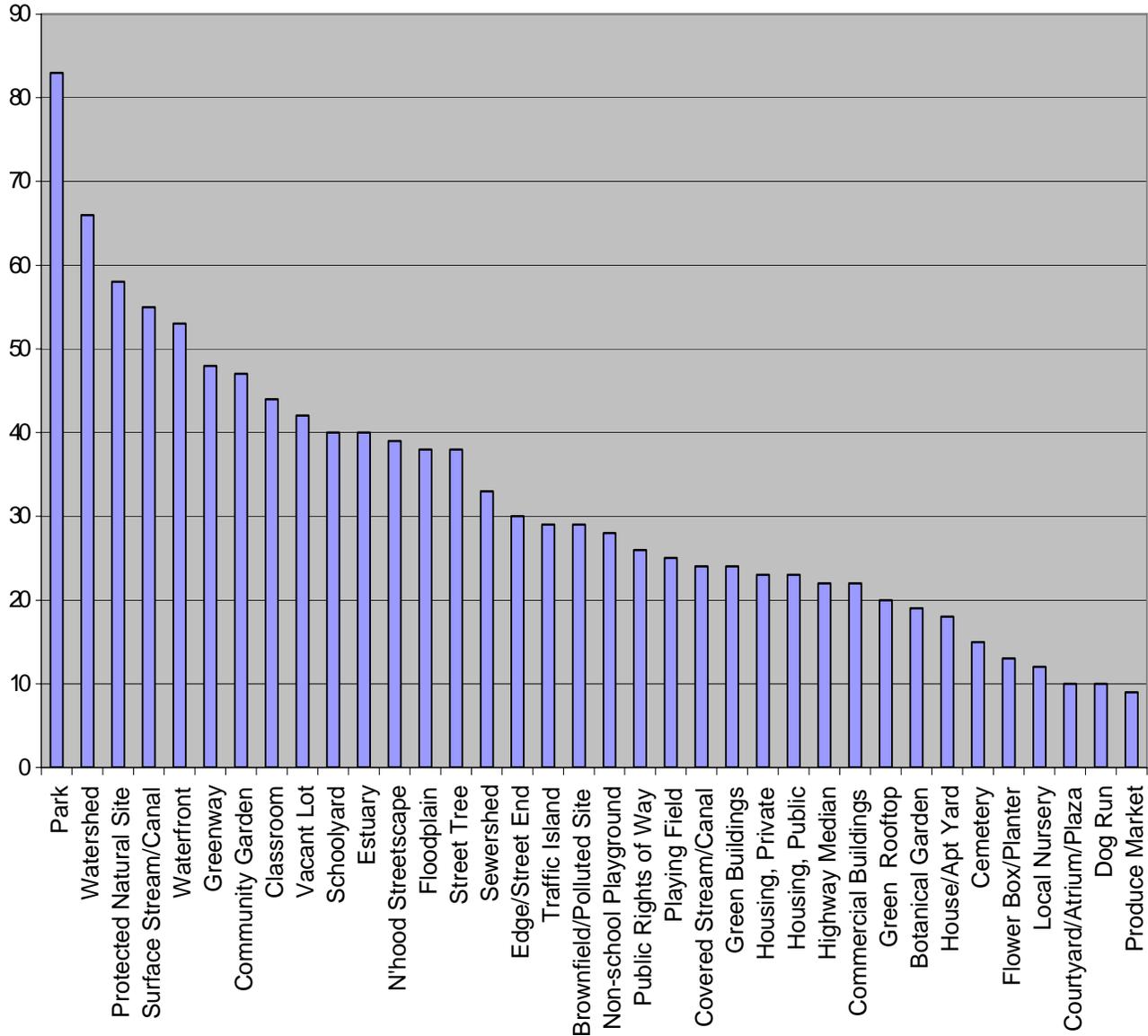
The final aspect to consider related to perceived impact is the jurisdiction of the various site types. Given the distribution of site types that includes the built environment and streetscape in substantial numbers, it is clear that stewardship is not just occurring on officially designated and publicly managed open space. In total, publicly held property does comprise the majority of sites on which all stewardship groups work at 57.5% (56.6% for just civil society orgs). Municipal government is the most common landowner of these sites, followed by state, and then federal government. Public managers must heed this presence of independent stewardship groups acting on public lands; for, as many have observed the design, use and meaning of public space is constantly challenged in the modern city (Jacobs 1961; Cranz 1982; Jackson 1984; Rosenzweig and Blackmar 1992)

The remainder of sites is divided almost evenly between individually owned land (15%), nonprofit owned land (15%), and business owned land (12%). Managing the city as an ecosystem would

require coordinated action across parcels with different management objectives and stewardship groups. Inventorying and making publicly available information on site jurisdiction is one critical first step, even independent of further research on organizations.

Conclusion

This paper begins to describe the nature of local environmental stewardship in large metropolitan areas in the Northeastern United States. Stewards are a mix of a few, larger public agencies operating at the citywide, regional and state scales and many smaller civil society actors, both 501(c) 3 nonprofits and informal community groups operating in ecological regions, across cities, and in specific neighborhoods. This organizational diversity can be viewed as both a source of social capital, in response to Putnam, and evidence of vibrant local environmentalism, in response to Shellenberger and Nordhaus. Public interest in the quality of the environment may in fact be on the rise, in response to Greenberg, but is nested within a larger context of quality of life issues. Finally, Harvey's notion that urban environmental groups are fragmented and inefficient is unresolved. The extent to which these groups will become further fragmented within specific spheres of influence or begin to develop organizational mechanisms in which to partner is unknown at this time. There is a strong underlying assumption made by this paper that without the introduction of a perceived crisis or risk, the only way to harness the capacity of stewardship groups is through deliberate multi-scaled, capacity building networks.

The assessment discovered a dynamic social network of organizations within cities with a reserve of social capital and expertise that could be better utilized. Although not the primary land owner of the sites on which they work, stewardship groups take responsibility for a wide variety of land use types. Outputs include the delivery of public programs as well as site maintenance. Most of the groups work in collaboration with government managers but operate on staffs of zero or fewer than ten, with small cohorts of community volunteers (and potentially large numbers of 'site users'). Resources are scarce and inconsistent, making it a challenge for groups to grow beyond their current capacity to develop long-term programs critical to education and management. This creates an impression of fragmentation which may not be legitimate given that certain events have the potential to unite groups across place and between scales. Stewardship networks are rather self-contained and while the business sector and legal groups are present, they are not sufficient given the critical resources that these groups can provide. This presents a challenge both to stewardship groups themselves (in terms of their own sustainability) and to planners and land managers that attempt to work with these groups. Research partnerships and shared governance structures are two potential means by which this network could be expanded (Durant 2004).

More comprehensive research of these groups is needed to be able to ask second order-questions, like the relationship between ideologies, management type, resources, strategies, and outcomes. Further research is also needed to explore the full breadth and complexity of the stewardship network. This study is a first attempt to understand groups with some affiliation to environmental umbrella organizations, but we recognize that there is a much larger universe of civil society groups for which environmental concerns are nested within other priorities (e.g. green career groups, faith based groups, youth oriented groups). An understanding of the full stewardship network will need to be cultivated in order to support stewards' work in restoring and revitalizing urban ecosystems and human communities.

Photographs of Site Types
Download from Associated Files

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Appendix: Urban Ecology Collaborative Multi-City Profiles and Organization Assessment

Organization Name:

Web site (if available):

Complete Address:

Key Contact Name

Contact Email: **Contact Phone:**

I.   Primary Purpose of the Group:

1. **Briefly, what is your group's mission statement and primary goal?** (200 words or less please.)

2a. At which types of sites does <u>your group</u> physically work? (Circle all that apply.)

Watershed	Protected-natural area	Estuary
Floodplain	Park	Brownfield-polluted site
Surface Stream/river/canal	Covered stream/river/canal	Cemetery
Vacant Lot	Community garden	Greenway
Waterfront	Botanical garden	Courtyard-atrium-plaza
Green rooftop	Produce market	Local nursery
Playing field	Non-school playground	Dog run
Greenstreet-traffic island	Sewershed	Street tree
Flower box-window display-planter	Neighborhood streetscape	Public Property Edges and Street Ends

Schoolyard	Highway median/roadside	Public Right of Ways
House/apartment yard	Housing, Private	Housing, Public
Classroom	Commercial Buildings	Green Buildings

2b. Of this list of site types, which do you think are a priority for <u>your city</u>? (Rank 5, with 1 = highest)

1. _____
2. _____
3. _____
4. _____
5. _____

3. What are your group's program areas of expertise? (Circle all that apply.)

Advocacy	Environmental protection	Public Health
Arts	Environmental restoration	Public safety
Built Environment/Green Buildings	Faith-based	Quality of Life
Business Development	Forestry	Regulatory/Enforcement
Community Development	Gardening/Horticulture	Rehabilitation/ Social Services
Education-General	Housing	Seniors
Energy Efficiency	Job Training	Sports/ Recreation
Environmental education	Legal	Transportation
Environmental Justice	Parks	Youth
Other: _____		

4. What is your management type? (Circle one.)

Individual	Non-profit	Public Agency -local	Public Agency -federal
Community Group	For-profit	Public Agency -state	

5. How many of the following does your organization have: (Please estimate and fill in the blanks.)

_____Full time paid staff	_____Community/Project-based volunteers	____Student Interns
_____Part time paid staff	_____Consultants	____Contractors
_____Part time volunteer staff	_____Temps	____Community Service Programs

II. Where the group works:

6a. In which of the following neighborhoods does your group <u>physically work</u>?
(List continues on next page. Circle all that apply.)

Annadale	Bathgate	Beechhurst	Boerum Hill	Brownsville
Arden Heights	Battery Park City	Bellaire	Borough Park	Bulls Head
Arlington	Bay Ridge	Belle Harbor	Breezy Point	Bushwick
Arrochar	Bay Terrace –QNS	Bellerose	Briarwood	Butler Manor
Arverne	Bay Terrace –SI	Belmont	Brighton Beach	Cambria Heights
Astoria	Baychester	Bensonhurst	Broad Channel	Canarsie
Astoria Heights	Bayside	Bergen Beach	Broadway Junction	Carnegie Hill
Auburndale	Bedford Park	Blissville	Brooklyn Heights	Carroll Gardens
Bath Beach	Bedford Stuyvesant	Bloomfield	Brookville	Castle Hill

Charleston Corners	Emersonville	Hunts Point	Mount Hope	Richmond Valley
Charleston	Far Rockaway	Inwood	Murray Hill	Richmondtown
Chelsea –MNH	Fashion District	Jackson Heights	Navy Yard	Ridgewood
Chelsea -SI	Fieldston	Jamaica	Neponsit	Rikers Island
Chinatown	Financial District	Jamaica Estates	New Brighton	Riverdale
City Island	Flatbush	Jamaica Hills	New Dorp	Rochdale
City Line	Flatiron	JFK Airport	New Dorp Beach	Rockaway Park
Civic Center	Flatlands	Kensington	New Lots	Roosevelt Island
Claremont Village	Floral Park	Kew Gardens	New Springville	Rosebank
Clason Point	Flushing	Kew Gardens Hills	North Riverdale	Rosedale
Clifton	Fordham	Kingsbridge	North Side	Rossville
Clinton Hill	Forest Hills	Kingsbridge Heights	Norwood	Roxbury
Clinton/Hells	Forest Hills Gardens	LaGuardia Airport	Oakland Gardens	Rugby
Kitchen	Fort George	Laurelton	Oakwood	Schuylerville
Co-op City	Fort Greene	Lefrak City	Ocean Hill	Sea Gate
Cobble Hill	Fort Hamilton	Lenox Hill	Ocean Parkway	Seaside
College Point	Fresh Meadows	Liberty Island	Oldtown	Sheepshead Bay
Columbia	Fulton Ferry	Lighthouse Hill	Olin Hill	Shore Acres
Waterfront	Georgetown	Lincoln Square	Ozone Park	Silver Beach
Concord	Gerritsen Beach	Lindenwood	Paerdegat Basin	Silver Lake
Concourse	Glen Oaks	Little Italy	Park Hill	Soho
Concourse Village	Glendale	Little Neck	Park Slope	Somerville
Coney Island	Governors Island	Long Island City	Parkchester	Soundview
Corona	Gowanus	Longwood	Pelham Bay	South Beach
Country Club	Gramercy	Lower East Side	Pelham Gardens	South Jamaica
Crown Heights	Granitville	Malba	Pelham Parkway	South Ozone Park
Cypress Hills	Grant City	Manhattan Beach	Pleasant Plains	South Side
Ditmas Park	Grasmere	Manhattan Terrace	Plum Beach	Spring Creek
Dongan Hills	Gravesend	Manhattan Valley	Pomonok	Springfield Gardens
Douglaston	Great Kills	Manhattanville	Port Ivory	Sputyen Duyvil
Downtown	Greenpoint	Marble Hill	Port Morris	St. Albans
Dyker Heights	Greenridge	Marine Park	Port Richmond	St. George
East Elmhurst	Greenwich Village	Mariners Harbor	Princes Bay	Stapleton
East Flatbush	Grymes Hill	Maspeth	Prospect Heights	Starrett City
East Harlem	Hamilton Heights	Melrose	Prospect Lefferts Gardens	Steinway
East New York	Harlem	Middle Village		Stuyvesant Town
East Tremont	Heartland Village	Midland Beach	Prospect Park South	Sunnyside –QNS
East Village	High Bridge	Midtown	Queens Village	Sunnyside –SI
East Williamsburg	Highland Park	Midwood	Queensboro Hill	Sunnyside Gardens
Eastchester	Hillcrest	Mill Basin	Randall Manor	Sunset Park
Edenwald	Hollis	Mill Island	Randalls Island	Sutton Place
Edgemere	Holliswood	Morningside Heights	Ravenswood	Throgs Neck
Edgewater Park	Homecrest	Morris Heights	Red Hook	Todt Hill
Ellis Island	Howard Beach	Morris Park	Rego Park	Tomkinsville
Elm Park	Howland Hook	Morrisania	Remsen Village	Tottenville
Elmhurst	Huguenot	Mott Haven	Richmond Hill	Travis
Eltingville	Hunters Point	Mount Eden		Tribeca

Tudor City	Utopia	West Brighton	Williamsbridge	Woodrow
Turtle Bay	Van Nest	West Farms	Williamsburg	Woodside
Unionport	Vinegar Hill	West Village	Windsor Terrace	Yorkville
University Heights	Wakefield	Westchester Square	Wingate	
Upper East Side	Washington Heights	Westerleigh	Woodhaven	
Upper West Side	Weeksville	Whitestone	Woodlawn	

6b. Please describe in detail the boundaries of where your group works. (Be as specific as possible. For example: "On Wyckoff St. between Court St. and Smith St"; "Lower Manhattan south of Canal St."; "The NW corner of 6th Ave. and 25th St."

7. At what scale does your group deliver services? (Circle one.)

Region	Borough	Block	Classroom
City	Neighborhood	Household/Individual	

8. Who owns the property on which your organization typically works? (Choose all that apply.)

Municipal government	Federal government	Private non-profit
State government	Private individual	Private commercial/industrial

III. What the group does:

9. Briefly list your organization's major long-term programs and the year in which they began. (Do not describe or use acronyms)

10. How does your group impact the urban environment? (Circle all the apply.)

Improves/restores physical sites	Inspires people to positive action
Builds network of people/trust	Provides educational experience (one time or long-term)
Creates/changes policy	Provides environmental education (one time or long term)
Creates public spaces	Engages youth
Attracts economic development	Stabilizes neighborhoods
Creates/sustains cultural centers	Creates/sustains safer streets
Encourages neighborhood pride _____	Provides food or other physical products (please state product:
Improves Air Quality	Improves Water Quality
Builds Local Capacity	Improves Energy Efficiency
Leadership Development	Improves Public Health
Reduces Trash	Provides Jobs
Other: _____	

11. What type of resources does your group currently provide to communities? (Choose all that apply.)

Curricula	Legal resources	Buildings/Facilities
Plant materials/equipment	Volunteers	Students/Interns
Grants	Group organizing	Hands-on Training
Public relations	Information/data	Other: _____

12. When was your organization founded? _____

13a. What is your organization's annual budget? (Choose one range.)

$0-$1,000	$200,000-$500,000
$1,000-$10,000	$500,000-$1 million
$10,000-$50,000	$1-$2 million
$50,000-$100,000	$2-$5 million
$100,000-$200,000	$5 million +

13b. What percentage of your budget is spent on planting and maintaining trees?

14. What is your primary funding source? (Please choose a maximum of three sources)

Federal government	National Foundation	Private giving/membership
State government	Local Foundation	Fees/Program Income
Municipal government	Endowment	Corporate giving/sponsorship

15. Please evaluate the following statement: "This budget adequately serves our group's needs." (Circle one.)

Agree strongly	Agree somewhat	Neutral	Disagree somewhat	Disagree strongly

IV. Who the group serves:

16. What type of organizations does your group most often work with? (Circle all that apply.)

Individuals	Non-profit	Schools/Students
Community Group / Interest Group	For-profit	Land Trusts
Public Agency (local/state/federal)	Public – Private Partnership	

17. Do you have a "target audience," or a specific type of group that your program is designed to work with? (Circle all that apply and specify the target audience.)

Age: _____   Race: _____

Ethnicity: _____   Religion: _____

Gender: _____   Education level: _____

Income level: _____   N/A

V. Data the group collects:

18. How often do you collect data on your programs?	N/A	Never	Rarely	Frequently	Consistently/ Year Round
Keep track of # of people served					
Keep track of # of sites served/projects completed					
Keep track of volunteer hours					
Track requests for services					

Track complaints					
Conduct before and after surveys					
Conduct end-user survey					
Conduct field site evaluations					
Do comprehensive natural system impact assessment					
Do comprehensive social/human impact assessment					
Monitor general feedback from calls/emails/letters					
Other (specify)					

19. And how do you use these data? (Circle all that apply.)

To assess/improve programs/services	To create new public policies	N/A
To satisfy funder requests	To raise new money	
To create legitimacy/ constituency	To distribute public information	

20. What do you feel your organization needs to be more effective in collecting and using data? (Choose all that apply.)

In-house staff	Computing/Equipment	N/A
Technical consultant	Strategy	
GIS	Other: _____	

21. What best describes your organization's experience in using scientific studies for decision making? (Please rank the following statements from 1-7, with 1 being the statement that best describes your experience.)

_____Science is created in isolation and information sometimes trickles down to my program

_____We work with an organization that synthesizes scientific information for decision makers like us

_____Science is disseminated directly to us, but lacks information exchange

_____We use consultants to help us understand and use scientific information

_____We are in a two-way exchange of information with research scientists

_____We work with research scientists on actual projects

_____ We are scientists that interpret data for other groups

VI. Relationship to other groups:

22. Does your organization ever do any networking beyond your group? If so, what? (Circle all that apply.)

Attend national conferences in our field	Participate in citywide coalition group
Participate in regional coalition group	Partner with local university
Partner with local secondary schools	Partner with local elementary schools
Attend local community meetings	Public-Private partnerships
Community outreach programs	Participate in list servs
Generate press	Other: _____

23. Identify groups, agencies and/or individuals in your city that are critical to your work. (Please list and rank a minimum of three, with 1 = highest)

1. _____   4. _____
2. _____   5. _____
3. _____   6. _____

24. What types of individuals, groups or agencies would you like to partner with in the future but are not currently working with? (Please list and rank a minimum of three, with 1 = highest)

1. _____   4. _____
2. _____   5. _____
3. _____   6. _____

25. What are the specific situations that prevent your organization from accomplishing key objectives? (Please list and rank a minimum of three barriers, with 1 = highest)

1. _____   4. _____
2. _____   5. _____
3. _____   6. _____

26. With which of the following <u>stewardship groups</u> in your city do you work? (i.e. partner on actual projects)	Never work with	Rarely	Frequently	Consistently/ Year-round
Individuals				
Schools				
Community Groups				
Non-profits				
Government				
Businesses				

27. Are you the only group in your service area to provide your type of programs?

Yes   No

Please evaluate the following statements:	Agree strongly	Agree somewhat	Neutral	Disagree somewhat	Disagree strongly
28. My organization can easily access other successful models in our field of work.					
29. Our programs adequately fulfill our stated mission and goals.					
30. Our programs adequately meet stated public needs.					

31. Our programs are considered critical by city decision makers.					
32. Our programs are considered critical by the general public.					

33. Is there anything else that you would like to tell us?