

What is Urban Environmental Stewardship? Working Toward a Practitioner-Derived Definition in Seattle

Michele Romolini, Weston R. Brinkley, Kathleen L. Wolf
USDA Forest Service, Pacific Northwest Research Station

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Introduction

While “stewardship” is often used to describe environmental improvement efforts, it is difficult to find an agreed upon definition of the term. Current research examines stewardship programs, activities, networks, and outcomes. A comprehensive definition should take into account the perspectives of all stakeholders. Practitioners and project managers have particularly direct experiences of stewardship, however little has been done to determine how they define the term and its implementation. Establishing a shared concept of stewardship is essential to further research, and the intent of this preliminary study is to begin to develop a definition.

Conceptual Content Cognitive Mapping (3CM)¹

Conceptual content cognitive mapping (3CM) was used to elicit responses to the question “what is environmental stewardship?” The 3CM method encourages participants to reveal and explore their cognitions and perceptions about an idea or activity. Responses are open-ended, rather than constrained by finite lists of questions or variables. Analysis of 3CM responses generates thematic, structural representations of shared concepts and their interactions across study participants.

Results

Results show that these practitioners have a multi-layered definition of stewardship, from environmental improvement to community building, from actions to outcomes. This array of perceptions is displayed in their organizational activities, and as further research may show, in organizational networks and outcomes. This initial work builds upon ongoing stewardship mapping research in New York City², and is part of a larger project comparing stewardship networks in Seattle and Baltimore. Through continued study in these and other cities, this work can be expanded and replicated to create a framework for urban environmental stewardship research.

Study Participants

In summer 2009, semi-structured interviews were conducted with representatives of nine Seattle environmental organizations. We sought to tap into the extensive knowledge and expertise of practitioners in the field. In addition to the criteria listed in Table 1, organizations were screened based on organizational size (from one volunteer to a staff of more than 50), geographic scope of programs (from a 60 acre park to the entire Puget Sound watershed), and stewardship goals (from watershed restoration to youth engagement).

We were also particular in the selection of which organizational representative to interview. Tenure was the main criterion in selecting participants; each interviewee had extensive experience and historical context from which to interpret a personal definition of stewardship. Several of the participants had been with their respective organization since its founding, and all organizations were represented by participants that were among the longest-tenured staff members. Collectively, study participants had over 100 years of experience in the field.

Criterion	Justification
had been working in the Seattle area for at least 15 years	to tap perceptions based on rich historical context
worked directly with communities	to give the context of “on-the-ground” activities that could contribute to a definition of stewardship
had a history of collaborating with other organizations	to allow for construction of a shared definition

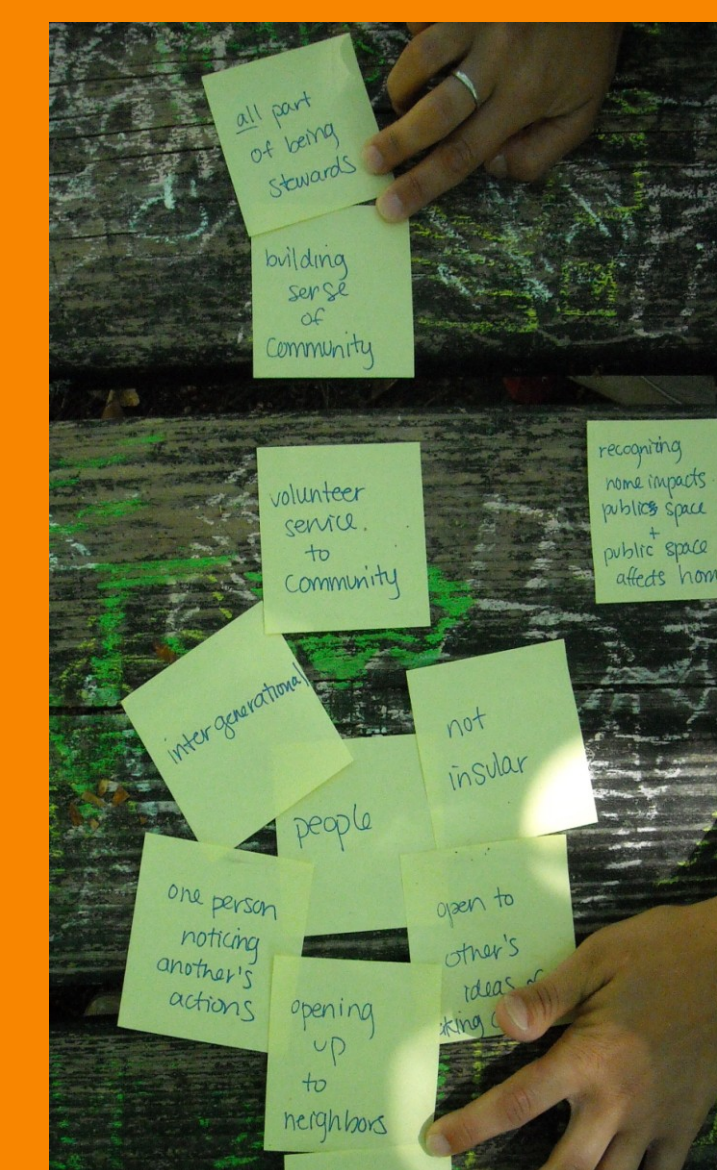


Figure 1. Example of a completed conceptual content cognitive map in response to the question “what is environmental stewardship?”



Tables 2a and 2b. 3CM respondents rapidly brainstormed terms and phrases in response to a question (left). They then assembled clusters of their self-generated terms (right). The resulting clusters generally created a whole greater than the sum of its parts.

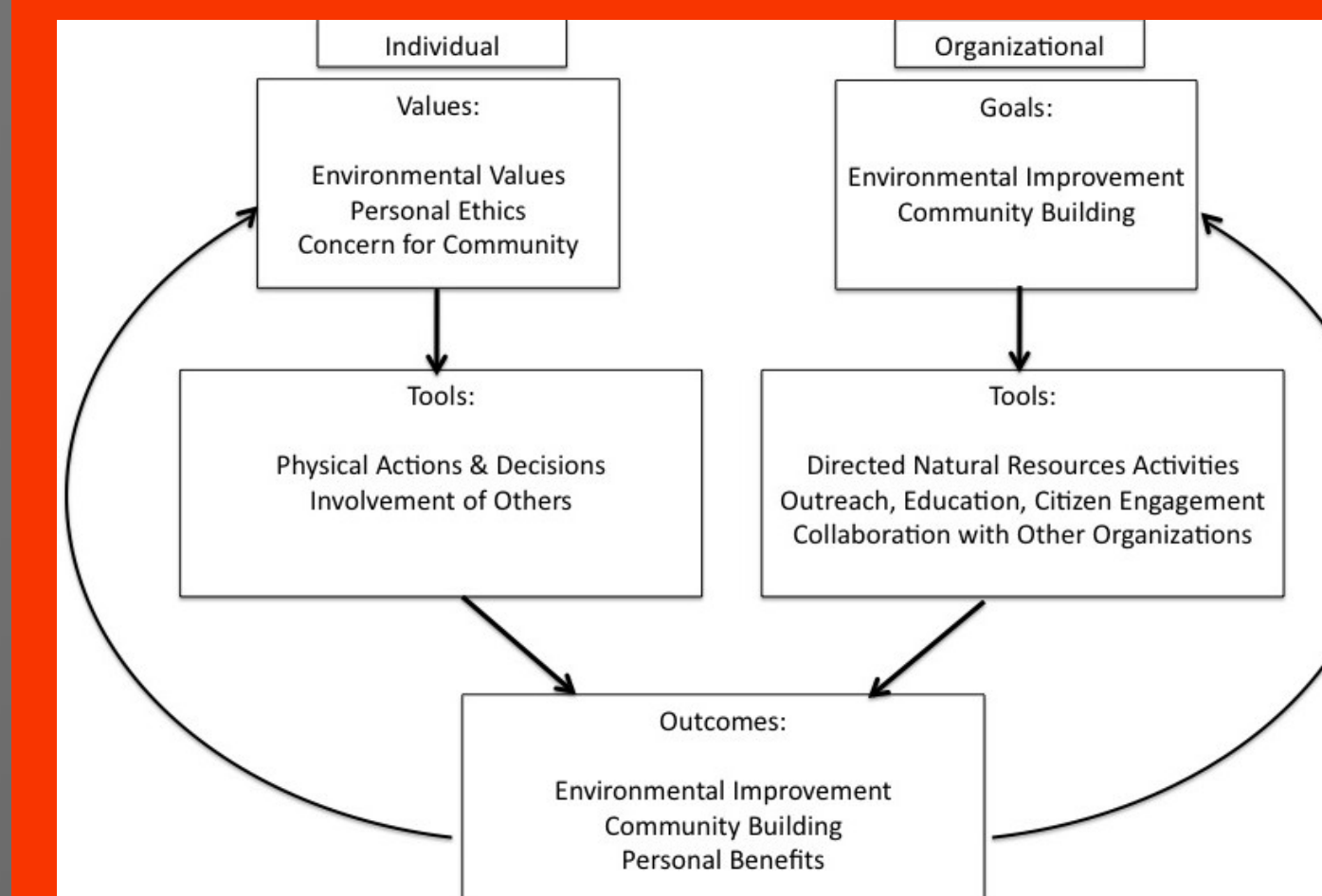
List of Responses
<ul style="list-style-type: none"> Personal accountability Responsibility Starts with yourself Cultivating voluntary commitment Voluntary commitment Grows out into community Communal How we can collectively sustain ourselves Relationships and connectivity Cultivating the health of relationships Humans are part of the environment Systems and interactive processes

Personal	Bridge	Communal
Starts with self	Grows out into community	How we can collectively sustain ourselves
Voluntary commitment		Relationships & interconnectivity
Personal accountability		Systems & interactive processes
Responsibility		Humans are part of the environment
Cultivating commitment (in others)		Cultivating health of relationships

Table 3. Conceptual framework of “environmental stewardship” using 3CM results from Seattle organizations.

Values	Stewardship was defined as being motivated by a set of values.
Environmental Values	restoration, getting back to nature, and reducing our impacts on the environment
Personal Ethics	moral obligation, spirituality, taking action about things we care about
Concern for Community	camaraderie, taking back our neighborhoods
Behaviors and Actions	Stewardship was described as taking physical action to improve the local environment
Individual Actions	planting, carrying a reusable mug, picking up trash on the sidewalk
Collective Actions	noticing each other’s actions, getting others to help
Organizational Tools	Groups described not only the mechanisms that they currently employ, but also those that they would need to achieve their desired outcomes.
Natural Resource Programs	tree plantings, removal of invasives
Outreach, Education, Citizen Engagement	advocacy, educating for stewardship, creating activities to engage everyone
Collaboration with other Organizations	collaboration, center of a cooperative, government encouragement
Desired and Realized Outcomes	Respondents often indicated that stewardship should produce end products such as change in a community through restoration or improvement.
Environmental Improvement	creating healthy green spaces, sustainable balance between built & natural environments
Community Building	opening up to your neighbors, creating a continuum of stewardship behavior, being open to other’s ideas, cultivating the health of relationships

Figure 2. Conceptual model of “environmental stewardship”



Groups tended to conceptualize stewardship at the individual level and the organizational level. Individual stewardship was generally defined as value-based. Individuals apply stewardship values through direct behaviors, actions and decisions as well as the involvement of others. Through acting on values, outcomes such as environmental improvement and community building as well as personal benefits such as meaning or realization of passion were met. These positive outcomes can strengthen initial motivations.

Organizational stewardship was often represented as goal-based, separated into environmental improvement and community building. To reach desired outcomes, organizations use several tools. These include direct programs to improve and protect natural resources; outreach, education, and citizen engagement; and collaboration. Realized outcomes appear as outputs of this process, which generate feedback, motivating further goals, values, and thus actions.



Acknowledgments

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Selected References

- Kearney, A. R., & Kaplan, S. (1997). Toward a methodology for the measurement of knowledge structures of ordinary people: The conceptual content cognitive map (3CM). *Environment & Behavior*, 29(5), 579.
- Svendsen, E. S., & Campbell, L. K. (2008). Urban ecological stewardship: understanding the structure, function and network of community-based land management. *Cities and the Environment*, 1(1), 1-31.

Future Directions

- Additional work with organizations in Seattle
- Replication in other cities (to begin in Baltimore in 2010)
- Incorporate conceptual model into future study of environmental stewardship networks