UNDERSTANDING THE SOCIAL BENEFITS OF URBAN GREEN SPACE:
COMMUNITY STEWARDSHIP AND RESILIENCE IN NYC

ACES: A Community on Ecosystem Services
Linking Science, Practice and Decision-making
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“To improve quality of life in urban areas by conducting and supporting research about social-ecological systems and natural resource management”
Social Benefits of Green Space
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**Aesthetics** (Schroeder 1983)

**Real Estate & Development** (Anderson and Cordell 1988)


**Self Fulfilment** (Westphal 1999; 2003)

**Social cohesion** (Sampson 2012)

**Crime & Community** (Troy, Grove and O’Neill-Dunne 2012)

**Resilience** (Tidball and Kransy 2014)

**Civic Engagement** (Fisher, Svendsen & Connolly 2015)
Urban Environmental Stewardship

Urban environmental stewards conserve, manage, monitor, advocate for or educate the public about the local environment (Fisher et al. 2007).

New York, Baltimore, Chicago, Seattle, and Philadelphia
San Juan and Los Angeles

Source: From left to right—Green Guerillas, NY daily News, © Meg Cotner
Stewardship: A co-production of ecosystem services
Cultural Ecosystem Services

“Non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences” (MEA 2005)

From cultural to socio-cultural ecosystem services

Often only easy-to-measure services are included in assessments (Chan et al. 2012)

Cities are increasingly where humans directly interact with ecosystems – urban ecosystem services (Gomez-Baggenthun et al. 2013)
Individual Park Users
City-wide Social Assessment of NYC Parklands (2013-2015)

Research questions

What are the uses, functions, and values of parkland as conveyed through people’s behaviors, descriptions, and narratives?

2013: How have perceptions of and interactions with parkland been influenced by Hurricane Sandy?

2014: How do visitors use, perceive, and value natural areas in NYC Parks?
Study Area

- Parks surveyed
  - 39

- People interviewed
  - 1600+

- Acres surveyed
  - 9503

Source: http://www.nycgovparks.org/
Methods

- Spatially explicit:
  - Interior zones
  - Edge

- Observations of:
  - Human activities
  - Signs of human use

- Randomized interviews
Direct human observation

Pelham Bay Park

Van Cortlandt Park

Flushing Meadows Park
Signs of human use

Alley Pond Park
Conference House Park
Pelham Bay Park
Forest Park
Interviews
Interactions Between Community and Park Edge

Mirroring

Blurred Boundaries

PRIVATE PROPERTY

PRIVATE PROPERTY

PRIVATE PROPERTY

PARK

PARK

PARK
Zone delineation
Interview Analysis: Park Use

- Local
- Amenities
- Nature – Outdoors
- Refuge
- Enjoyment
- Activity
- Place attachment
- Sociability
- Social Ties

<table>
<thead>
<tr>
<th>Cultural Service (MEA 2005)</th>
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<tbody>
<tr>
<td>Cultural diversity</td>
</tr>
<tr>
<td>Spiritual and religious values*</td>
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<tr>
<td>Knowledge systems</td>
</tr>
<tr>
<td>Educational values</td>
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<tr>
<td>Inspiration</td>
</tr>
<tr>
<td>Aesthetic values*</td>
</tr>
<tr>
<td>Social relations</td>
</tr>
<tr>
<td>Sense of place</td>
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<tr>
<td>Cultural heritage values</td>
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<tr>
<td>Recreation and ecotourism*</td>
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What does it mean?

Provisioning

Habitat / Supporting

Regulating

Socio-Cultural
Stewardship Groups
City-wide Stewardship Organizations

Green Space

Social Space
Data and Methods

- Online and mail-in survey
- Combined org databases of 20 umbrella groups, snowballed to saturation among data providers
- Initial N = 5,861
- Final N = 2,517
Organizational Characteristics

- About 1/3 of the groups have 0-1 paid staff
- 32% have budgets of < $1000
- About half the groups have 501(c)3 status
- The # of organizations founded increased throughout the 1970s, 80s, 90s
- The most common stewardship sites were parks (41.3%), community gardens (40.5%), and street trees (23.9%)
Stewardship Legends and Legacies

• 19th Century Parks Movement
  • Progressive Era
    • Technocrats and Power Brokers
      • Homeowner Associations
        • Anything Goes
          • It’s Us vs. Them
            • Coalition and Collaboration
Geopolitical Spheres of Influence: Stewardship Turf and Intensity
Networked Stewardship

Networks & Hybridity
*a social innovation*
Civic to Civic Network

N=704, with 316 respondents
11% of all stewardship groups
Most connected organizations

Green Guerillas
Brooklyn Botanic Garden
Grow NYC
Just Food
Trust for Public Land
NY Cares
New York Restoration Project
Trees New York
Citizens Committee for NYC
Park Slope Civic Council
American Littoral Society
Municipal Arts Society

~identified organizations 2 standard deviations or above with number of “in-degree” ties
Co-Production of Services: Governance

Bridge, broker, and bi-modal governing

- Mid-level brokerage is increasing

- These groups create links across scales and sectors – share information, resources, & materials

- Hybrid (civic-gov’t) role for bridge organizations

This figure identifies the groups with the most ties and the greatest “betweeness” measures in the civic stewardship network of New York City.
Socio-cultural Ecosystem Services: Application for Resilience Planning & Land Use Development

- **Land Use Coalitions, Trusts and Alliances**
  
  *STEW-MAPing on the rise*

- **Urban Resiliency Planning and Development**
  
  *Urban design & civic engagement*

- **Emergency Response Community**
  
  *Greening as a recovery mechanism / restoration*

- **Civic Ecology / Democracy Organizations**
  
  *Greening as a mediating mechanism / conflict*
Thank you

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