

Civic Organising

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Introduction

Urban sustainability systems, including green, blue, and grey infrastructures and spaces, require ongoing coordination, collaboration, and co-management in order to function. Municipal agencies often do not have the resources to maintain these systems alone and rely on a network of civic organisations and volunteers as well as job trainees, temporary employees, and welfare-to-work staff, alongside permanent public employees (Krinsky and Simonet, 2017). Civic groups, however, are more than just a labour force; they envision and shape the public realm in their own right. The majority of civic stewardship groups in this study formed in part as a response to hyperlocal concerns – such as access to parks, input on neighbourhood design, and desire for culturally responsive programming. Civic stewardship groups are part of environmental governance networks of the city, along with government entities and private sector actors, as they advocate for, manage, and programme urban spaces (Connolly et al, 2013). As cities seek to steer toward sustainability, there is a crucial role for civic stewards in those processes.

Klinenberg (2018) and others have highlighted the ways in which physical spaces, and organisations associated with physical space, can serve as social infrastructure that strengthens social cohesion (Peters et al, 2010). Indeed, a 2023 report by the US Surgeon General called for a greater investment in social infrastructure to combat the current epidemic of loneliness and social isolation (US Surgeon General, 2023). Latham and Layton (2019) identify the need to understand how social infrastructures function. We posit there is a need to focus on the organisational aspects of social infrastructures, to highlight Klinenberg's

‘hidden networks’ of social actors who are activating these spaces and their specific tactics of activation. In the cases of green, blue, and outdoor grey spaces, we find civic stewardship groups shape urban environments physically, discursively, and politically. Greater attention is needed to the role of civic actors as stewards who engage in acts of caretaking and claims-making in the urban public realm in pursuit of sustainability, environmental justice, and social justice.

Stewardship practices are undertaken by diverse civic groups with various foci including the environment, seniors, social services, youth, housing, and arts. They work across multiple site types including green public spaces like parks, commons such as water and air, as well as systems of energy and waste (Svendsen and Campbell, 2008). These stewards can work independent of government, in collaborative partnerships, and/or through contestation as part of environmental governance networks (Connolly et al, 2013; Fisher and Svendsen, 2014). While environmental stewardship by civic actors is often ‘unseen’ or thought to be episodic and more ephemeral than government-led environmental management (Metcalf et al, 2016), the civic sector can be more effective than government at realising environmental justice outcomes and adapting quickly to disturbances (Landau et al, 2021).

In this chapter, we explore: How do civic stewardship groups activate urban environments as social infrastructure in order to create more sustainable cities? How do social networks associated with stewardship organisations help shape stewardship practice? Through interviews and case studies with civic stewardship groups in New York City, we generate empirical evidence about the practices and networks through which stewards activate, interact with, shape, or transform the urban public realm to serve social functions.

Background on social infrastructure and civic environmental stewardship

Social infrastructure can be defined as ‘the physical conditions that determine whether social capital develops’ or ‘the physical places and organisations that shape the way people interact with each other in everyday life’ (Klinenberg, 2018, p 5). Researchers have long studied ‘third places’ outside home and work that encourage gathering and build social capital and cohesion (Oldenburg, 1989). Prior research has established that public space is the product of both physical space and social processes (Zukin, 1995). As such, physical spaces must be activated by individuals, groups, and organisations to function as social infrastructures that encourage cohesion. These everyday spaces that necessitate social interaction are essential to civic life because they foster the types of social networks and collective efficacy that are the foundation of a strong society (Latham and Layton, 2019). Public parks and waterfronts function as social infrastructure by offering the public opportunities for recreation and access to outdoor environments (Stanley

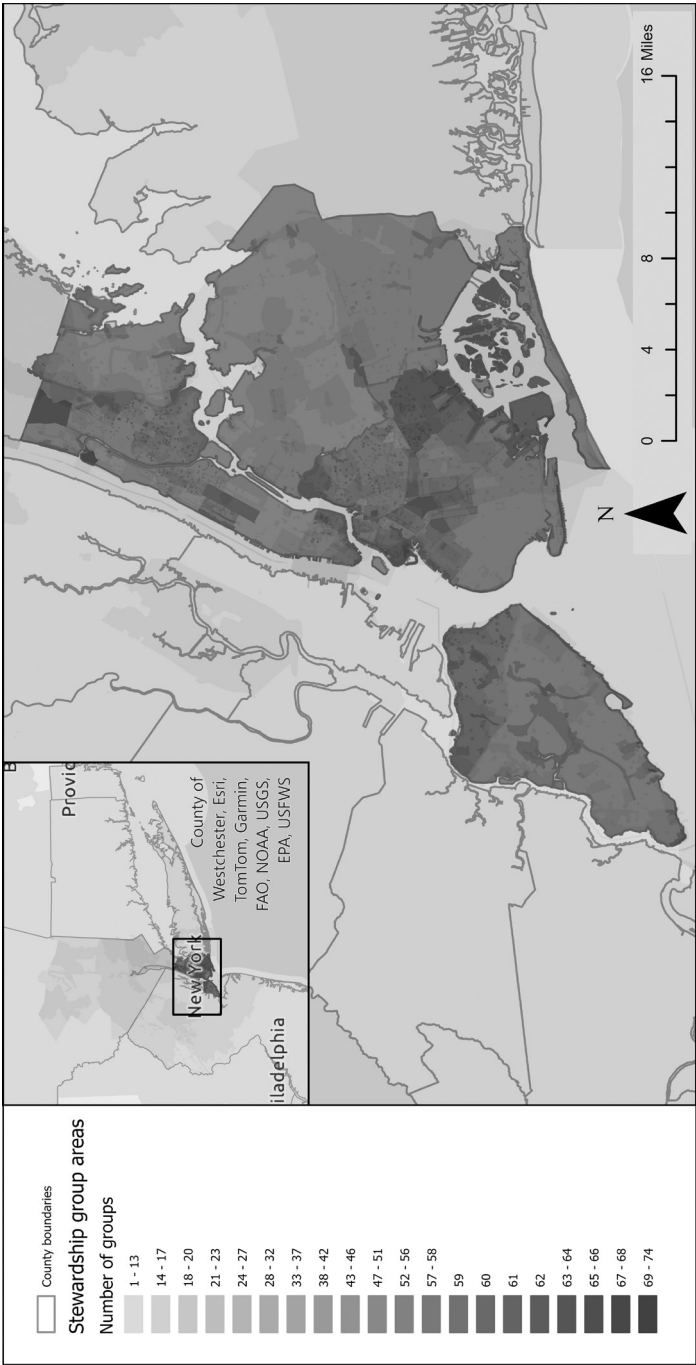
et al, 2012). The environmental stewards who manage and activate these green and blue spaces can serve as transformative agents by improving ecological outcomes as well as quality of life (Svendsen and Campbell, 2008). It is through the sociality of their actions that environmental stewards deepen their relationship to community and place.

As actors in a complex environmental governance network, stewardship groups can function as key brokers to create social-ecological outcomes and shape new forms of environmental governance (Connolly et al, 2013; 2014). Environmental case studies have found that civic groups bring local knowledge to bear alongside and within government and private sector efforts, scale up through political hierarchies, and scale out through social networks (Buijs et al, 2019). Different types of green and blue spaces require specific forms of management and care, and civic capacity to address environmental needs and concerns varies greatly by geography (Sampson, 2017). Stewardship groups do not all have equal access to the same level of resources, funding, or social capital. Yet, green and blue spaces that function as social infrastructures, such as community gardens, parks, and waterfronts, often generate the type of community organising that produces associated benefits of community efficacy, wellbeing, and civic capacity (Sampson, 2012). These small-scale groups run programmes and everyday activities that foster trust (Small, 2009), engage in the type of ‘do it yourself urbanism’ (Iveson, 2013), and support the formation of social networks (Connolly et al, 2013; 2014) that help to address pre-existing inequalities across a given urban geography.

How we did our research

This chapter draws upon data on civic stewardship groups and their role in environmental governance networks collected through the Stewardship Mapping and Assessment Project (STEW-MAP), a USDA Forest Service research project (see <https://www.fs.usda.gov/research/projects/stew-map>). STEW-MAP surveys and interviews civic groups engaging in environmental stewardship, to capture data on their organisational characteristics, the geographies where they work, and their organisational networks with civic, private, and governmental actors (Svendsen et al, 2016). The survey was implemented in 2017 in the New York City region, with a total of 7,003 groups receiving the survey and 754 responses (11 per cent response rate). Civic stewardship groups were found to work across all five New York City boroughs, with territories ranging from a single parcel, to neighbourhoods, to the entire region (see Figure 10.1). These groups work on green spaces, blue spaces, and urban systems. Green spaces include parks, community gardens, and street trees. Blue spaces include waterways, wetlands, and waterfronts. Systems include multi-sited, networked infrastructures such as waste, energy, and stormwater systems. These groups participate in collaborative networks

Figure 10.1: Map of New York City stewardship group intensity



Source: Michelle Johnson (chapter author)

Table 10.1: Sampling strategy

	Less connected groups	Moderately connected nodes	Brokers
Citywide or regional	3	2	3
Neighbourhood wide to citywide	3	3	3
Smaller than neighbourhood	3	3	3

that cross institutional sectors and physical site types (see Landau et al, 2019 for complete survey methods and results).

We selected a stratified random sample of stewardship groups to participate in in-depth, semi-structured organisational interviews. The sampling design stratified New York City STEW-MAP survey respondents by size of their geographic territory and level of network connectedness. We assigned groups to one of three network categories (Less connected groups with no named connections – meaning other respondents did not name them as a partner; Moderately connected nodes, with named connections by other respondents; and Brokers, which have two times the standard deviation for betweenness – a social network measure) and to one of three geographic categories (citywide or regional; neighbourhood to citywide; and smaller than neighbourhood, based on territory size). This design led to a typology of nine different group types (see Table 10.1); three groups were selected at random from each category. Following any bouncebacks or interview refusals, we selected a replacement group from the same category. In the category of large geographic territory and moderate connectivity, replacements were exhausted and only two groups were interviewed for a total of 26 interviews during 2019 (see Campbell et al, 2021 for complete interview methods and results).

In this chapter, we first present a summary of the practices by which stewardship groups activate and transform urban environments that were identified across the entire interview dataset. Following that, we present three purposively selected case studies of groups focused on parkland stewardship that operate at different positions in the network (highly connected broker, moderately connected node, less connected group). These case studies demonstrate the way stewardship practices vary by position in the governance network and yet each produce distinct social-ecological outcomes.

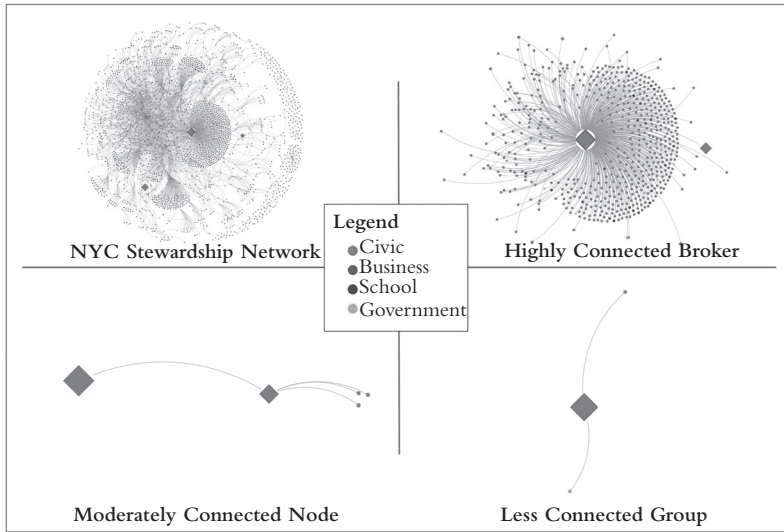
How stewardship groups activate and transform green, blue, and grey outdoor spaces

We found that civic stewardship groups activate social infrastructure to achieve social-ecological outcomes in diverse ways, dependent upon their position in the network (Campbell et al, 2021):

- **Highly connected brokers** in the stewardship network activate green and blue spaces most commonly through community-based planning and engagement. We found evidence for a two-way role of broker groups: working collaboratively with government actors, but also holding government accountable to community concerns (see also Connolly et al, 2013). These brokers foster trust and build collaborative relationships across multiple domains. In so doing, they amplify the voice of community stakeholders in decision-making, create new conduits for communication, and draw upon their complex partnerships to create advocacy ‘asks’ that help communities meet their needs while being rooted in the realities and constraints of governing.
- **Moderately connected nodes** engage in relatively more programming and activation of the public realm than do the broker groups. This programming takes the diverse forms described earlier: cultural, educational, health and wellness, sports, and sustainability-related activities are widespread. In delivering these programmes, many stewardship groups work with municipal government, often by receiving money, materials, or technical support. While moderately networked groups conduct community engagement, it usually takes the form of creating opportunities for volunteers to participate in hands-on stewardship activities (such as tree care, gardening, clean-up events), rather than in the larger-scale advocacy efforts led by the broker groups.
- **Less connected groups** frequently mentioned mediating conflict and difference, which centred on differences in opinion among members. At the same time, these groups foster many interpersonal connections and inter-organisational connections. Groups in this category more often referred to forming friendship, loose ties, and social cohesion. It is important to note that although these less connected groups are not as centrally positioned, they are not ‘isolates’ in the network. They also collaborate with civic, public, and private sector groups and identify them as partners. However, groups in this category were not listed as partners by other civic stewardship groups who responded to the STEW-MAP survey.

Next, we present three case studies of stewardship groups working on urban parkland that occupy these three different positions in the governance network in order to shed light on the practices used and outcomes that these groups achieve. As you can see in these case studies, each of the stewardship groups formed because of locally observed socio-environmental problems. See Figure 10.2 for an illustration of the overall NYC collaboration network as well as the networks of the three case study groups.

Figure 10.2: Network diagrams for overall NYC stewardship collaboration network and each of the case studies



Source: Lindsay Campbell (chapter author)

Highly connected broker: citywide advocacy and base-building for park support among New Yorkers

This citywide nonprofit parks advocacy group is a quintessential civic ‘broker’ in that it both advocates for changes to the NYC Parks Department budget and practices, as well as works collaboratively with the government in order to make sure those advocacy efforts are well-coordinated. Over numerous advocacy campaigns in their more than 100-year organisational history, they have organised for increases to the Parks Department budget, particularly since the major cuts that were received in the city’s 1970s fiscal crisis. Since that time, the Parks Department budget has fallen below 1 per cent of the total city budget and restoring that budget to at least 1 per cent is a consistent goal of park advocates. The organisation conducts open space-related research and planning – primarily in the form of synthesising data about park condition into accessible ‘report cards’ as well as providing indices about the availability and quality of open space, summarised at the neighbourhood and district level. These reports can, in turn, be used by residents and other, smaller stewardship groups in their advocacy and policy making, as the following quote illustrates:

[We are] trying to make sure that the research and data that we are generating as an organisation is really getting into the hands of not

just decision-makers, but into the hands of stewards themselves – so, community members who are actively doing beautification and improvement in local open spaces or community gardens or tree beds. We want those New Yorkers to be empowered with data about what’s going on in their neighbourhoods, where there are deficiencies in access to open space or maybe the conditions from a maintenance standpoint aren’t where they need to be or where the city intends for them to be because the city has its own set of metrics right that like they set out. ... We have really tried to focus on providing data to stewards so that they can be empowered as advocates.

In addition to this advocacy, research, and planning, the organisation fosters opportunities for New Yorkers to engage in on-the-ground stewardship. Their citywide stewardship and outreach programme was created after 11 September 2001, when the organisation began giving away free daffodil bulbs for planting in parks, gardens, and streetscapes as a memorial and beautification effort in response to the terrorist attacks. Despite these solemn origins, the program has sustained for more than 20 years and become one of the key ways that the organisation interfaces with everyday New Yorkers across all five boroughs. It is an accessible touchpoint for the organisation to ‘meet people where they are’ by giving them a chance to engage in tangible, hyper-local, neighbourhood greening, and also helps group the organisation’s outreach list for when they want to call for support on advocacy. The interviewee called the daffodil programme a ‘Trojan Horse’ for advocacy – because the map of where bulbs are requested helps their staff know where their community connection is weakest and where they need to do further engagement.

In terms of networks and partnerships, their main focus of their advocacy is clearly NYC Parks, but in service of advancing open space investment, quality, and access, they work with numerous other agencies and organisations. They try to continually connect with new and emerging stewardship and civic groups to maintain their role as a node in the network. In so doing, they noted that some of the relationships are challenging and require ongoing adaptation. Recently, they noted working successfully with the city’s largest municipal labour union DC37 in their effort to enhance investment in park maintenance and personnel lines. They also work closely with the New York City Housing Authority (NYCHA), which is the nation’s largest public housing authority, to analyse open space both on and adjacent to the parcels they own. The organisation works collaboratively with other environmental nonprofits (such as The Nature Conservancy and the Natural Areas Conservancy) to coordinate advocacy, testimony, public rallies, and media related to various ‘asks’ connected to open space, parkland, and urban forestry. While public–private partnerships have become increasingly

common in NYC (particularly since the Mayor Bloomberg administration) as a way to fund parks – such as the High Line and the Brooklyn Bridge Parks Conservancy – this organisation sees part of their role as standing up for parks as a critical public asset that requires a consistent baseline of municipal investment. Their most recent advocacy campaigns focused on parks’ maintenance have grown in momentum and reach as public attention to parks as critical infrastructure has grown of late.

Moderately connected node: strengthening Black women’s wellbeing through running and building community in a Brooklyn neighbourhood

This neighbourhood-scale group in Brownsville, Brooklyn was founded as a volunteer project in 2015, with a goal of bringing Black women together to build community and support healthy lifestyles. Founded by two women who were neighbourhood residents, combining their passions for community organising, social justice, and healthy living, the group organises public running events for Black women. Their initial seed funding and support came from a local community foundation that aimed to support neighbourhood leaders and grassroots groups with seed ideas to support community health and wellbeing. Over time, the group became its own independent nonprofit and since 2018 they have been organising an annual two-mile race that runs through the streets of the neighbourhood. They began with a group of about 18 women running twice per week in Betsy Head Park. By 2019, they had organised a group of more than 40 intergenerational women of different backgrounds – Latina, African American, and Caribbean women – to regularly run together and be a mutual support system or ‘sisterhood’. They work only with trainers who are also women of colour to show they are also leaders and runners; and they welcome women of all ages and body sizes. Their focus on health and wellbeing is holistic – including physical, mental, and emotional health. In addition to running, they have run workshops with healthy cooking demos and host a community support agriculture (CSA) distribution site.

Their networking strategy has been multi-scalar. As long-time neighbourhood residents, the founders drew upon existing relationships in order to recruit running participants at the outset. By being present on site in the park through events and regular running, they have come to know the everyday users of the space – such as an Asian couple who have become ‘wave friends’ and soccer players who visit every week. Scaling up, they used their professional backgrounds in order to network citywide and even nationally. They formed a positive, working relationship with the prior NYC Parks Commissioner, Mitchell Silver, whom one of the founders called ‘the uncle we didn’t know we had.’ They have worked with the national crowdfunding platform ioby.org to raise funds for their project and share their

story and have attended national conferences like the American Planning Association meeting in New Orleans. Their group has been celebrated in several venues as a success story of Black-led organising and leadership in an environmental justice community.

When the group began to organise, the track at Betsy Head Park was not well maintained, and they felt that their use of the space would bring visibility and attention to the needed investments in the park. As of 2019, Betsy Head was named as one of five sites citywide that received a total of \$150 million investment via NYC Parks' Anchor Parks initiative. This initial funding, as well as a second round of \$23 million allocated in 2021, was specifically targeted toward parks in neighbourhoods that had been historically underserved. The group was invited to give input into the new design because of their visibility and relationship with NYC Parks and Commissioner Silver. The Betsy Head site would be redesigned and improved for community use in the long term, including new playgrounds, basketball courts, skate park, fitness area, a synthetic turf, and rubberised track. When asked about their hope for the future of stewardship in their community, one of the founders offered this reflection, which reveals a desire for an even more networked and collaborative form of governance:

That decision making right doesn't happen in a silo ... I think there is so much to be gained through collaboration. So, people who use parks in Brownsville go to Flushing; the people who use the park in Flushing come to Brownsville and talk about similarities, talk about challenges ... cross-exchange of ideas ... I want cross-collaboration and I want politicians, elected officials who are really aware – and that can only happen if they come into communities and talk to communities where people are.

Less connected group – organising dog owners for advocacy and stewardship in a Brooklyn park

Initially mobilised by the potential threat of the loss of 'off-leash' dog hours in NYC parkland, this informal group of volunteers was founded in 1999 by an individual who brought a clipboard to Fort Greene Park in Brooklyn to sign up other dog owners to a group list. Historically, New Yorkers had been informally able to use city parks between 9 pm and 9 am for off-leash dog use, but dog owners were concerned as there was discussion of NYC Parks eliminating off-leash use. The founder of this group described their organising effort as starting off face-to-face since it began before the widespread use of the internet and social media. They weren't certain if the effort would involve a petition or a formal organisation, but they knew they needed the power of a collective in order to advocate as a group.

The group was able to mobilise local dog owners from the ground up, but also to work effectively with local elected officials. Leticia James (current New York State Attorney General) was a former NYC Council member and dog owner who lived in the neighbourhood and was very supportive of the group's organising efforts. She used her discretionary funds as a city council member to have a dog water fountain installed in the park and was instrumental in helping navigate the politics of a park's rule change. In 2007, the group achieved its primary aim – with off-leash hours officially legalised in parks citywide. The group was careful to note, however, that rules can always be changed, and that public official and agency support can change over time. Furthermore, the everyday pressures and stresses of park use continue as new development is increasing the number of residents and dogs in the area. The founder noted that every time there is a negative dog incident – such as biting or a fight – there tends to be a backlash in public opinion against dogs. With overall use of the park increasing, there is a delicate balancing act among users who want to prioritise different aspects of the park, such as: historic preservation of the monuments in the site, dog use, cultural programming, and active recreation. Reflecting on this dynamic, the interviewee noted:

Well, there are people who see us [the dog group and the historic preservation group] as adversaries, but we're absolutely not, so we all have the same goal: to keep the park safe and beautiful. Frankly, we all live in New York, everything's too crowded, we have to share the park, we have to educate people how to do it without being jerks [laughs.]

Following the success in solidifying off-leash hours, the group evolved into a more socially focused group of dog owners. Reflecting on that turning point, the founder said, 'We kind of looked at each other and we were like: "mission accomplished, what do we do now?"' The group has grown to more than 2,000 members and they actively use social media to promote their events. In order to celebrate dogs, raise the visibility of the group, and raise funds, they founded an annual Halloween dog costume contest that has become very popular and has taken on a life of its own, including drawing attendees from city, national, and even global media coverage. Beyond this signature event, they hold regular park clean-up days, including a 'poop pick up' competition and an event where they fill in holes in the ground created by dogs.

Overall, they aim to show that they are good dog owners and contribute to the maintenance of the park. They also help with the late evening and early morning activation of the park – ensuring that it is safe and used at all times of the day. The founder also gets contacted by groups all over the city and even the country who are interested in learning from their organising

success and the visibility of their events. Along the way, the group has fostered friendships and networks of mutual support. Participants will help walk dogs or dog sit for each other and will refer lost dogs to other groups that help reunite dogs and owners. In some cases, these friendships have transcended dog ownership, with the founder stating that she had attended friends' weddings and met new children born of friends she made through the group.

Conclusion

These three case studies demonstrate both commonalities and distinctions between civic groups at different positions within stewardship networks. All of the groups navigate the state/civil society boundary in order to effect changes to parks as green and social infrastructure. Navigating this boundary successfully often includes both influencing elected officials and high-level government decision-makers coupled with a 'ground game' to build a base for collective action among residents. This ground game ranges from advocacy approaches such as signing petitions, to organising community events, to stewardship practices such as planting daffodils and holding park clean-ups. The particular social and ecological outcomes that the groups seek vary with their mission and focus – these can include citywide policy changes, improvements on physical infrastructure, a stronger sense of community. As a result, their measures of success and impact will differ widely. But all the groups share a common interest in having parks that are clean, safe, accessible, well-maintained, and well-used. Accommodating multiple, potential competing uses (such as dogs, historic preservation) is a common challenge facing open space management across cities, towns, and rural areas. This chapter affirms that park management is not done by the government alone; civic engagement is alive and well in this arena. As a result, we find that power dynamics can affect all governance actors associated with social infrastructure, including which civic groups are included or favoured in decision-making processes. Overall, our work demonstrates that civic stewards play a vibrant role in activating green space to function as social infrastructure via a wide range of strategies and practices.

It is important to recognise a few limitations and caveats in this research. The network measures were drawn from a survey conducted at one point in time, yet we know that groups and networks are dynamic. New groups and coalitions form, leaders shift, missions change over time. This points to the need to triangulate survey data with interview data as we have in this chapter, as well as to collect longitudinal data as we have in our citywide study (2007, 2017). Second, while we are discussing groups' roles in environmental stewardship in particular, many groups are multifunctional and operate in several different domains. So, while the Brownsville group may be only

moderately connected to the environmental stewardship network, it may serve as a key broker within groups focused on Black women's wellbeing. These multiple, overlapping networks can be sources of innovation as groups develop partnerships that span previously disparate domains. Finally, our unit of analysis in this study is the group – and the number of ties between groups as a network measure. It does not fully capture the relationship between individual residents and groups, or between individual residents. So, even the least connected group featured here has over 2,000 individual members and serves as a major node for dog advocacy citywide, though they are not named by other stewardship groups as a partner in our survey.

This research illustrates that stewardship groups activate and transform the urban environment to create and maintain social infrastructures. The specific pathways and tactics used by stewardship groups vary by group network position. These groups work both alongside and independently of government actors to play a role in the advocacy, maintenance, and activation of the urban environments. Through their stewardship, they create tangible outcomes – such as programming that welcomes multiple publics into a space, as well as intangible – often collectively held – outcomes, including friendship and trust. These groups can function in transboundary roles – through coalition-building, brokering, and convening communities of practice – that span sectors and scales. Moreover, stewards carry institutional and collective memory that can move across space and over time. For example, if access to physical sites is lost, the group carries forward knowledge and relationships that can be adapted to new contexts. What is crucial in this analysis is the role of the groups that comprise an essential network of transformative stewardship. While physical space is necessary for social infrastructure to occur, it is not sufficient – activation is dependent upon organised, motivated, and dynamic stewards.

This research makes visible the civic groups and organisational networks, along with the physical sites they care for, that comprise social infrastructure of green space in cities. The term 'social infrastructure' itself may tend to focus us on the physical, our work attends to the ways in which physical space and organisations interact. We see a reciprocity in the system: social networks animate physical spaces; and the space can sustain the networks over time. There is a networked structure to stewardship that is polycentric and more complex than simple hierarchies (such as federal, state, county, municipal government). But it is important to recognise that the network is not frictionless, it still contains power imbalances and inequities. Groups operating with different numbers of connections at different junctures in the network have more or less influence on the stewardship community. Yet seemingly 'small' and local acts can scale up to create impacts on the broader system – through fostering social ties, building a base of collective action, and innovating new practices. Going forward, we suggest that support for

green and blue spaces as social infrastructure will need to be cognisant of the role that groups and organisational networks play in its formation, growth, and stability and thus recognise the value of local organisational capacity, leadership, and programmes.

References

- Buijs, A., Mattijssen, T., Van der Jagt, A., Ambrose-Oji, B., Andersson, E., Elands, B. and Steen Møller, M. (2019) 'Active citizenship for urban green infrastructure: fostering the diversity and dynamics of citizen contributions through mosaic governance', *Current Opinion in Environmental Sustainability*, 22: 1–6.
- Campbell, L.K., Svendsen, E., Johnson, M. and Landau, L. (2021) 'Activating urban environments as social infrastructure through civic stewardship', *Urban Geography*, 43(4): 1–22.
- Connolly, J.J., Svendsen, E.S., Fisher, D.R. and Campbell, L.K. (2013) 'Organising urban ecosystem services through environmental stewardship governance in New York City', *Landscape and Urban Planning*, 109: 76–84.
- Connolly, J.J., Svendsen, E.S., Fisher, D.R. and Campbell, L.K. (2014) 'Networked governance and the management of ecosystem services: the case of urban environmental stewardship in New York City', *Ecosystem Services*, 10: 187–94.
- Fisher, D.F. and Svendsen, E.S. (2014) 'Hybrid arrangements within the environmental state', in S. Lockie, D. Sonnenfeld and D. Fisher (eds), *Routledge International Handbook of Social and Environmental Change*, London: Routledge, pp 179–89.
- Iveson, K. (2013) 'Cities within the city: do-it-yourself urbanism and the right to the city', *International Journal of Urban and Regional Research*, 37(3): 941–56.
- Klinenberg, E. (2018) *Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life*, New York: Crown Publishing.
- Krinsky, J. and Simonet, M. (2017) *Who Cleans the Park?: Public Work and Urban Governance in New York City*, Chicago: University of Chicago Press.
- Landau, L., Campbell, L.K., Johnson, M. and Svendsen, E. (2021) 'Measuring stewardship practices to understand environmental justice outcomes in New York City', *Journal of Environmental Management*, 280: 111737.
- Landau, L., Campbell, L.K., Johnson, M., Svendsen, E. and Berman, H. (2019) *STEW-MAP in the New York City Region: Survey Results of the Stewardship Mapping and Assessment Project*, Gen. Tech. Rep. NRS-189, Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.
- Latham, A. and Layton, J. (2019) 'Social infrastructure and the public life of cities: studying urban sociality and public spaces', *Geography Compass*, 13(7): e12444.

- Metcalf, S.S., Svendsen, E.S., Knigge, L., Wang, H., Palmer, H.D. and Northridge, M.E. (2016) 'Urban greening as a social movement', in J. Gatrell, R. Jensen, M. Patterson and N. Hoalst-Pullen (eds) *Urban Sustainability: Policy and Praxis*, Cham: Springer, pp 123–47.
- Oldenburg, R. (1989) *The Great Good Place: Cafés, Coffee Shops, Community Centers, Beauty Salons, General Stores, Bars, Hangouts, and How They Get You Through the Day*, New York: Paragon House.
- Peters, K., Elands, B. and Buijs, A. (2010) 'Social interactions in urban parks: stimulating social cohesion?', *Urban Forestry & Urban Greening*, 9(2): 93–100.
- Sampson, R.J. (2012) *Great American City: Chicago and the Enduring Neighborhood Effect*, Chicago: University of Chicago Press.
- Sampson, R.J. (2017) 'Urban sustainability in an age of enduring inequalities: advancing theory and econometrics for the 21st-century city', *Proceedings of the National Academy of Sciences*, 114(34): 8957–62.
- Small, M.L. (2009) *Unanticipated Gains: Origins of Network Inequality in Everyday Life*, Oxford: Oxford University Press.
- Stanley, B.W., Stark, B.L., Johnson, K.L. and Smith, M.E. (2012) 'Urban open spaces in historical perspective: a transdisciplinary typology and analysis', *Urban Geography*, 33(8): 1089–117.
- Svendsen, E. and Campbell, L. (2008) 'Understanding urban environmental stewardship', *Cities and the Environment*, 1(1): 1–32.
- Svendsen, E.S., Campbell, L.K., Fisher, D.R., Connolly, J.J., Johnson, M.L., Sonti, N.F., et al. (2016) 'Stewardship mapping and assessment project: a framework for understanding community-based environmental stewardship', *Gen. Tech. Rep. NRS-156*, Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.
- US Surgeon General (2023) Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community, [online] Available from: <https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf> [Accessed 1 July 2023].
- Zukin, S. (1995) *The Cultures of Cities*, Oxford: Blackwell.