12 Living in kinship within urban landscapes through equitable, multicultural, collaborative stewardship in New York City

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Introduction

> [Stewardship] means recognising the gifts that you see before you, recognising that others have protected it in the past, and holding hands with them from the past into the future to preserve and enhance something precious.
>
> (pers. comm. Community Gardener, New York City 2019)

Urban residents who cultivate relationships with nature tend to experience: enhanced wellbeing, cognitive function, social cohesion and sense of place; reduced stress; strengthened socio-ecological resilience; and, in some cases, improved sustenance via the gathering of foods and medicines as well as materials for cultural practices. The goal of strategic planning in urban areas is to design networks of green and blue spaces that deliver wide-ranging benefits across spatial scales (Hansen et al. 2017). By urban nature, we refer to the green (land) and blue (water) spaces in cities, suburbs and towns where plants grow and animals dwell, including parks, gardens, street trees, waterbodies and waterways. Urban nature, then, is vital not only for providing ecological services (e.g., water and air filtration, heat reduction, carbon sequestration) but also for supporting the "psychological, social, and, in some cases, spiritual needs of its residents" (Svendsen et al. 2016). While widely appreciated that precious psychological, emotional, spiritual, sustenance and health benefits can result from investments into urban green and blue infrastructure, a growing body of research documents inequitable access to these benefits (Gerrish and Watkins 2018, Rigolon et al. 2018). Surprisingly little is known about the conditions, programmes, policies and practices that support more equitable access to, influence over and governance of urban nature by diverse cosmopolitan communities (cf. Ernstson 2013, Nesbitt et al. 2019).

A foundational premise of this chapter is that sacred relationships with nature enhance the stewardship capacity of natural resource professionals and community members (Kealiikanakaoleohaililani et al. 2019), with profound

impacts on how people interact with urban landscapes and seascapes (McMillen et al. 2020). We posit that having a shared sense of stewardship supports more equitable natural resource planning and access to the benefits of nature. Here, our use of "sacred" is not limited to any particular religious expression. It is inclusive and also embraces the "secular sacred" (cf. Anttonen 1996, Knott 2016), which encompasses elements of everyday life that are set apart based on their supreme value (Durkheim 1976) and spiritual nature, with which we share profound "love, respect, care, intimate familiarity, and reciprocal exchange" (Kealiikanakaoleohaililani & Giardina 2016). If the quality, depth and longevity of the relationships between urban residents and nature affect the extent to which residents benefit from nature, then understanding how these benefits are distributed is of paramount importance to successful urban planning. Specifically, sacred relationships with nature are formed when there is physical access to blue and green spaces and the policy environment fosters rather than hinders opportunities for residents to engage nature in socio-ecologically meaningful ways. These include co-creating with nature; shaping and being shaped by nature; taking refuge in nature; enhancing social relationships while spending time together in nature; growing, harvesting and sharing family foods; sharing knowledge, practices and stories that feature nature; and connecting to a power greater than oneself. In dense, complex and highly constructed urban landscapes, enlightened planning that prioritises equitable access to nature allows residents to cultivate sacred connections to place and with each other (Kealiikanakaoleohaililani et al. 2019).

Nature is valued in a range of ways, from an economic commodity to a beloved family member.

> While it is human nature to appreciate nature, there is no consensus on what we value most. What is beloved to some can be disregarded by others, and what is desirable can change over time, space, and context, even for the same person.
>
> (McMillen et al. 2019, p. 1)

And this extends to urban nature. Competing interests (e.g., economic, spiritual, aesthetic) often hinder urban planning efforts to provide equitable access to nature (McMillen et al. 2019), even while knowing that benefits (Ribot & Peluso 2009) are enhanced when residents can interact with, shape (e.g., through designing, planting, caring for and collecting from green spaces), and be shaped by nature (e.g., through being inspired, feeling connected, experiencing increased wellbeing).

Gentrification can impact equitable access to urban nature, and in most cities, investments into urban nature can drive gentrification (Pearsall 2010, Curran & Hamilton 2012) – ultimately influencing who can form and sustain sacred relationships with nature, and how, where and for whom these relationships will be degraded or even eliminated. We posit that effective planning needs to understand these dynamics as well as: how nature within the urban

ecosphere is valued by diverse residents; how access to nature is negotiated; and how equitable access to, influence over and governance of urban nature by diverse urban communities can be facilitated. In this chapter, we rely on a political ecology of place – a useful framework for examining crucial questions about who decides how urban green and blue infrastructure is planned, built and re-created (Swyngedouw & Heynen 2003, Campbell & Gabriel 2016). We then ask: how are sacred relationships with urban nature formed in New York City (NYC) and what do these look like? To these ends, we: (1) establish the nature of sacred relationships in the mega-urban ecosphere that is NYC, the features and underlying conditions for these relationships, as well as the benefits of nature as described by residents; (2) describe research that engages the sacred as related to urban green and blue spaces; (3) offer preliminary insights into how relationships with nature in the city have been managed, promoted or degraded by powerful actors, economic shifts, programmes and policies over time and (4) explain actions that can enhance equitable access to urban nature.

The profound Biocultural diversity of New York City

Spanning three islands and the adjacent mainland on the Atlantic Coast of the United States (US), NYC covers nearly 800 km^2 and has a population of almost 8.5 million (US Census Bureau 2018), making it both the largest and densest city in the US. It is highly diverse in terms of ethnicity, national origin and languages spoken. The US Census Bureau (2018) reported that NYC was 43 per cent White, 29 per cent Hispanic or Latino, 24 per cent Black, 14 per cent Asian and 3 per cent multiracial. More than 37 per cent of NYC residents are foreign-born; 49 per cent speak a language other than English at home; and 23 per cent speak English less than ''very well'' (US Census Bureau 2010). NYC's urban park system covers 15,785 hectares (ha) representing 21 per cent of the city, the third highest percentage of open space among major US cities (The Trust for Public Land 2015). Of these parklands, approximately 8,220 ha consist of ''natural areas'' (The Trust for Public Land 2015), including forests, freshwater wetlands, meadows, rocky shorelines, beaches and salt marshes representing over 30 distinct vegetation associations (O'Neil-Dunne et al. 2014). According to Gómez-Baggethun et al. (2013, p. 215),

> Ensconced within these ecosystems are more than 40% of New York State's rare and endangered plant species. As a result, scientists are beginning to view New York City as an ecological hotspot – more diverse and richer in nature than the suburbs and rural counties that surround it.

In addition to these protected natural areas, half a million street trees in the public right of way and 2,100 ha of landscaped parkland provide additional nature benefits. While nature is abundant in NYC, it is not evenly distributed. Socioeconomic variables (i.e., education level and income) correlate positively with proximity to urban nature for many neighbourhoods (Nesbitt et al. 2019).

Sacred Connections to Place via Urban Nature in NYC

Human–nature connections have traditionally been enshrined within a concept of kinship, recognised as sacred, and codified in cultural practices founded on the intergenerational accumulation of knowledge about the social-ecological system that sustains them (Berkes 2012, Pascua et al. 2017, McMillen et al. 2017a). Some indigenous scholars have described human-nature relationships today as community-based and intergenerational guardianship that is sustained through reciprocal exchange (Johnson et al. 2016, Whyte et al. 2016). Reciprocal, kinship-based relationships with resources are not unique to rural, indigenous communities of the past; they continue to define contemporary relationships for indigenous and local communities and they can also be strong factors in other peoples' (e.g., settlers and migrants) relationships to nature (Nash 2014), including in urban areas (Elands et al. 2019).

For many residents, urban nature compels them into its care. Biophilia, the innate love and affinity humans have for nature (Wilson 1984), emphasises a reciprocal, kinship-based relationship between people and nature. Within academic and professional circles, the sacred elements of human relationships to nature are increasingly being recognised for driving decision-making about natural resources (Kohler et al. 2019). In our work in NYC, the sacred often emerges when residents share about their relationships with urban nature – features that inspire recovery and respite, facilitate connections with others and also lead to healing introspection (Svendsen et al. 2016, Sonti & Svendsen 2018). Residents use natural places for ceremonies, telling origin stories, connecting with natural cycles and experiencing wondrous phenomena. Nesbitt et al. (Chapter 10) provides similar examples of how elders from the Squamish First Nation use opportunities in natural places to reclaim and rediscover urban indigenous biocultural relationships, including among Squamish youth groups.

We draw upon our longitudinal research that includes large quantitative datasets and in-depth qualitative case studies to document how people are intimately connected to urban nature. While beyond the scope of this chapter, we are aware that strongly contrasting perceptions of urban nature exist. Some NYC residents view natural spaces as unsafe or inaccessible, especially for women and children (Sonti et al. 2020); others see the more "wild" (i.e., less landscaped) parklands as places where they can engage in private or transgressive acts, such as sleeping, sex, drug use or vandalism (Campbell et al. 2019).

Living memorials

For almost two decades, we have been documenting how living memorials created to commemorate the lives lost to the plane crashes in NYC on September 11th, 2001 (here after 9/11) also function (Svendsen & Campbell 2005, 2010, McMillen et al. 2017b) as sacred and therapeutic landscapes (Gesler 1993). A wide range of living memorials have been created – from the official September 11th Memorial and Museum built at "ground zero" where

the twin towers collapsed to grassroots, guerrilla and informal spaces, such as public right of ways and vacant lots. We have documented hundreds of living memorials within public parks but also schools, hospitals, government agencies, fire stations, churches, and private gardens and woodlands. The scale and diversity of living memorials is enormous, ranging from single flowers to entire forests and dunescapes; from sunflowers to roses; from weeping cherry trees to columnar oaks (McMillen et al. 2017c) (Figure 12.1). These living memorials serve as public tributes to what was lost and because stewards incorporate natural, built, social and symbolic elements to communicate what they find important in their current lives, these memorials also provide ongoing therapeutic benefits. Further, care of living memorials assists with grieving, including through engaging nature, sharing of powerful stories and building social cohesion. Stewards indicate that planting and caring for plants helps them to process trauma and grief within a setting of strong social support, and so allowing a person to engage in something greater than oneself (McMillen et al. 2017b). As with community-based stewardship of green space along a street, in gardens and even in vacant lots (Campbell & Wiesen 2009, Sonti & Svendsen 2018), the healing power of nature in living memorials is bound up with the materiality of digging in the soil and weeding, but also the planting of particular species and the placing of meaningful objects (McMillen et al. 2017c).

Figure 12.1 Living memorial to 9/11: Healing garden of the federated garden clubs of New York State. Staten Island (NYC). Source: New York City Urban Field Station.

One steward at a living memorial in NYC (2017) explained: "Nature is one of the things greater than all of us. It's always here – as long as the world is here, nature is here".

A special kind of living memorial that evokes spiritual connections with nature is the survivor tree. Survivor trees are those that "have witnessed and withstood extreme disturbances and become compelling symbols for communities seeking to respond, recover, and reconnect following a tragedy" (McMillen et al. 2019, p. 3). The 9/11 survivor tree, a callery pear (*Pyrus calleryana*) that was growing near the World Trade Centre in NYC, survived the collapse of the Twin Towers. It has since become an internationally recognised symbol of resilience, strength and unity (McMillen et al. 2017c). Those who cared for the tree immediately following 9/11 describe this care as a healing process and spiritual connection, as might be used to describe relationships with family members. Those connected to this and other tragedies draw inspiration from the symbolism of this tree, finding hope, strength and resilience in the planting of saplings grown from its seeds, which are sought for commemorating recovery from the events of 9/11 and other traumatic events (McMillen et al. 2019).

Community gardens

Community gardens are a unique form of community-managed open space that provide multiple benefits to stewards, users and the public at large (Figure 12.2). Our work in NYC has shown how associated horticultural and agricultural activities can provide the practitioner with spiritual, psychological and emotional benefits (Campbell & Wiesen 2009, Sonti & Svendsen 2018). In surveying community gardeners from across NYC, Stone (2009) identified several key benefits of urban gardening: opportunities for unstructured recreation in a natural setting, dialogue about widely ranging topics (social, personal, political), and a place to develop community actions; intergenerational interaction, as well as programming specific for youth and seniors; and a strengthened sense of identity and pride. Similarly, Elands et al. (Chapter 11) describes how community gardening practices often lead to an increased place attachment and people taking responsibility for their neighbourhood.

In their research on motivations for community gardening in NYC, Sonti and Svendsen (2018, p. 1195) found that urban gardeners are also motivated by the "spiritual healing" they experience from planting, harvesting and sharing of produce. One person explained how gardening: "lifts the spirit and enables us to rise above life's tragedies" while another gardener explained: "I don't go to church to get in touch with God, I sit under a tree" (2018, p. 1198). Another shared:

> Personally, it's very relaxing to me. It is therapeutic, absolutely therapeutic and I get a lot out of it … it's very rewarding because my children are all grown, and it's a chance to nurture something from the seed to the point of harvest, and then prepare it.
>
> (Community gardener, NYC 2011)

Figure 12.2 Beach 41st Street community garden in public housing grounds. Rockaways, Queens (NYC). Source: New York City Urban Field Station.

Cocks et al. (Chapter 6) found similar sentiments being shared by gardeners gardening in their yard spaces adjacent to their newly acquired houses. The resulting reciprocal relationships between people and place (Sonti & Svendsen 2018) confer resilience to the community.

The profound meaning of nature is evidenced by so many new immigrants creating gardens reminiscent of their former agrarian lives – such as the strong tradition of Puerto Rican gardening in NYC, which leads to the building of *casitas* (little houses) and the naming of gardens after places or plants from home (Stone 2009). We have also seen how deeply rooted cultural traditions from distant homelands can be transported and adapted to a new home and then adopted by neighbours. At a community garden in Queens, NYC, a Korean family stored kimchi (traditional fermented, spiced cabbage) in crock pots buried in their garden, which became a vital food source for the family immediately following the devastating Hurricane Sandy. In response to multiple requests, this Korean family shared their practice with other community gardeners (McMillen et al. 2016). Nesbitt et al. (Chapter 10) shares a similar example of how Maya refugee families started up Maya in Exile Garden in the City of Vancouver in Canada. The garden provides the families with an opportunity to share Mayan knowledge and traditions with local people. Members

of the garden also offer cooking and farming workshops to the public and volunteers are welcome to help out in the field.

Such interactions are building blocks for improved health and wellbeing, which foster social resilience at the community level (Svendsen 2009). Indeed, McMillen et al. (2016) identified that place attachment, social cohesion, social networks, and knowledge exchange and diversification are outcomes of stewardship at both living memorials and community gardens. Moreover, community gardeners are deeply attached to their plots, which was revealed in the late 1990s when across NYC gardens were threatened by a period of rapid development. In response to the resulting changes, gardeners organised and mounted a successful campaign to prevent the sale of these gardens without a proper, public review process (Von Hassel 2002, Stone 2009). The legacy of this grassroots social movement persists today in neighbourhood to citywide coalitions directed to supporting food justice and the equitable distribution of urban open space (Campbell 2017).

Parks

Parks, including natural areas such as forests and wetlands, are green and blue set-asides that serve a variety of functions, including: recreation, refuge, relaxation and socialisation (Auyeung et al. 2016, Campbell et al. 2016); psychosocial-spiritual wellbeing (Svendsen et al. 2016) and ecosystem services (Hansen et al. 2017, p. Iv). One visitor to Marine Park in Brooklyn commented: "I come here to get away, to relax and be with my thoughts. When I'm stressed out or something, I like to walk in these woods and explore". Many urban and national parks have a common origin in a 19th-century conservation movement focused on preserving landscape aesthetics and promoting specific uses for urban lands (Svendsen 2013 Campbell et al. 2019). A leader of this movement, Fredrick Law Olmsted, the designer of Central Park, hailed the development of urban parks as similar to that of preserving great areas of the American wilderness (Olmsted 1870).

As with intra and international migration across diverse geographies (Cocks & Dold 2006, Chan et al. 2016), residents of NYC have relationships with urban nature that are derived from their home culture before they, their parents or their grandparents came to NYC (McMillen et al. 2020). For example, in NYC Yoruba practitioners make offerings to Orisha at designated trees (Figure 12.3); Hindu practitioners make offerings to the Mother Ganga at urban waterfronts (Garcia et al. Chapter 8) and practitioners of Orthodox Judaism collect local grasses to construct temporary huts or sukkah for the celebration of Sukkot. What results is a complex assembly of diverse nature-based practices operating in close or even overlapping fashion. The emergence and dynamics of these relationships can bring about tensions, especially when emerging practices conflict with dominant models of land use and economic development. Importantly, these tensions can lead to novel and innovative integration and adaptation of sometimes ancient practices (McMillen et al. 2020).

Figure 12.3 *Orisha* offering at tree in Alley Pond Park. Queens (NYC). Source: New York City Urban Field Station.

Planning and paradigms governing urban nature

Here we explore how the dynamics of engaging nature shape and are shaped by governance and underlying power structures that influence the composition, abundance and distribution of nature across NYC. We offer a brief historical overview of the evolution of planning for and governance of nature in NYC. We explore the planning paradigms that have governed urban nature and examine how the balance of power between the state and the public shift in response to market forces and investment cycles.

Planning for nature in the capitalist city: role of elites in the 19th– early 20th century

Robert Foglesong (1986) examined planning in the late 19th century and used the establishment of public parks as an example of a "democratic-capitalist contradiction" whereby the desire for urban space competes with the flow of capital and private interests (see also Mellegard (Chapter 4)). The history of urban parks is fraught with examples of social and cultural divides and the pitting of privileged access against core principles of democracy (Cranz 1982). In the 19th century, the urban park concept shifted from private courtyards and green spaces for the wealthy to public spaces accessible to all. While important

advances were made in realising this shift, many American cities were sites of inequitable, even unjust (e.g., removal of entire neighbourhoods), approaches to creating urban parks (Taylor 2009). Central Park was one of the first publicly financed and managed, large-scale capital projects undertaken by a city government in the US, and so presents a useful case study.

The establishment of Central Park was championed by an elite group of families who stood to benefit financially and socially from its construction (Taylor 2009). Comprised of local politicians and wealthy New Yorkers, the park's Board of Directors established and enforced public rules of social order and conduct in the park. The construction of public green space was a salve for ailments of a rapidly growing city and a new industrial working class. The notion was that the pastoral and artistic design of Central Park combined with proper rules of behaviour would "civilize and improve the lives of an untamed labor force" (Cranz 1982, Fein 1981). As planned, Central Park also became a real estate windfall for adjacent and nearby landowners. At times however, this park as with so many failed to serve the needs of a diverse public, which in the 20th century prompted a shift to the championing of smaller parks that could better serve the needs of multicultural and lower-income neighbourhoods (Taylor 2009). Today, Central Park remains one of the most iconic urban parks in the US if not the world, with a history that includes protest and power struggles, segregation and privilege, but also peace, beauty, joy and redemption. It continues to provide a reflection of many cultures and identities but retains a dominant design and narrative of ordered nature. Stanley Park also recognised as iconic park, i.e., "green jewel" of Vancouver shares a similar chequered history (Nesbitt et al. Chapter 10).

Caring for nature during crisis and austerity: transformation of stewardship in 1970s NYC

The 1970s financial crisis was a major turning point in the governance of NYC's nature. Much of the environmental work was linked to community development efforts designed to help NYC recover from the effects of divestments from public and private sector institutions that resulted from the political, economic and demographic shifts that began in the 1960s and culminated in the 1970s crisis. Recreation budgets were slashed, public restrooms were closed and urban green spaces became degraded. Budgets required that public authorities strongly limit park maintenance. Consequently, NYC parks became trash-strewn, overgrown and sometimes dangerous. Many civic stewardship groups responded to this decline by proactively taking on green space management. The resulting ethic of a highly engaged civic sector would birth a generation of powerful environmental stewardship groups (Connolly et al. 2014).

Central Park also experienced a downward trajectory but urban elite living near Central Park responded to the ensuing crisis by organising large amounts of private capital to rehabilitate and manage this iconic park. Since its founding

as a non-profit in 1980, the Central Park Conservancy has invested US$500 million in restoration and maintenance. With US$390 million of this investment being raised from the private sector, the Conservancy has become the "gold standard" of urban park partnerships, inspiring similar initiatives in NYC including the Prospect Park Alliance and Friends of Hudson River and High Line Parks. There are now more than 40 park conservancies in NYC that have raised millions of dollars through private contributions, organised income generating schemes and mobilised a volunteer workforce for park management (Gentile 2009). Now mainstream across the US, this strategy has transformed the relationship between parks departments and civic groups.

Neighbourhood parks and open spaces throughout NYC were improved by these efforts, including the largely unsung efforts of small groups of neighbours and friends, block associations and social service organisations. Organised to "take back their parks", formal and informal organisations became involved in local environmental improvements (Svendsen 2013). Few local neighbourhood stewardship groups are comparable to the professionalised staffing and budget of the Central Park Conservancy, and while many of these groups continue to serve a critical role in public park and environmental stewardship (Taylor 2009), wealth discrepancies across NYC's uneven public-private partnerships have resulted in a "two-tiered" park system made up of the haves and the have nots (e.g., Kaminsky & Simonet 2017).

Supporting and being supported by nature in a 21st-century sustainable city

Heynen et al. (2006, p. 9) argue that from an urban political ecology perspective,

> there is no such thing as an unsustainable city in general, but rather there are a series of urban and environmental processes that negatively affect some social groups while benefitting others (See Swyngedouw & Kaika 2000). A just urban socio-environmental perspective, therefore, must consider the question of who gains and who pays.

Power imbalances and systemic and systematic exclusions – particularly based on class and race – are ongoing problems in NYC, but over the past two decades, there has been a rise of sustainability-oriented approaches to planning for and governing urban nature, including increasingly diverse stakeholders pursuing a more holistic and integrated set of strategies for managing water, waste, housing, energy and transportation (Pickett et al. 2013, Munoz-Erickson et al. 2016). First, the formulation and implementation of sustainability policies have necessitated the participation of numerous personnel across state agencies who interface with stakeholders (Brecher et al. 1993, Keil & Boudreau 2006). Second, hybrid governance approaches (Connolly et al. 2014), including public-private partnerships, continue to support implementation of sustainability efforts spanning multiple land jurisdictions, operating across decades (Campbell

2017), and engaging the public, especially volunteers and advocates for urban green infrastructure. Finally, increased attention is being given to the influence of civic stewardship groups in caring for and even shaping urban nature (Svendsen et al. 2016, Landau et al. 2019).

NYC's campaign to plant one million trees, MillionTreesNYC, provides a compelling case study of how public-private partnerships, in this case the NYC Parks Department and New York Restoration Project, can be directed to designing, investing in and implementing plans for the equitable creation or management of urban green space. Between 2007 and 2015, hundreds of staff and thousands of volunteers planted trees across private and public property in NYC, leveraging the complementary skillsets and resources of public and non-profit/private sectors. The effort was launched as part of the city's first long-term sustainability plan, PlaNYC, with a goal of improving quality of life in NYC. Whereas prior tree planting efforts had been triggered by requests, leading to an uneven distribution of urban forest, NYC Parks Department officials redefined trees as basic infrastructure, equivalent to stop signs and sidewalks, with the neighbourhoods with the least trees being targeted first for greening (Campbell 2017). This high-level change in mindset resulted in an equitable distribution of the 1 million trees across NYC's ethnically and economically diverse neighbourhoods. The campaign used multiple volunteer engagements and novel stewardship training programmes to teach residents how to care for these million new trees, which has resulted in a community-based urban forestry movement (Campbell 2017). Similarly, in 2015 other volunteers counted the city's trees in the census, TreesCountNYC! In the case of MillionTreesNYC, community tree plantings allowed residents to work together towards a common goal (Fisher et al. 2015). In the case of the tree census, participants enhanced their community awareness, heightened their observation skills and expanded their knowledge of nature (Johnson et al. 2018).

To better understand the occurrence and impact of civic stewardship, the Stewardship Mapping and Assessment Project (STEW-MAP) was established to map the scope and impact of environmental activities over time (Fisher et al. 2012; Campbell et al. in press). The Assessment was initiated in 2007 and repeated in 2017, during which STEW-MAP inventoried and geospatially defined the stewardship activities of organisations and their networks to better understand the extent and dynamics of urban stewardship (Svendsen et al. 2016, Landau et al. 2019). The 2017 assessment received responses from 800 groups representing budgets totalling US$800 million and an estimated 540,000 members. Analyses showed these groups made crucial contributions to urban stewardship, but because of the high degree of informality in the sector (half of these groups do not have legal non-profit status and about one-third have budgets under US $1,000), their impact and even their presence can be overlooked. Collectively, however, these stewardship groups wield enormous adaptive capacity (Connolly et al. 2013) and represent systems of change delivering on-the-ground stewardship, advocacy and data/knowledge production.

On this last point, these groups, often operating within complex collaborative learning and doing networks, develop and implement metrics to evaluate their work. Perhaps most importantly, these groups share resources and information across civic, public and private sectors (Landau et al. 2019), and bridge civic and public by playing "broker" within governance structures.

The STEW-MAP project has revealed the origin stories of many groups caring for NYC's nature, from highly professionalised, citywide broker NGOs to highly informal, local neighbourhood groups. Many of these stories are strikingly similar, beginning with friends, neighbours or colleagues responding to a hyper-local environmental threat, for example, development of a beloved park or declining condition of an empty lot, or a social threat, for example, neighbourhood violence and a lack of productive activities for youth. In many cases, these stewards do not own the property they steward but assert their rights and claims to place through acts of stewardship, including hands-on work and community organising (Peçanha Enqvist et al. 2019), or acts of place-making, knowledge exchange and collective action (McMillen et al. 2016). Elands et al. describes similar acts of knowledge exchange and collective action taking place in community steward programmes in European cities (Chapter 11). These acts often are founded on a shared understanding of the value, purpose, persistence and sacredness of urban nature. While contestation, conflict, protest and occupation have been key tactics used by social movement actors and civic groups to argue for the "right to the city" and "right to nature", these expressions highlight a need for new discursive arenas that foster trust and mutual understanding among people with radically different worldviews and life experiences but who share in the caring for place.

Strengthening kinship connections to place: the creation of new discursive arenas

In 2016, we began discussing how indigenous and local knowledge systems and relationships with nature might catalyse new approaches to the stewardship of urban nature. For this we relied on a partnership with Hālau ʻŌhiʻa, an intensive Native Hawaiian stewardship and lifeways training programme created to enhance the capacity of natural resources and conservation professionals to engage self, others and place (Kealiikanakaoleohaililani et al. 2018). It was created in 2015 with the goal to "transform the way we view and steward our lands and seas" and represents the formalised teaching on enhancing sacred relationships with the natural world (Kealiikanakaoleohaililani et al. 2018). The pedagogical approach is based on learning, practising, adapting and eventually creating rituals that open windows of opportunity for sacred, kinship-based relationships that connect us to place (Kealiikanakaoleohaililani & Giardina 2016).

While the conservation of biocultural diversity and biocultural stewardship have been written about widely, especially in indigenous and rural communities

(Gavin et al. 2015), the practice of applying them in multicultural, urban environments has rarely been explored. We have yet to realise the full potential of kinship-linked, place-based stewardship models in highly diverse and densely populated urban settings. We viewed the lessons of Hālau ʻŌhiʻa as being relevant and accessible beyond Hawaiʻi Island, where it was born, and so in 2017, participants in Hālau ʻŌhiʻa, USDA Forest Service researchers based in Hawaiʻi, worked with Kekuhi Kealiikanakaoleohaililani and USDA Forest Service researchers based in NYC to coordinate an exchange with stewards of nature in NYC. Our aims were to catalyse co-learning about connecting to place and cultivating stewardship across regional, professional, cultural and personal levels; identify and understand culturally based concepts and practices that drive environmental stewardship in NYC; and develop a framework for a pilot stewardship training programme for NYC. In the case study from Japan, similar approaches are being advocated in an attempt to restore notions of kinship with nature which are based on reinterpretation of traditional wisdom (Pastor-Ivars Chapter 2).

To achieve these goals, we organised *Learning from Place*, a two-day workshop (October 2017). It was led by Kekuhi Kealiikanakaoleohaililani, framed with the pedagogy of Hālau ʻŌhiʻa and based upon her approaches, exercises and concepts. These were adapted for NYC and included engaging in sacred ritual through song, traditional chant and dance (Figure 12.4); sharing sacred stories, creating poetic texts and art forms; and allowing time for personal

Figure 12.4 Hula illustrates kinship relationships to place, led by Kekuhi Kealiikanakaoleohaililani (right). Source: Ashford, Giles with permission.

reflection (Figure 12.5) and group discussions (for detailed description). By engaging in these practices and in relationships with surrounding green and blue spaces, participants (45 "stewards of NYC stewardship", – from land managers to educators and artists, as well as the authors of this chapter) were able to cultivate multiple ways of knowing their biology, minds, spirits and communities, while fostering deeper kincentric relationships with place.

In NYC, we identified a gap in the professional development and training currently available to natural resource managers, whose careers have been largely focused on the technical management of biophysical resources. This gap results in an under-developed capacity to engage spiritual dimensions of stewardship. Hālau ʻŌhiʻa directly addresses this gap by exposing participants to diverse knowledge-practice-belief exercises that help participants strengthen their connection to place and to their community of practice. Inspired by the success of this workshop, LC and ES created a series of Stewardship Salons (hereafter Salons) to build a community of practice among the "stewards of NYC stewardship". The Salons encourage participants to share their "origin stories" as a way to engage the secular sacred and reveal processes of personal transformation and then apply learning to stewardship practice (Figure 12.6). As our capacity is limited, this process cannot be all inclusive; however, the small group of Salon learners have brought their experiences back to their respective agencies, organisations and communities, raising our hope that the Salons are serving as a catalyst for change within broader personal and

Figure 12.5 Personal reflection during Learning from Place workshop. East River, Brooklyn (NYC). Source: Ashford, Giles with permission.

Figure 12.6 Small group discussion of origin stories. Bushwick Inlet Park, Brooklyn (NYC). Source: Ashford, Giles with permission.

professional networks. We recognised a need to transform training for stewardship professionals so that it would include listening with empathy; reflexively situating one's own perspectives, worldview and biases; and developing cultural competencies in interacting with diverse communities – including those with fundamentally different understandings of relationships with "nature." Bearing in mind histories of exclusion resulting in highly inequitable access to public space and trauma, resource managers of the future will become better stewards of the communities they serve through strengthening these cultural competencies.

The Salons have been led by diverse stewards filling both teacher and learner roles on a rotating basis. Each session is guided by "ground rules" that have been collaboratively developed by participants, and includes discussion with ample time for participant reflections. We have also instituted elements from Hālau ʻŌhiʻa – including an opening protocol, collectively creating a kuahu (altar) of natural and personal materials that bring certain intentions and energies to the space, informal sitting arrangements and the sharing of food. Content, topics, sites and speakers are sourced from our community of practice. For example, we have discussed Hindu ritual practices at Jamaica Bay (NYC) (see also Garcia

et al. (Chapter 8)); examined the histories of Central Park and the displacement of Seneca Village; shared a Tu B'Shevat seder while exploring Jewish environmentalism; and reflected on the Great Migration (the 19th-century movement of African Americans from the Southern United States to Northern cities in often thwarted pursuit of greater economic opportunity and cultural freedom) and connections to Southern landscapes, including heirs' property in the Carolinas and urban farming and gardening in NYC (see also Schelhas et al. 2017). While reach and scope are limited, the Salon participants are highly diverse and we are demonstrating an effective approach to cultivating sacred stewardship in urban environments.

Through the first year of the Salons, we observed moments of transformation, which we consider to be the building blocks of change. With our guards down, hierarchies forgotten and roles as "agency representative" or "scientist" or "land manager" shed, participants are more comfortable recounting personal stories, reflecting on childhood memories, sharing deep emotions about stewardship and social change, and even partaking in laughter and play – modalities that are sorely lacking in many conventional meeting structures. Some have even reflected that they feel the Salons are a "safe space" where they can share insights they are not able to share in a workplace setting. And there has been deep emotional and intellectual wrangling with difficult issues that have surfaced during site visits and sharing of, for example, historical trauma, the meaning of land ownership, Indigenous rights and the need for significant work to diversify our communities of practice. Throughout, we have begun to treat each other, as well as the nonhuman others in our surrounding landscape, more as kin than commodity or fellow professional.

Conclusion

> Stewardship makes me think of being the captain of a ferryboat. It's about ferrying the ship in a way that helps me to arrive safely but also benefits all the people who are being stewarded along. And in a larger sense we're all being stewarded so the responsibility of stewarding is on us. I believe in a vision of a society that is interdependent.… I would much rather live in a world where everyone is taking care of one another than a world where everyone is just out for themselves. I think we're stronger that way, more resilient and it's a more beautiful world. My hope for the future of stewardship work in New York City is that all citizens of New York start to take it seriously as their job, it's not someone else's job, it's our job.
>
> (Steward at an educational programme about sustainable sanitation in NYC, 2019)

The dominant narratives around the stewardship of urban nature have been historically framed by economic development, social order and privilege. To overcome these historic legacies, we need a new framework from which coalitions of diverse bioculturally oriented stewards of place can operate and grow.

Based on our shared experiences with applying a model from Hawai'i in NYC, we propose that more equitable access to and governance of urban nature can be realised by building communities that share a common desire for sacred relationships within multicultural, collaborative efforts to care for NYC's green and blue spaces. When these communities include natural resource management professionals and all types of residents, we are best able to equitably connect these biocultural coalitions to urban nature. Through Learning From Place, the Stewardship Salons, STEW-MAP and numerous other experiences, we have learned that people find intense meaning in urban nature, meaning often founded on sacred relationships with nature.

By engaging in traditional rituals and adapting rituals for new settings, communities work to cultivate and express personal connections to place. Today, urban stewards desire to more deeply engage these topics, to more effectively foster the sacred within an economic–social–political–programmatic–legal matrix that often determines who accesses urban nature and how. Future work in NYC and beyond might address (1) Can sacred relationships with nature be cultivated and nurtured, to reach a larger number and greater diversity of people, including resource managers, planners and policy makers? (2) Can doing so improve the economic conditions, funding programmes, public policies and law enforcement practices that support equitable access to urban nature? And (3) How can a heightened awareness of the sacred help us better care for urban nature and foster the type of social innovation that will improve land use planning and urban economic models? In the process of doing that work, we may grow as biocultural stewards of our familial relationships with each other and with our places.

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