
ARTICLE

Neighbourhood–Open Space Relationships in Metropolitan Planning: a look across four scales of concern

PAUL H. GOBSTER

ABSTRACT *New Urbanism and other metropolitan planning strategies may discount the importance of neighbourhood–open space relationships when dealing with some types of open spaces, particularly in city centre and urban fringe areas. In this paper I review a series of studies I have carried out over the past decade looking at people’s perceptions and uses of urban open space. This research examined neighbourhood–open space relationships in the metropolitan area of Chicago, Illinois, USA at four scales of concern: quasi-public space within an immediate neighbourhood; a public park that spans different neighbourhoods; regional greenways; and a metropolitan bioserve. In all of this work, my findings show how adjacent neighbourhoods are critical to the success of these open spaces, regardless of their scale. Lessons are drawn from each scale for how neighbourhood–open space relationships might be improved.*

The neighbourhood is local environment at one of its most humanly relevant scales. Because it is as much a perceptual area as a physical one, the size of a neighbourhood varies depending on who is defining it and can range from the length of a street (block or blocks) to a district several square miles in extent and populated by thousands or even tens of thousands of people (Jacobs, 1961). The main relevance of neighbourhood scale, however, lies not so much in the size of a neighbourhood area as in how it functions internally and in relation to other components of a city. In the USA and many other countries, neighbourhoods have long been thought to offer a sense of coherence and identity for those living in large cities, making urban life more manageable and meaningful (Hester, 1975). While some might consider this an overly romanticised view, in an era of increasingly fragmented social worlds the neighbourhood is being looked on by New Urbanists and others with renewed enthusiasm as a form to help repair the dysfunctional patterns of metropolitan growth and development (e.g. Calthorpe & Fulton, 2001).

Paul H. Gobster, US Department of Agriculture, Forest Service, North Central Research Station, 845 Chicago Ave., Suite 225, Evanston, IL 60202, USA. Fax: +1 847-866-9506. Email: pgobster@fs.fed.us

In addition to residential, commercial, institutional and other built-up land uses, open space also forms an important component of the neighbourhood landscape. Neighbourhood open spaces can provide recreational and aesthetic values to residents as well as serving a variety of deeper psychophysiological and spiritual values related to nature that we have only recently begun to understand (Kaplan *et al.*, 1998). Thus, while traditional open spaces like backyards and neighbourhood parks continue to be key parts to consider in the provision of neighbourhood open space opportunities, today's metropolitan planners also need to think of how other forms of open space can better contribute to the neighbourhoods they lie near.

The need to understand neighbourhood–open space relationships is especially critical at this time when many metropolitan regions are changing rapidly and producing new forms and unfamiliar juxtapositions between people and open spaces. In many urban fringe areas, regional-scale initiatives are being launched to protect and restore natural resources in the face of rapid urbanisation. Other changes are happening within central city areas that have long been developed, where demands for open space opportunities are increasing in the face of gentrification, the densification of established neighbourhoods and the residential colonisation of areas once dominated by other uses. Whether caused by 'natural' shifts in the socio-economic and demographic characteristics of the population or by planned strategies for 'smart growth', these changes are having a profound effect on how we conceptualise neighbourhood–open space relationships.

As a social scientist who has studied people's perceptions and uses of urban open spaces for more than a decade, it is my contention that to a large extent *all* metropolitan open spaces are neighbourhood landscapes, and that those who live in nearby neighbourhoods play a critical role in how those open spaces are perceived and used as well as how well they are maintained. I would also argue that local neighbourhoods are often an important factor in the success of metropolitan open spaces *regardless of the scale* of the space—whether it is a microsite playground or a macrosite bioreserve. In this paper, I review a series of studies I have carried out in the Chicago, Illinois metropolitan region of the USA, which look at a hierarchy of open spaces across four increasingly broad scales of concern and examine the extent to which neighbourhoods matter in terms of how such landscapes are perceived and used and how neighbours influence their design, planning and management. By considering both individual sites and types of sites, I attempt to distil some lessons for how neighbourhood–open space relationships might be optimised through physical design and proactive neighbourhood involvement (see Table 1).

Interspace: open space opportunities in dense urban neighbourhoods

Thoughts about neighbourhood open space at the narrowest scale of concern often conjure up images of pavements and back yards, the prototypical realms of the public and private. But between these everyday spaces also lies a curious assemblage of open space fragments, or *interspaces*, that is less well recognised but nonetheless forms a key part of the open space mix at this scale. Interspace—literally, the space between—is often seen as negative space, if in fact

TABLE 1. Summary of open space issues and lessons learned across four types and scales of concern

Type	Scale	Issues	Lessons
Interspace	Acres and tenths of acres	Identifying new open space opportunities in dense urban areas	Sustainability increases with size; maintenance is intensive; signs of care and changed use are critical; site context is important; greening can connect people socially
Neighbourhood boundary parks	Tens of acres	Encouraging park use and fostering relations between racially and ethnically diverse neighbourhoods	External factors include community history and social diversity of users; internal factors include locating facilities around the park perimeter, providing a range of facilities and programmes, and proactive management
Greenways	Miles and tens of miles	Providing corridor recreational opportunities across a metropolitan region	Trails should consider local functional needs in terms of length, location and access; greenways are used as point destinations for neighbourhoods as well as linear routes
Regional bioreserves	Hundreds and thousands of acres	Preserving biodiversity and ecosystem values in a metropolitan context	Plan for restoration in a landscape context; design with people in mind; promote two-way communication; encourage involvement; work to integrate values

it is seen at all. Yet in dense urban neighbourhoods where opportunities to create new open space are limited, these quasi-public spaces have the potential to provide valued and unique experiences to neighbourhood residents. Perhaps even more significantly, in addition to being the primary users, neighbourhood residents often become the designers and managers of these interspaces, transforming them from liabilities to assets for themselves and their communities.

Since 1989 I have been a participant observer in a block group greening effort that has worked to improve the interspaces in and around the Rogers Park neighbourhood of Chicago, in which I live. While the group's story is not very different to that of many other community gardeners operating across the USA and other countries, when examined within the context of landscape ecology I think its efforts in dealing with interspace reveal some lessons that are relevant to planning and design at the scale of the neighbourhood landscape, particularly in dense urban areas (Gobster & Dickhut, 1995).

The interspaces the group has worked with consist of patches a fraction of a city lot in size and corridors less than 15 feet (4.5 m) in width. Examples include fence lines, parkway strips (the space between street and pavement), car park islands and areas functionally cut off from main open spaces. From a landscape ecology perspective, these spaces are limited in a number of ways: their small size limits ecological diversity and often makes it difficult to sustain trees; their high edge ratio makes them prone to invasion by weeds and difficult to maintain; their exposure to full sun or full shade hinders the growth of many plant species; and their soil is often compacted and low in organic material. Despite these disadvantages, other features of interspaces can enhance ecological function: although they are small in area, their high frequency in the landscape in terms of total length (corridors), density and dispersion is a great potential asset; their proximity to one another gives them the potential to function as an interconnected network; and, because their vegetation often differs markedly from adjacent land uses, they can contribute significantly to the heterogeneity and contrast of the urban landscape.

From a human perspective, interspaces are usually overlooked, underused or otherwise perceived negatively. Their small size hinders most traditional uses of outdoor space, and their ambiguous ownership status often leaves them open to neglect and abuse. On the other hand, interspaces have some useful structural features for serving urban open space needs: most occur in highly visible areas, often very close to where people live or work, and although they are often overlooked, with the right design and management interspaces can become attractive, useful and productive spaces in their own right or can showcase buildings and spaces they adjoin.

These concepts, constraints and opportunities provide a useful understanding of the nature and potential of small open spaces in dense urban neighbourhoods, and are illustrated by the greening efforts of the block group in my neighbourhood. The group took on its first area in 1989 as a greening project to rehabilitate a 4-foot by 400-foot (1-m by 120-m) landscape strip in the alley behind residents' homes. The strip had been installed by the City some years earlier to separate residents' homes from a newly built municipal facility, but was never maintained once the arborvitae hedge was put in, and had become a weedy, rubbish-strewn eyesore. A spring 'cleaning and greening' day catalysed neigh-

bours into taking over responsibility for the strip, and increased efforts in planting and care resulted in a dramatic transformation over a period of a few years. This success motivated neighbours to adopt additional spaces further from their homes. As new sites were taken on, the corridors and patches started to form a green edge around the neighbourhood, establishing a physical identity as seen from outside the neighbourhood and a social cohesion as experienced from within. As partnerships formed with neighbouring block clubs, businesses and public institutions, efforts were unified under the GreenEdges project for identity and funding purposes. Currently, 18 spaces are being managed by project members, including gateway planters at key neighbourhood entrances, fence lines and parkway strips planted to demonstrate and test various native and ornamental plant materials, and small landscape patches planted to frame and beautify neighbourhood municipal buildings and/or function as community gardens for flowers and vegetables.

The project exemplifies initiatives taking place at larger scales in the city. CitySpace is a City of Chicago-wide planning initiative that has examined open space needs and opportunities. Rogers Park 2000 is a community planning effort to examine open space and recreation in conjunction with other issues in the Rogers Park community area. Both efforts have identified the potential value and usefulness of small neighbourhood spaces in serving open space and recreation needs for dense urban areas. In this context, GreenEdges was designated a CitySpace Model Demonstration Project in 1995.

Although the size of interspaces in neighbourhoods such as this limits activities mainly to greening projects, the projects described here have yielded a range of leisure, aesthetic, social, biodiversity and safety benefits to the community and have attracted individuals across age, gender and ethnic groups. The following are some of the key lessons learned during the past 11 years of the project that have increased the ability of the GreenEdges project to work within the physical and social constraints and opportunities related to greening neighbourhood interspaces.

- *Site sustainability increases with the size and shape of interspaces.* This idea is commonly known to biogeographers, and is essential to keep in mind in the greening of urban interspaces. Larger spaces are better than smaller ones, and patches will be easier to care for than linear spaces. Large spaces often allow the use of a greater diversity of plant materials, whereas small spaces usually require a narrower range of plants that are adapted to adverse conditions.
- *Maintenance is intensive.* Because of the physical and social constraints related to size, interspaces require regular maintenance, even with adequate site preparation and appropriate plant choice. In the GreenEdges project, some sites suffer from extreme exposure to sun and wind, and in dry periods need to be watered. Many sites also collect blowing litter, which can easily detract from all the positive efforts put into the site.
- *Signs of care and changed use are critical.* It takes time to increase awareness and change negative perceptions of spaces that have long been abused, and when interspaces are taken over for greening, positive improvements may not always be recognised or accepted by those who come into contact with them.

Woodchip mulch may appear messy if it spills onto pavements, and young perennials may not be obvious to passers-by in the first season of growth. We have dealt with these problems by increasing maintenance of areas, and have used edging, signage and other design cues (e.g. interplanting young perennials with showy annuals during the first year) that demonstrate care and use of new spaces.

- *Site context is important.* While it is critical to select plants that will do well on a given site, it is also important to recognise that the context or location of a space relative to adjacent land uses will also dictate what should be planted and how. In high-visibility landscaped patches, we have opted for hardy but showy perennials and annuals in a formal design. Less visible areas allow greater leeway for experimentation and failure, and in these spaces we have selected a broader range of plant materials and have been less diligent about weeding and litter pick-up.
- *Greening can serve as an effective social connector between neighbourhoods.* Greening can be a contagious activity, and progress made through the GreenEdges project continues to expand beyond its original boundaries into adjacent neighbourhoods. In this way, greening has served as an effective connector between neighbourhood block organisations, providing an additional tie to broader networking efforts such as the Community Area Policing Strategy recently instituted in Chicago.

In summary, ideas about the landscape ecology of interspace can help us understand the physical and social constraints and opportunities of managing small neighbourhood open spaces. Lessons from the GreenEdges project in Chicago can be useful in identifying new open space opportunities, especially in dense urban areas where few larger open spaces are available.

Neighbourhood Boundary Parks in a Multicultural Society

Public parks are the most commonly thought of form of open space in the neighbourhood landscape and can serve a multitude of positive functions, not the least of which is as an agent for social and cultural integration. In many cities across the USA and elsewhere, larger public parks often lie at the boundary between neighbourhoods, separating people of different races, ethnicities, classes, ages or lifestyles. What happens within these common spaces—who uses them, how they are used and how those who use them interact with each other—makes boundary parks a particularly important area for study in the context of neighbourhood–open space relationships.

Although for some years I have been involved in the study of the perceptions, preferences and uses of parks and other natural areas by different racial and ethnic groups, it was not until a few years ago, when reading about a study in Boston, Massachusetts, USA, that I became drawn to the issue of boundary parks. In that study, the researchers concluded that parks that lie at the boundary between racially and economically different neighbourhoods can act as ‘green walls’, inhibiting use and resulting in community neglect and poor maintenance (Solecki & Welch, 1995). While I felt the authors were indeed describing a serious phenomenon, as a social scientist I took issue with the vegetation

analysis methods through which they arrived at their findings. In my reply to the authors (Gobster, 1998a), I reviewed some past studies of my own to illustrate how on-site surveys, personal interviews, focus groups and other social science methods can provide improved information on barriers to park use by individuals from racial and ethnic minorities. From my review, I concluded that interracial and ethnic tensions over park space: (1) can exist among minority groups as well as between majority and minority groups; (2) can serve to produce physical harm (e.g. assaults) as well as feelings of fear and discomfort; and (3) can result in lowered use, temporal and spatial displacement of a group and racial and ethnic segregation of users within a park. While the scope of this paper prevents me from elaborating on these findings (see, for example, Gobster & Delgado, 1993; Zhang & Gobster, 1998), one study merits further discussion because it is a direct counter-example of the green wall phenomenon and hence may provide some useful lessons in discovering how boundary parks might act as positive forces for improving interracial and ethnic relations between diverse neighbourhoods.

Warren Park is an 82-acre (33-hectare) Chicago park that by all definitions qualifies as a boundary park, separating somewhat lower-income, primarily minority neighbourhoods to the east (African American and Hispanic) and south (Indian and Pakistani) from somewhat higher-income, primarily white neighbourhoods (both established and recent Eastern European migrants) to the north and west. As a researcher, I first became interested in studying the park to better understand the ways in which different cultural groups used it for recreation (Gobster, 1992). Using a systematic observational approach, I visited the park 150 times over the course of three seasons in 1989, during different times of the day and days of the week, recording who I saw on and near the trail that circled the park, what they were doing and who they were with. I reinstated my observations in the summer of 1996, this time visiting the park 50 times and focusing on some of the active use areas away from the main trail.

In my observations I found the park to be generally well used, with use levels correlating significantly with time, day and weather, and with trail use on sunny summer weekend days reaching levels where traffic problems started to occur. While there were significant differences in the activities different groups engaged in, the proportion of individuals from different racial and ethnic groups in the park roughly paralleled US Census statistics for the adjacent neighbourhood block groups. In addition to the racial and ethnic diversity, I also found a corresponding social diversity, with significant proportions of individual park users that included females, older adults and young children, and social groups that included single adults, adult couples and families with young children. As for interracial and ethnic interactions in the park, my trail study data showed limited interactions between people of different racial and ethnic backgrounds, with most trail parties of the same racial or ethnic group, only a handful of observed interactions between parties of different racial and ethnic groups and some evidence of segregation of users within the park by race/ethnicity. My observations at two of the active use areas of the park showed a somewhat different picture of interracial interaction. At the basketball courts, games more often than not included players from different racial and ethnic groups, with

most games made up of teenage males. At the playground, children quite often interacted with other children of different racial and ethnic groups and, although interactions between adult guardians were more reserved, greetings and other brief but amiable interactions were common.

From these data I concluded that Warren Park seemed to be a successful boundary park, a 'green magnet' that is well used by a representative cross-section of people rather than a green wall forsaken by the surrounding neighbourhoods, as suggested by the Boston study. What lessons might be learned from this counter-example? Various external factors—those operating outside the park—probably play a role, including: a long history of cultural diversity in the surrounding community; its reputation for tolerance and, in many cases, the appreciation of different cultures and lifestyles; and a related social diversity of park users of different ages and household compositions who provide a continual flow of use throughout the park, throughout the day. But along with these external factors are various internal factors—those operating within the park itself—that may also explain Warren Park's success. These include: a physical design that locates many of the park's facilities along the perimeter where they are visible and easily accessible from adjacent neighbourhoods; a full range of facilities and programmes that draw tots, teens, adults and seniors of diverse racial and ethnic backgrounds throughout the year; and a proactive management staff that keeps the grounds and facilities in good shape.

Urban residents in many areas of the USA and elsewhere continue to be segregated by race, ethnicity and class in many aspects of their daily lives, a fact that many policy analysts feel is responsible for the persistence of tensions between racial and ethnic groups. Urban boundary parks like Warren Park may provide the kind of setting to nurture healthy interracial and ethnic relationships, especially among children and young adults. The voluntary nature of leisure participation may remove some of the negative sentiment associated with structured programmes for integration, such as school busing and scattered-site public housing development, and leisure activities allow for contact and interaction to take place on a variety of levels. By creating a safe environment with attractive opportunities, it may be possible for boundary parks to play an active role as catalysts in improving interracial and ethnic relations.

Greenways as Neighbourhood Resources

Urban landscape planners and designers often see greenways as regional resources, interlinked networks that span great distances across a metropolitan region and beyond. Do users of greenways see these resources in the same way? In two greenway studies I have been involved in, I found that the neighbourhood significance of these landscapes is also important, and that overemphasis on the regional character of these corridors may shortchange their success at the neighbourhood level.

In the first study, I conducted on-site surveys on 13 bicycle-grade greenway trails around metropolitan Chicago during the summer of 1989, asking more than 2800 pedestrians and cyclists about their trail use patterns and preferences (Gobster, 1995). The trails themselves ranged in length from 1 to 55 miles

(1.5–89 km), were located in the heart of the city as well as suburban and urban fringe areas and received anywhere from light to very heavy use. Of the various results from these surveys I found that the location of greenway trails was an important factor in how they were used. Local greenway trails—those where most users travelled only a short distance to use the trail—tended to have users who came alone or in pairs to the trail under their own power, walked or ran on the trail in short but frequent trips, were ‘brand loyal’ to the trail, tending not to use or consider other trails as substitutes, and more often used the trail for commuting than did those who used regional and state trails. In contrast, regional and state trails tended to attract users who more often drove to and cycled on the trail, were more often first-time visitors to the trail, took longer trail trips and diversified their use of trails within and beyond the metropolitan region.

In a second study I examined the images and perceptions of residents who lived in different neighbourhoods along the 150-mile (241-km) Chicago River corridor in metropolitan Chicago (Gobster, 1998b). In 1993 11 focus groups were conducted, where ‘the river in my neighbourhood’ was discussed with nearly 100 residents, focusing on current uses and perceptions as well as suggestions for future improvements. As in the greenway trail study described above, the neighbourhoods were chosen to span the range of Chicago River environments, from affluent suburbs along the river’s upper reaches to working class neighbourhoods along its lower, more industrial stretches. When we asked how people used the river, we found that while residents often focused on the linear nature of the corridor and its ability or potential for water or shore trail activities, many people also saw the river as a special spot in their neighbourhood—a destination rather than a route—as exemplified by the following comments:

I take my little boy into the grassy areas and walk around back there with him. There’s a little wooden bridge where he sits down and watches the water go by and it’s great, I love it.

We feed the ducks, we picnic along the river frequently. In various spots there are little park-like areas although a lot of people don’t know about them so that is part of the fun of kind of exploring the river in the area and you are only a few feet away and you see just millions of people streaming by and you’re real isolated in a very beautiful little area. You see a lot of people drawing and painting, taking pictures and filmmaking.

There is one section of Lake Katherine where you can sit and watch the boats go by. I like the barges and the boats.

The lesson from both of these studies is that neighbourhoods should be taken into account in the development of greenways. While planners and greenway advocacy groups often stress building longer trails and regionally linked systems as top priorities, these initiatives may discount the needs of those who are often the most frequent users of greenways. On the basis of my trail survey data I found that a reasonable guideline would be to develop local trails so that they

can be reached from a distance of 5 miles (8 km) or less, and that, for some types of local trail users such as older adults (and probably young children as well), a much more conservative service radius of 1 mile (1.5 km) may be needed to make trails reasonably accessible (Gobster, 1991). On a broader level, the study also suggests that it is important to think of how greenway trails operate functionally for people—to design trails so that they can meet more consistently people's everyday needs for recreation, commuting and access to nature. Finally, findings from the Chicago River study identify the importance of greenways to adjacent neighbourhoods—resources that not only provide the possibility and intrigue of travelling beyond the neighbourhood, but which are also special places in their own right. It is largely this neighbourhood significance that motivated the National Park Service and Friends of the Chicago River to focus on small-scale, local initiatives when it came to developing strategies for river improvement. When overlaid with larger conceptual frameworks, such strategies can attain both the breadth and depth needed to make greenways work for people.

Integrating Neighbourhood Values in Natural Area Restoration Efforts

In April 1996 an ambitious new initiative was launched in Chicago—Chicago Wilderness—that would bring public and private groups together to co-ordinate land protection and ecological restoration pursuant to the formation of a unique metropolitan bioserve. It would be a new way of looking at nature in the city, of expanding small-scale restoration efforts and thinking about them in the context of a 13-county, three-state region, and of drawing widespread public awareness of and support for the restoration and management of endangered ecosystems. These lofty aspirations of the project's progenitors were quickly sullied, however, by a series of newspaper articles that began shortly after the initiative was announced, stories and editorials reporting discontent over restoration activities in forest preserves in Chicago and outlying suburbs. Distraught residents told of tree massacres, the conversion of placid forest oases to hot open prairies, the destruction of wildlife habitat, the loss of long-cherished special places and the large department store that was suddenly visible across the way now that dense shrubbery had been removed. Before long, restoration activities in two counties were placed under a moratorium, and the 'Chicago restoration controversy' had become national news.

Pro-restoration forces countered that the opposition voiced in the papers was mainly 'just a NIMBY thing', relegated to residents from a few neighbourhoods near certain forest preserves who had got the ear of a reporter, and people who saw the restoration issue as a way to further their animal rights agenda. One Chicago neighbourhood in particular had become a focal point both for restoration opposition and as a place for restorationists to point the finger at in their charges of NIMBYism. As such, this neighbourhood is a useful microcosm from which to examine broader questions of local vs. regional values in nature.

Old Edgebrook is an enclave of upper middle class homes in Chicago completely surrounded by county forest preserves. It lies near Bunker Hill Prairie, one of the first ecological restoration sites in the preserves, where

small-scale prairie restoration began in the late 1970s. As these activities expanded over time, some residents of Old Edgebrook became concerned about changes in the preserves around them and the impact these changes might have on the preserves, on the animals in them and on themselves. When in September 1996 a public forum on the restoration of the nearby reserves led to a moratorium on all restoration activity, I began studying the issues being voiced by restoration opponents by analysing their views as expressed in newspaper articles and letters to the editor, transcripts from hearings and radio interviews, and newsletter articles and fact sheets put out by groups on both sides of the controversy (Gobster, 1997). Surprisingly, I found little in the way of blanket disapproval of restoration. In fact, critics often lauded the basic goals of restoration in protecting and enhancing urban nature. Instead, it was the specific practices people objected to, foremost among them the removal of trees and brush. For Old Edgebrook residents, it was the trees that defined their neighbourhood and that were in part responsible for having it declared a landmark district by the City of Chicago in 1989. Trees also became their rallying cry when Old Edgebrook residents helped form the Trees for Life group in 1996 to organise more formally against restoration efforts. Thus, while the killing of deer or other animals was a concern, it was voiced much less frequently than the tree issue and other issues such as prescribed burning and herbicide application.

These practice-related concerns revealed *what* critics objected to. I also identified a number of process- and context-based concerns that related to *how* and *where* restoration was being carried out: these included a lack of public information and involvement in decision making; a lack of plans detailing how and where restoration would happen; and questions about who was in control of managing these public lands and what their qualifications were. Finally, I attempted to identify the kinds of values in urban nature that people expressed in relation to *why* restoration should not occur. These I categorised as functional, economic, recreation and wildlife, aesthetic and symbolic values.

The range of issues and values evidenced through this research convinced me that the concerns being voiced by opponents were not narrowly conceived, and that there were some serious questions that the restoration community needed to address if their programmes were to gain wider public acceptance. A more systematic, county-wide study of perception toward restoration later confirmed that Old Edgebrook was not an anomaly, but perhaps instead a useful harbinger expressing the wider set of values held by an urban public toward nature (Barro & Bright, 1998).

Given the role that neighbourhoods like Old Edgebrook can have in making or breaking regional nature protection and restoration efforts, it is important to understand and work within the context of local concerns. Briefly stated, the following lessons may help guide future efforts in similar situations (for more, see Gobster & Hull, 2000).

- *Plan for restoration in a landscape context.* Integrate restoration sites into the larger landscape context, keeping the scale, degree of disruption and length of recovery to a minimum near neighbourhoods or other high-use areas.
- *Design restoration sites with people in mind.* Cues to care, such as mowed

edges, the planting of showy native perennials and interesting trees at key locations, fencing and other design devices, can improve the appearance of restorations as viewed from neighbourhood areas.

- *Promote two-way communication.* On- and off-site information can help sell and interpret restoration and management efforts. But equally important is a willingness to listen to alternative views and recognise that neighbours may have diverse values in nature that deserve consideration.
- *Encourage involvement.* At the Chicago restoration hearings, several neighbours who lived near restoration sites spoke of how they had been turned off by what they initially saw happening until they experienced a restoration site close up, especially by participating in hands-on restoration activities. Public groups and individuals also desire greater involvement in restoration planning and decision making, and it seems likely that this could in some cases also lead to involvement in the actual work of restoration. Including a wider range of groups in the planning process can lengthen planning time and sometimes modify outcomes, but it often speeds up implementation and management in the long run.
- *Work toward the integration of values.* The values people hold for nature are diverse and, as this study shows, may not always be compatible. Instead of arguing whose values are better, perhaps a more constructive way to proceed is to respect the legitimacy of local neighbourhood values and to work to integrate them with regional concerns so that together they can help to achieve the shared overarching goal of protecting nature.

Conclusion

In these four examples I have drawn together results from my past research to demonstrate the important role that neighbourhoods play in metropolitan open space planning at different scales of concern. While the neighbourhood–open space connection seems obvious when dealing with open space issues at the smallest, most local scales, these examples also suggest that it is important to understand and deal with nearby neighbourhoods, no matter what scale of open space is being planned for. This may not be obvious when dealing at more regional scales of open space planning, but the cases of greenway development and natural area restoration discussed above show why attention to neighbourhoods could be important at these larger scales.

Although my work helps to establish the neighbourhood as a common denominator of importance when planning across the spectrum of metropolitan open spaces, I am less certain whether the lessons we can learn by looking at neighbourhoods are necessarily the same ones for every type or scale of open space. For example, in looking across the lessons learned as summarised in Table 1, the case made for locating activity around the edges of boundary parks is probably less of a concern in interspaces and many greenway trails because these open spaces are nearly all edge anyway. Likewise, distance recommendations for locating greenway trails for neighbourhood access would not hold for smaller open spaces: in the GreenEdges project, for instance, it was found that many neighbours' participation did not extend beyond the length of their garden

hoses. On the other hand, lessons about the context of open space and need for maintaining visible cues to care came out of both the smallest- and largest-scale studies discussed here. These lessons may be relatively independent of scale and, as Nassauer (1995) and others have found, seem to be important aspects for landscape design in many situations.

For these reasons, I think it is important when planning for open space in metropolitan areas that we become sensitive both to the pervasive importance of neighbourhoods and to their unique relationships to different types and scales of open spaces. With neighbours both the premier supporters and critics of open space design, planning and management, it behoves us to better understand why neighbourhood–open space relationships matter—at all scales of concern.

Acknowledgements

A shorter version of this paper was presented at ‘Does the neighborhood landscape matter?’, a conference held at the University of California Berkeley, Department of Landscape Architecture and Environmental Planning, 19–22 October 2000. The author thanks Marcia McNally, Randy Hester, Walter Hood and Louise Mazingo for their efforts in convening this seminal event, and Marcia, John Dwyer, Bill Sullivan, Lynne Westphal and two anonymous reviewers for their helpful comments on an earlier draft of this paper.

References

- Barro, S. C. & Bright, A. D. (1998) Public views on ecological restoration: a snapshot from the Chicago area, *Restoration & Management Notes*, 16(1), pp. 59–65.
- Calthorpe, P. & Fulton, W. (2001) *The Regional City: planning for the end of sprawl* (Washington, DC, Island Press).
- Gobster, P. H. (1991) Trends in urban forest recreation: trail use patterns and preferences by older adults, in: *Proceedings, Outdoor Recreation Trends Symposium III: dialogue for the 1990s* (Indianapolis, IN, Indiana University–Purdue University).
- Gobster, P. H. (1992) Urban park trail use: an observational approach, in: G. Vander Stoep (Ed.) *Proceedings, 1991 Northeastern Recreation Research Symposium*, General Technical Report NE-160 (Radnor, PA, US Department of Agriculture, Forest Service, Northeastern Forest Experiment Station).
- Gobster, P. H. (1995) Perception and use of a metropolitan greenway system for recreation, *Landscape and Urban Planning*, 33, pp. 401–413.
- Gobster, P. H. (1997) The Chicago Wilderness and its critics III. The other side: a survey of the arguments, *Restoration & Management Notes*, 15(1), pp. 33–38.
- Gobster, P. H. (1998a) Urban parks as green walls or green magnets? Interracial relations in neighborhood boundary parks, *Landscape and Urban Planning*, 41(1), pp. 43–55.
- Gobster, P. H. (1998b) Nearby neighborhood residents’ images and perceptions of the river, in: P. H. Gobster & L. M. Westphal (Eds) *People and the River: perception and use of Chicago waterways for recreation* (Milwaukee, WI, US Department of Interior, National Park Service).
- Gobster, P. H. & Delgado, A. (1993) Ethnicity and recreation use in Chicago’s Lincoln Park: in-park user survey findings, in: P. H. Gobster (Ed.) *Managing Urban and High Use Recreation Settings*, General Technical Report NC-163 (St Paul, MN, US Department of Agriculture, Forest Service, North Central Forest Experiment Station).
- Gobster, P. H. & Dickhut, K. E. (1995) Exploring interspace: open space opportunities in dense urban areas, in: C. Kollin & M. Barratt (Eds) *Inside Urban Ecosystems: proceedings of the 7th National Urban Forest Conference* (Washington, DC, American Forests).
- Gobster, P. H. & Hull, R. B. (Eds) (2000) *Restoring Nature: perspectives from the social sciences and humanities* (Washington, DC, Island Press).

- Hester, R. (1975) *Neighborhood Space* (Stroudsburg, PA, Dowden, Hutchinson & Ross).
- Jacobs, J. (1961) *The Death and Life of Great American Cities* (New York, Vintage).
- Kaplan, R., Kaplan, S. & Ryan, R. (1998) *With People in Mind: design and management of everyday nature* (Washington, DC, Island Press).
- Nassauer, J. I. (1995) Messy ecosystems, orderly frames, *Landscape Journal*, 14(2), pp. 161–170.
- Solecki, W. D. & Welch, J. M. (1995) Urban parks: green spaces or green walls?, *Landscape and Urban Planning*, 32, pp. 93–106.
- Zhang, T. & Gobster, P. H. (1998) Leisure preferences and open space needs in an urban Chinese American community, *Journal of Architectural and Planning Research*, 15(4), pp. 338–355.