

Restoration and revegetation projects in urban parks and community perceptions of personal safety — learning from Waitakere's Green Network

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ABSTRACT

One of the principal objectives of Waitakere City's Green Network Strategy is to encourage more people to make greater use of the extensive range of natural areas in the city, including the parks.

Restoration and revegetation of the Green Network involving possibly extensive native plantings has to address community concerns about actual safety and perceptions of safety in the parks and reserves. In 1996, we undertook a study of community perceptions of personal safety in several case study parks in Waitakere City, identifying both positive and negative aspects of landscape features and vegetation. Findings from this study were used to develop safer design guidelines for revegetation of the green network.

This paper revisits the case study parks and discusses implementation of the guidelines.

THE CONTEXT

Waitakere City is the most westerly city of the four cities in the Auckland Region. Suburban development is spreading across the lowlands in the east and into the foothills of the bush-clad Waitakere Ranges. Urban intensification of the existing suburbs is occurring with infill development and higher density redevelopment. The green open spaces in the city, the parks and reserves, are, for the most part, concentrated along the banks of the many streams and creeks that wind their way through the city. The streams have been subservient to the development process. Culverting and bridging of streams have made the roads the visually dominant elements and eliminated any visual continuity to the streams and the trees and bushes along the banks. Developments, commercial and residential, have turned their backs to the streams, and the parks along the stream banks are often hidden from view.

These areas of open space are subjected to competing pressures and competing values. From the ecologists' viewpoint, which has considerable political support in Waitakere 'eco city', maintaining remnants of indigenous vegetation and re-establishing corridors

between the remnants is the key to protecting and maintaining biodiversity. There is a belief that protection can best be achieved by concentrating restoration and revegetation efforts on publicly owned land, such as the existing parks and stream banks (Nugent et al. 1995). However, in addition to ecological objectives, there are competing social, economic, cultural and water management objectives.

The community's use of these publicly owned lands is changing and will continue to change, as will the different values placed on them. Whilst school children and some commuters walk through the parks on their way to and from school and work, and others visit the various community buildings in the parks (including kindergartens), relatively few people currently appear to visit the parks for recreational purposes on weekdays. During the working day, the paths along the stream banks are almost deserted, the playing fields are unused, and the car parks may have scattered broken auto glass, or beer bottles, evidence of the previous night's teenage drinking session.

The city is experiencing growing residential intensification and infill development of suburban sites. On the one hand, the private green space for each dwelling is contracting. On the other hand, even in areas in the city not experiencing much physical development, the population in recent years has increased with high house prices, young people living longer at home, and families sharing dwellings. As these growth pressures increase, the use of public open space in the city will change, and the competition between objectives will become more pronounced.

THE GREEN NETWORK

In 1995, the City Council proposed restoring and revegetating significant areas of native vegetation along the Green Network of parks and reserves linked by the streams. In addition, the Council wished to encourage people to walk more and to make greater use of pedestrian routes through the Green Network. These pedestrian routes not only provide recreational opportunities in their own right but also connect residential areas with schools, public transport and employment (Fig. 1).

Community concerns were expressed about the visual and physical barriers that would result from the revegetation programmes. There was a perception the revegetation could increase personal risk. Native vegetation in Waitakere grows rapidly and can form a dense mass that serves to block informal surveillance of areas, to minimise views to and from footpaths, and to provide concealment areas and entrapment spots (Fig. 2). And whilst this paper is primarily concerned with community concerns with fear of crime, it should be noted that in recent years there has been considerable media coverage of attacks and murders in parks in various parts of the Auckland region, which no doubt has contributed to community concerns.

COMMUNITY PERCEPTIONS OF PERSONAL SAFETY

In 1996, the author and others undertook a study of community perceptions of personal safety held by members of the community, for the existing and proposed restoration of the Green Network (Austin et al. 1996a,b). The

research explored the diverse perceptions of risk, and the specific features of the parks, the landscape design and the management strategies that contribute to fear of crime, and that need to be addressed in the future design and management of the parks.

A Safer Design approach was adopted, drawing on the following assumptions:

- Understanding perceptions of safety requires community input and community participation
- It is important to have the participation of people who feel themselves to be more vulnerable
- Community knowledge and involvement can not only help identify current problems but also assist in the design of revegetation projects.

A number of focus groups were formed, of local residents, older people, athletes, intermediate school children, and kindergarten parents. The focus group members were involved in structured interviews and audits that took place on site (in four case-study parks along the Green Network), and in an interactive process of developing design guidelines for the revegetation projects, based on their knowledge as local users of the sites.

EAR AND EYE ISOLATION

In terms of understanding perceptions of personal safety, the components of the Green Network are complex. Firstly, the stream banks are uneasily positioned along a public-private space continuum. Where the stream banks form edges to parks, they are the least revealed part of the public space, with steep slopes and often dense vegetation blocking views. The parks, which give access to the stream banks, are relatively undeveloped for passive recreation, with a predominance of grassed open spaces often bereft of seating or paved walkways, and visually and physically dominated by the presence of rugby or athletic fields. As connecting corridors between areas of more public space the stream banks are often marginal spaces, hidden behind buildings, obscured by high fencing, or reached by narrow walkways.

Fears may be exacerbated where the Green Network is isolated:

- By distance from social activity
- By location at the rear of commercial or industrial properties
- By limited informal surveillance (Fig. 3).

LACK OF LEGIBILITY

Secondly, the winding nature of the streams, their steep banks, the dense vegetation that obscures almost all external visible landmarks, and the haphazard interconnections between public and private space serves to disorient the user. Without warning, some of the pathways along the stream banks end, whilst others take the walker from the open space of a park to a secluded route with extensive vegetation and 2 m high fences.

Fears may be exacerbated when there is uncertainty:

- Where is this path leading to?
- What is around the next bend?
- How much further is it?
- Is there an alternative path (Fig. 4)?

ANTI-SOCIAL BEHAVIOUR

Thirdly, there is a perception that the stream banks and green spaces have been appropriated by 'others', by people not like oneself, who have no observable or legitimate reason for being in that space. The presence of graffiti on the backs of buildings and residential fences reinforces this perception (Fig. 5).

Fears may be exacerbated when there are signs of anti-social behaviour:

- Legitimate/illegitimate activities
- The territory of others
- Fear of confrontation.

POOR MAINTENANCE AND POOR DESIGN

Feelings of powerlessness over control of the green public space were directed not only at anti-social behaviour but were also reinforced by poor maintenance and poor design on the part of the Council. For example, the location of public toilets in the far corner of

a park surrounded by vegetation to disguise their function (Fig. 6). These perceptions of powerlessness included voicing concerns that the Council would listen to ecologists rather than to the community.

Fears may be exacerbated when:

- There are signs of a lack of care
- Facilities are poorly located or designed without safety in mind.

1996 SAFER DESIGN FOR THE GREEN NETWORK

In developing safer design guidelines, safer design principles were adopted based on:

- Locational awareness and legibility
- Choice and control
- Visibility of others
- Visibility by others
- Solitude without isolation.

These principles were used to consider the choice of facilities, and their placement design and management, in addition to the design of restoration and revegetation plantings and management of vegetation. Pathways through the Green Network were designed to reflect specific objectives, such as pedestrian linkage, passive recreation, ecological or cultural heritage etc. Thus for areas where pedestrian linkage were dominant (as part of a pedestrian network) maximising visibility, legibility and control was critical. For areas where passive recreation were dominant, locational awareness and choice were given greater weight in the design. And, where ecological objectives were dominant, the pathway was designed as a bush trail with minimal consideration given to legibility or visibility but with clear signs indicating the ecological nature of the route (Fig. 7) and a choice of alternative routes.

FROM 1996 TO 2003

In reassessing the parks where the Council has implemented the Safer Design Guidelines there is clear evidence of this approach. For example, in one park, revegetation has been undertaken in quite extensive areas, whilst ensuring that the adjacent pedestrian linkage

route has clear sightlines along its length, that the planting is only on one side allowing views of activities within the park, and several open routes through the planted area are retained to the nearest residential area (Fig. 8A,B). In another example, a new town house development has been designed to provide informal surveillance of a new footpath along a stream bank, which links to a footbridge and pedestrian linkage route. The area between the footpath and the stream provides revegetation opportunities. An existing recreational path on the opposite bank of the stream enables some cross stream surveillance to occur without intruding too much on the enjoyment of the more natural setting on the far bank (Fig. 9).

LINKING DESIGN TO COMMUNITY INVOLVEMENT

The design guidelines have recognised the importance of community perceptions of risk and community participation in the design process. And the approach also recognised that informal surveillance requires people, and that opportunities must be developed to enable more people to visit and use the parks and to encourage and support ongoing community involvement and ownership.

In addition to adopting Safer Design Guidelines, the City Council has developed a number of community stewardship and education initiatives. These include regular Clean Stream and Planting Days, with the involvement of local school children, community groups and residents. Each new baby born in Waitakere is celebrated by the planting of a native tree, in the Trees for Babies projects, along the Green Network (WCC 1999).

Opportunities have been provided to foster community identity and a sense of pride with the creation of works of art along the Green Network. These include a primary schools-artist partnership, and several artist-engineer partnerships resulting in the construction of pedestrian footbridges across the streams. Not only are these aesthetically pleasing bridges but they also provide seating or viewing locations overlooking the stream banks and pedestrian routes through the Green Network. These initiatives provide reasons for more people to visit the Green Network and appreciate the natural and restored areas of the city. As more people visit and value these special urban spaces, it is hoped that all will feel safer visiting them.

REFERENCES

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Fig. 1 The Green Network along the streams links parks and community facilities and connects residential areas with schools, public transport and employment. A community restoration and revegetation project along the stream bank was started in 1996.



Fig. 2 By 2003, the new plantings along the stream bank have grown significantly. Some members of the community fear that revegetation may increase personal risk by impeding sightlines, forming physical movement barriers, and providing concealment areas and entrapment spots.



Fig. 3 Fears may be exacerbated where the Green Network is isolated by distance from social activity, location at the rear of commercial or industrial properties, and with limited surveillance.



Fig. 4 Fears may be exacerbated when there is uncertainty on where the path leads to, what is around the next bend, how much further the path leads, and where there is no sign of an alternative route.



Fig. 5 Fears may be exacerbated by signs of anti-social behaviour such as graffiti on the rear of buildings.



Fig. 6 Public toilets such as this one, located at the far corner of the park and surrounded by vegetation to disguise their function are not designed with safety in mind.



Fig. 7 Good signage providing distances, walking times, types of paths and alternative routes.



Fig. 8 **A**, before revegetation in 1996. Surveillance from the edge of the park was blocked, visible from within the park but little used, and an area for youth to congregate after dark; **B**, same area after revegetation in 2003, following Safer Design Guidelines, providing clear sightlines along the path, path left open to the right for views of activities within the park, several routes kept open through the planting to nearest residential areas.



Fig. 9 The new town house development and grass bank in the reserve are designed to encourage residents to overlook the footpath, and enjoy the view of the newly planted revegetation area along the near bank of the stream, to the left of the photo. Views through the revegetation area provide some additional informal surveillance of people using the recreational footpath on the far bank of the stream.