

London Parks & Greenspaces Forum

Biodiversity Working Group

Safer or greener? - Landscaping for biodiversity and security

1. Introduction – Jan Hewlett, Greater London Authority

Central Government calls for parks which are ‘Cleaner, safer and greener’. But are these three aims, which we would all support in principle, mutually supportive? If we assume that ‘greener’ signifies aesthetically pleasing, ecologically-rich, sustainable landscapes, with an abundance of wild nature, is there a tension between ‘safer’ and ‘greener’?

We will begin by exploring how people perceive landscape, and what leads them to feel safe or insecure in particular landscapes. We will then look at a survey of birds in relation to landscape design in small parks and squares in central London. This will be followed by presentations from two people who are involved in the management of two very different public open spaces, and finally we will hear from the perspective of the Metropolitan Police.

2. People’s experiences and expectations of urban green space – Prof. Carolyn Harrison.

I am going to draw on the work of environmental psychologists and social scientists to illustrate how landscape preferences and experiences contribute to people’s enjoyment - or not - of urban green space. Studies of landscape preference based on rating photographs suggest that four key cognitive factors influence people’s responses: *complexity, coherence, legibility and mystery*. When mapped onto the landscapes of urban parks, the most preferred landscapes cohere around the style of the English Landscape Garden. However, in practice many parks and open spaces lack the subtleties of this landscape style and many of our urban spaces are dominated by what I will term an ‘urban savanna’ landscape of open amenity grassland with scattered trees that offers few of the qualities of form, composition, or wildlife habitats that are intrinsic to preferred types of ideal landscapes.

While the approach of environmental psychologists works with landscapes as ‘visual texts’, other social scientists have focussed their research on people’s lived experience. Employing a variety of methods of enquiry that attempt to mirror the social practices of everyday urban living, such as in-depth and focus group discussions, participant observation and photo diaries, these studies seek to reconcile ‘reported’ preferences and behaviour expressed through laboratory studies and questionnaires, with the actual use of parks. These studies show that parks and open spaces offer people a range of enjoyable experiences – gateways to better social and environmental worlds – both in the metaphorical and physical sense.

However, they also show that enjoyment is compromised by a range of concerns such as *fear of crime, ‘unsociable others’, poor basic facilities, signs of neglect and vandalism and the absence of people in positions of authority* who can mediate to promote the common good. Several studies also show that these concerns are differentially experienced by some groups in society rather than others – children, young people, disabled, elderly and members of Black and Ethnic minorities. For some people, these anxieties and fears are mapped onto the natural environments of parks so that ‘parks in general’ are seen as risky places.

In practice there are few studies of public attitudes to and experiences of particular natural environments in urban green spaces. Studies of woodland environments suggest that personal

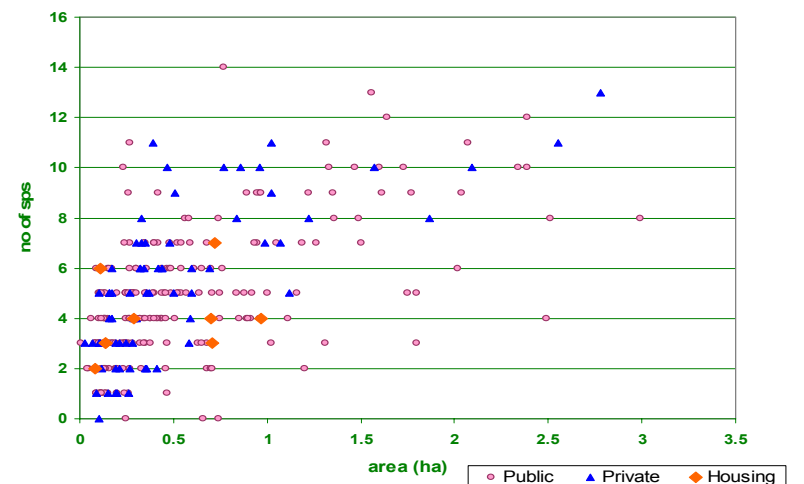
histories and experiences can make a difference to people's expectations and use of these settings; they also suggest that having easy access to these environments as 'familiar places' makes a difference. In this respect local context is important – both socially and environmentally, so working closely with local people – users and non-users is essential. And, while several opportunities exist for introducing subtle and gradual habitat changes that enrich wildlife to urban savannas, experimenting with changes that are consistent with some of the design principles suggested for 'preferred' landscapes seems important too. *Most important of all however, is the need to demonstrate that the park of which these habitats are a part, is consistently well cared for.*

3. A survey of birds in London's smaller parks and squares – Peter Sibley

During the summer of 2004, the London Biodiversity Partnership's Parks Habitat Action Plan undertook a survey of squares and small parks in central London, to assess their contribution as wildlife habitat and to see how far the diversity of bird species could be linked to styles of garden management. The study was funded by the Bridge House Estates Trust, with contributions from English Heritage, the Royal Parks Agency, Grosvenor Estates and the Metropolitan Public Gardens Association and carried out under contract by the London Wildlife Trust. It covered 297 sites, ranging from 0.1ha to 3.0 ha, including public and private squares, community gardens, public parks and a few housing estates, all within central London. Each was visited once only (for an average of about 40 minutes) and a survey form completed, with details of habitat, and birds and other wildlife seen or heard. The analysis of the results is ongoing, but the following can be considered an interim summary.

The range of bird species recorded was found to be closely linked to site area. The average number of species per site tended to be a little higher for private sites than those which were open to the public ($p=0.014$). Private sites tended to have more cover in the form of trees and shrubbery than public sites, as well as lower levels of disturbance. None the less some of the public sites supported a good range of birds (see fig. 1).

**Fig 1. London squares survey:
No of bird species in
relation to site area**



Species varied in the extent to which they appeared to respond to differences in habitat, notably the extent of cover. Some, for example feral pigeon, wood pigeon and carrion crow occurred more or less as frequently in sites with low amounts of shrubbery as those with more abundant cover (fig.2.i). Others – notably robin, wren, dunnock, great tit and long-tailed tit – were more often recorded in sites with greater amounts of cover (fig.2.ii). These five species also occurred more frequently if a substantial proportion of the shrubbery could be described as 'medium' or dense'

rather than 'sparse' (fig 3). Similarly, all five were recorded in a higher proportion of sites where most of the shrubbery was medium (1-2m) or tall (>2m) in height, rather than low (<1m). (fig 4).

Fig 2.i Species frequency in relation to cover – feral pigeon, wood pigeon, carrion crow, starling

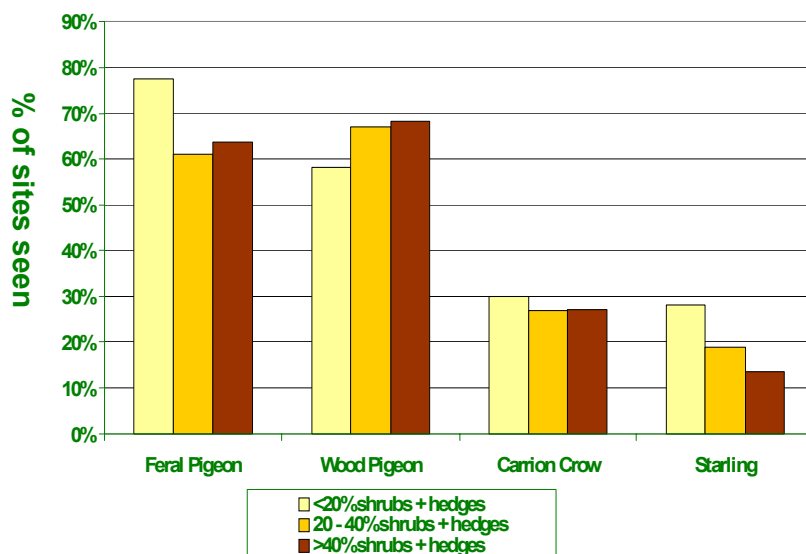


Fig 2.ii. Species frequency in relation to cover – robin, wren, dunnoek, gt tit, long-tailed tit

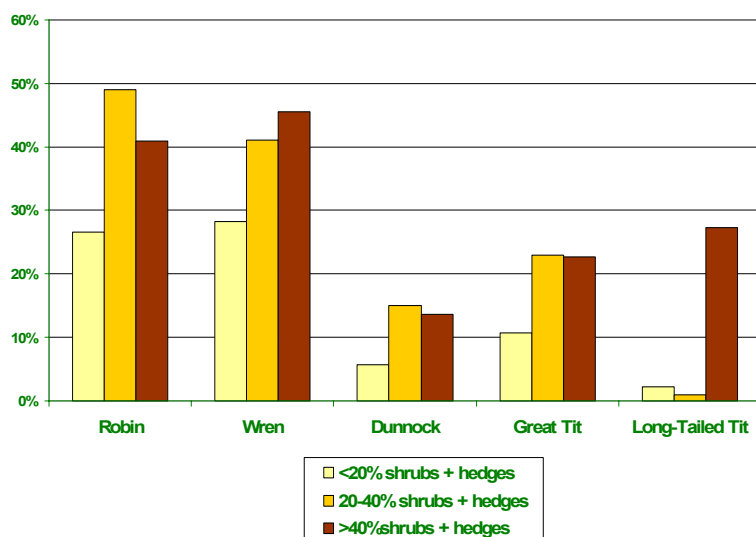


Fig 3 Bird frequency v density of shrubbery

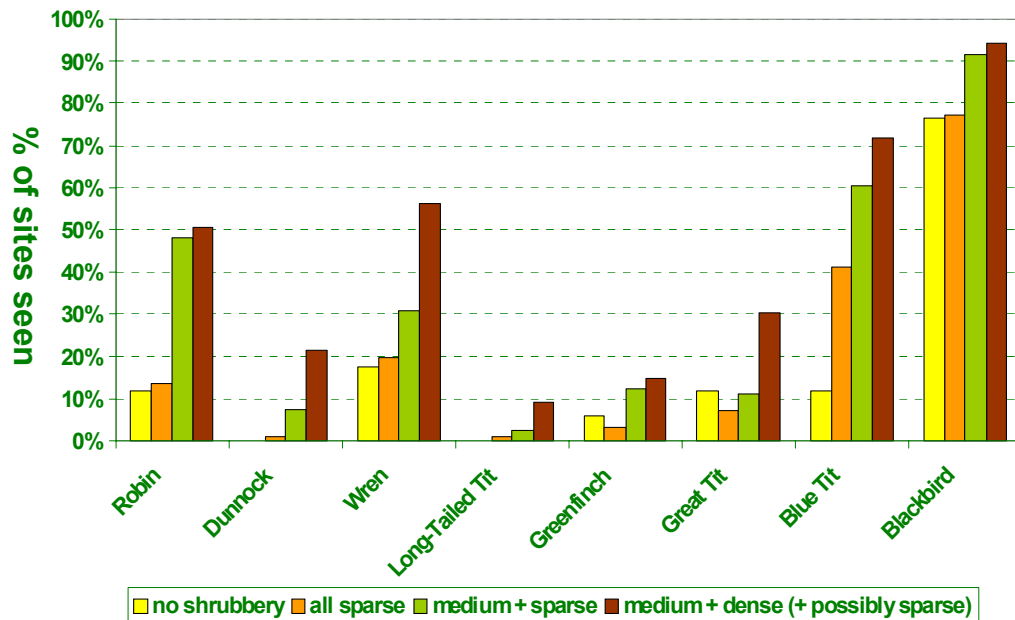
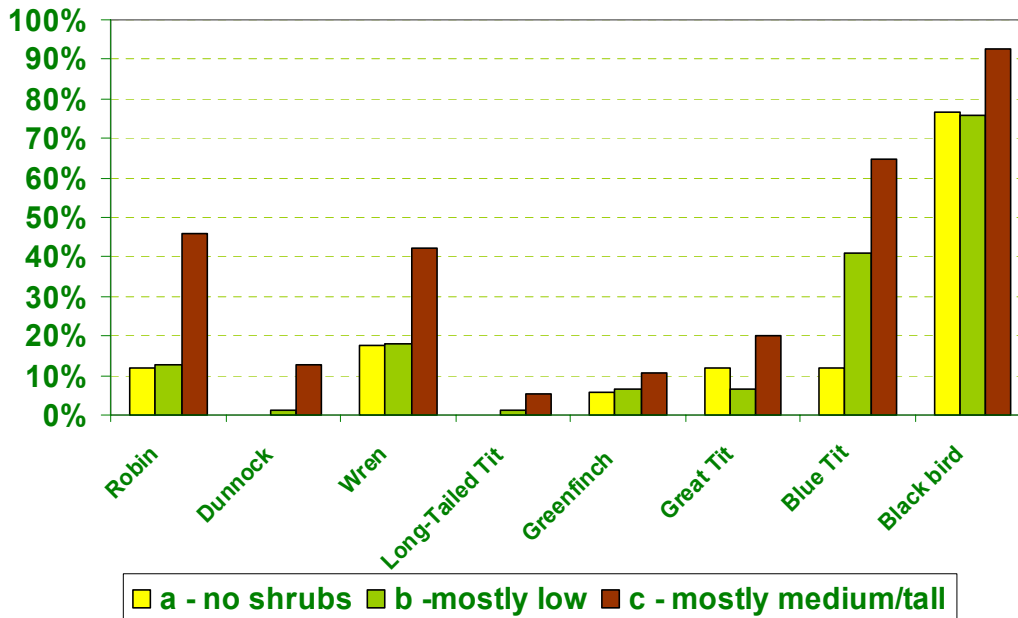


Fig 4 Species frequency in relation to height of shrubbery



The implications of this study for parks management were then discussed. It seems to show that if understorey vegetation is reduced to a minimal quantity, or low in height, perhaps to improve visibility and security, then some loss of bird diversity can be anticipated. The sites with the richest bird life tended to be those whose landscape design mimics the structure of a woodland edge.

3. Managing an historic landscape for people and nature. Nick Butler, Park Manager, Kensington Gardens, Royal Parks Agency

Most of you will know Kensington Gardens, which adjoins Hyde Park, the two together comprising 239 ha. The gardens are managed as an important historic landscape, originally commissioned in the early 18th century by Queen Caroline and designed by Charles Bridgeman. However, we cater for vast numbers of people. Although Kensington is generally perceived as an area of affluence, we do also draw visitors from large blocks of deprived areas. Today I will focus on aspects of security.

We have 26 working gates which are locked at dusk. Some have turnstiles which allow people to get out after closing time. Our most recent turnstiles are DDA compliant. We have our own Police Service, that patrol our parks 24/7. The Royal Parks Constabulary have now become an Operational Command Unit of the Metropolitan Police .

The tree canopy is extensive. 2000 trees have been planted in recent years to re-establish our historic lines of trees. We also have some fine veteran trees. We have observed that our small number of evergreen trees offer shelter for birds from predators in winter when other deciduous trees are bare. In early Spring young fledglings can hide. Now more evergreen trees have been planted to increase the protection areas for our songbird.

We have large areas of shrubberies, which are a refuge for wild life. Most of these are surrounded by spiked railings. There is a very large belt of thick shrubbery/ woodland alongside the Longwater, but again the public are also excluded by railings. We used to manage our shrubberies by raking out the leaves in autumn, but found they had a thin canopy. More recently we have recycled our leaves by shredding/composting and now mulch our shrubberies annually so they are more resistant to drought and offer a better feeding habitat for birds.

We are careful about where we place benches. If a bench is placed next to a shrubbery, railings can help people to feel safer, as no one can jump out from behind. We used to have the benches set opposite one another along one of our avenue paths, which is 8 metres wide. But I observed men deliberately arriving to sit opposite and intimidate solitary woman. If you are considering setting benches opposite one another, I suggest a safe width of 15+ metres otherwise set benches out in alternate positions down narrow paths.

In Hyde Park the cycle routes are marked out in lanes and in Kensington Gardens the footpaths are shared cycle/pedestrian paths. In both cases the paths can be a point of conflict as neither like mixing.

Our grassland management has changed substantially in recent years. In past dry summers, the turf was becoming stressed by regular cutting so we decided to extend the small amount of meadow. This has created a pleasing, rural landscape in central London where the informal quadrants with the meadow grass and wild flowers amplify the formality of the historic tree avenues, where the grass is cut short. We found that the indigenous grassland worked well as it flowers from June through to August and is also quite short, so nobody could hide in it. Our meadows lie mainly on well-drained soils, and are dominated by bent grasses, which appear to be reasonably robust and able to upright themselves after people walk through. This contrasts with the tall, rank grassland in Hyde Park Meadow, where it lies over London clay.

We are not without our problems with criminal damage and it is sad to see. Last year, 14 out of a total of 65 newly planted trees were vandalised – though I appreciate this is much better than

many London parks. We have found the need to return to tall tree support with heavy crossbeams. We make a point of addressing graffiti etc promptly.

Kensington Gardens has long had a strong association with children, epitomised in the story of Peter Pan in Kensington Gardens. The famous sculpture of Peter Pan by Sir George Frampton was actually commissioned by James Barrie. Our new Diana Princes of Wales' Memorial Playground, opened in 2000, was designed as a very adventurous place for toddlers and children up to 12 years. When we first we opened we had 3000 visitors per day, but now peak at 2500, which is still more than many leisure centres. It is a challenging place to manage safely. It has cctv and there is just one gate in/out. Parents/ Guardians are required to accompany the children. Adults are not allowed in without a child so it is the children that give the adults access. In the height of summer we employ Pool Lifeguards to supervise the playground as we find their training is ideal; their duties involve scanning like a Lifeguard covering a pool, but our risks are glass bottles, jars and child protection. All our permanent attendant staff have the First Aid at Work qualification. I was always taught that playgrounds should not have hiding places for undesirables to hide, but our playground has a tall, railed fence and so to add to the adventure it does have places for the children to hide. Lost children are common but we have robust systems in place to ensure a safe reunion.

With the measures I have discussed above, the help of our ground staff and in partnership with our dedicated Police Service I am confident we can keep the Gardens safe for our countless tourists and many local residents.

5. Trying to Balance Safety Considerations with Managing Wildlife Habitat on Tooting Common - Valerie Selby, Wandsworth Council

Tooting Common is a Site of Metropolitan Importance for Nature Conservation in suburban south-west London. It is a complex of woodland, grassland, water bodies and amenity features (playground, sports pitches etc). The woodlands are dominated by oak (including several fine veteran oaks) with a range of other trees, including hornbeam. They support an unusual variety of birds for such an urban area. An interesting invertebrate fauna includes a good population of stag beetles, and the nationally rare jewel beetle *Chrysolina oricalcia* living on cow parsley on the woodland edge.

Problems:

- Prostitution & Gay cruising – including the use of “bedroom” enclosures which had developed within stands of saplings and bramble
- Litter (in particular that associated with the above activities & needles)
- Woodlands becoming no-go areas for the general users of the Common

Issues:

Parts of the common had become “Derelict” habitat, which had virtually no management for 10 years, leading to:

- Scrub encroachment onto adjoining grassland areas and footpaths
- Tall leggy bramble providing little habitat structure
- Dense stands of saplings obscuring visibility
- Overgrown paths

Differing perceptions of safety

- A majority of people (who, if not silent, were very quiet) perceived the woodlands as threatening and were therefore not going through them.
- A small but vociferous minority were not feeling threatened and therefore undervaluing the perceptions of the majority

- Parks Police were unwilling to patrol the area as it was visibility difficult.
- Met Police were not seeing the need to balance issues regarding people and wildlife, suggesting it “would be better to pave it over”.

Actions:

1998/99: first winter woodland works started – tentative and ad hoc. Cutting of bramble patches, coppicing of some wooded parcels.

1999/2000 – 2001/2002: work continued – Further bramble management and coppicing.

2002/2003: Met Police in particular raised the issue of safety in, and near, the woodland areas. In trying to blitz the prostitution problem, they were seeking more widespread clearance of “undergrowth”. Extensive clearance carried out with work transgressing into spring.

2003/04 to present: a more balance approach achieved

Current approach:

Overall the management regime has aimed to:

- improve visibility
- paths – to have a meter wide strip of lower vegetation on either side
- remove dense vegetation capable of hiding adults

whilst maintaining the overall ecological integrity of the site.

Brambles:

- Now cut down on a 3 year rotation. This allows visibility through the whole site.
- Not enough cover for the “bedrooms” which had been created in the taller brambles.
- This bramble scrub habitat exists elsewhere on the common in smaller patches which can remain taller – we try to manage an overall balance across the wider landscape.

Saplings:

The understorey of trees i.e. saplings which are naturally regenerating, have been selectively thinned. This has allowed greater visibility through the site. Dead wood is retained on site where possible - either standing or (due to health and safety reasons) laying down.

Pathways:

The main paths, where we wish to encourage access, have been widened and the corners broadened out so it is possible to see into and out of junctions. We maintain a graded edge to encourage woodland flora and associated fauna. Smaller pathways, where we wish to discourage use, were initially blocked with dead hedging. Many have now grown over with low bramble making the dead hedging unnecessary. Also there is less need for people to make a variety of pathways into the woodland, as there is nowhere to hide once you get there!

Summary of present situation:

- Prostitution & Gay Cruising – still goes on but it more clearly visible now and therefore supposedly easier to police – no more “bedrooms” in woodland.
- Litter – much reduced and regular clearance is easier as there is nowhere for large amounts to be hidden - marked reduction in condoms and absence of needles
- Accessibility – there are regular dog walkers who now use the woodlands daily

Habitat changes

- abundance of dense low bramble,
- regenerating copses of trees,
- clear paths,
- diversifying ground flora (including ferns),
- wide range of bird species still breeding within the woodlands (& bats)

Perceptions

The increased level of use points to an improving perception of the woodlands amongst the local community. Parks Police now feel able to patrol the woodlands and relations are more constructive.

Consolidation:

We are currently writing up the principles and how they are applied into a Woodland Management Plan, which will form part of an overall Management Plan for Tooting Common within the next five years. Wide consultation has taken place amongst local people.

5. Crime Prevention and Landscape Design in Urban Parks - PC Ian Gray

Changes to open spaces intended to reduce opportunities for crime and disorder can also reduce the appeal of the space for recreation, leisure or nature. The blanket removal of undergrowth and tree canopy, replacing these with flat hard-landscaped surfaces can destroy habitats and usages alike, whilst contributing nothing to the appeal of the park or green space concerned.

There are, however, genuine concerns about crime and disorder, also health and safety, in many in city open spaces. Crime and disorder does not only impact upon people, but also upon wildlife and plants, particularly where vandalism and littering are symptoms of the problem, or the health and safety of grounds staff is imperilled by discarded sharps.

Interventions intended to reduce the opportunity to commit crime or indulge in anti-social behaviour should also *support the intended function of the open space* in question. This means we not only need to know the extent of crime, disorder and risk, but also need to know the importance of biodiversity, play and other amenity functions in each open space before coming up with problem-solving options. User aspirations may also be significant to this process.

No one solution can fit all problems and environments. For example, Phoenix Gardens is a small inner city park with a previous history of very bad drug problems, excluding residents and workers. Larger trees and some undergrowth have been retained to combine a pleasing appearance with natural surveillance. Birds and insects are to an extent supported by this change, whilst local people can now enjoy their park.

Size matters. Generally, a larger space can safely support denser bushes and trees than a smaller one, although location can be equally important. The small urban park is often the only choice for residents and workers, whereas the larger space on the city fringe gives people more options about where they should walk or play, thus leaving more scope for wild or overgrown sections

Just as one school of thought may advocate natural surveillance to the exclusion of other options, another supports the removal of railings and gates from park boundaries, and substitutes lighting instead. Clearly, this can work well where there is *a defined need to cross or use the park at night*. On the other hand removing boundaries and lighting open spaces not only invites people in; perhaps to their risk, but may also impact upon the nocturnal patterns of life in these spaces.

Therefore, the Victorian approach of the fenced and gated park, locked at night, can be equally valid, particularly for compact inner urban parks and squares.

Many other options exist to help reduce crime or disorder problems, including localised perimeters *within* parks, defensive planting, route straightening, selection of materials to reduce

graffiti, tree works and others. These should be applied to address specific known problems, not a part of a “scatter gun” cure-all, otherwise a flat characterless, “dead” space may result.

It is always worthwhile talking to your local crime prevention officer when considering improvements to deal with a problem in a park. Solutions should always be evidence-based, and commensurate with the level of the problem experienced.

6. Discussion

For the discussion, the speakers were joined by Wendy Davis of the Women’s Design Service

Shrubbery and use of railings

Kevin Morgan: Thickets can become so dense they may be perceived as security risks. Is there any advice on how to handle this?

IG: One option is railings; even low railings make a difficult to cross the barrier. We have used railings for a shrubbery by the canal, near where people emerge from under a bridge. In addition, a few thorny plants can discourage ambushes whilst also being good for birds. But railings are not right for every situation. The right kind of plant properly used can be equally effective.

WD: The Women’s Design Service have also worked on this subject. With regard to railings the research is split. Some women think railings improve a park, others see them as intimidating. The decision on whether to use railings or not needs to take account of the character of the site.

JH: Some people see parks as symbolic countryside; railings can impact adversely on that perception. It depends on the site.

Jonathan Tristram – St Mungos: If you plant too close to a boundary, the plant may not grow well. But if a gap is left to give a plant space, that can leave a hiding place where problem behaviour may occur.

CH: We should hold to our main aim to encourage people to enjoy natural landscapes, but be prepared to keep experimenting. If thickets are to be encouraged we also need to take allow for increased litter picking.

Hedges

Jon Best, L. B. Southwark: Are hedges an alternative to shrubbery where security is an issue?

IG: Yes, hedges can aid birds. The only downside is if there is a need for surveillance into or across the site by security staff.

NB: We are experimenting with boundary hedges in Kensington gardens, e.g. using hawthorn. They can make a good visual barrier and soften the visual impact of railings.

Lighting in urban parks

Lesley Williams, L B Brent: What is the panel’s view on use of lighting and its effect upon wildlife?

IG: This depends partly upon whether you want people in the park after dark? Unless there is a well-used and very good pedestrian connection, lighting is of little use and can cause damage to biodiversity. Even if there is good reason for lighting, it is important lamps are not hidden behind

trees and one has to be careful of shadow effects on walkways. Lighting can give the message the area is safe and secure when perhaps it is not.

VS: There is a huge pressure to light up areas, but given that the areas cannot be guaranteed to be safe, it is generally better not to light.

JH: It's hard to generalise. This issue needs to be examined on a site-by-site basis.

Jonathan Tristram: What is the effect of lighting upon wildlife?

IG: It is known to break the cycles of nocturnal animals. There is also the wider issue of energy use and sustainability.

JH: There are real concerns for nocturnal wildlife, for example some species of bat will not enter a lit area. There is a need for more research on this topic.

Sports v informal recreation

Joyce Bellamy, Metropolitan Gardens Association & Friends of Burgess park: We should not undervalue 'Urban savanna' landscapes - they may not be the preferred landscape for biodiversity, but are good for sports, with security concerns being allayed by large groups using them.

CH: The information gathered on sport thus far is quite positive, although the more that is known of the complimentary effects of sport the better. But another issue is the amount of financial resources that go into sports compared with other aspects of parks management.

PS: Another consideration is grounds maintenance; astroturf may not be favoured by ecologists, but can be helpful in some situations as the pitch can be used all year round. It is virtually impossible to maintain grass pitches to enable a comparable level of use.

Costs of management

Often there is money for the capital costs of setting up various schemes but not for maintaining them. Has the panel any advice on this?

VS: There always is pressure for money, however, a recent Parks survey in Wandsworth revealed that a minority of local people would be willing to pay for improved maintenance of green spaces. This suggests continued public lobbying is advisable to raise the point that funds can only be squeezed so far and no further.

KM suggested it could be pitched as a win-win situation: If we can show that people use parks more than any other public spaces, that helps to justify why funds should be available.