

Plus Project: Valuing Open Space

The objectives of the project are three-fold. First, to assess the role of urban green space in contributing to ecosystem function and, particularly, the maintenance of biodiversity in urban systems. Second, to assess the actual and perceived social and psychological benefits of green space to those living and working in areas of different urban form. And, finally, to integrate these two perspectives, to provide a more holistic approach to evaluating the value of urban green space.

The research focuses principally on the city of Sheffield, within which several component case studies are being conducted. These include

(1) Maintenance of biodiversity in urban systems

- Determining, by sampling components of the floristic and faunistic composition, the variation in biological diversity across greenspace in a wide range of different urban forms across the city.
- Determining the distribution of wildlife-friendly gardening practices across the urban landscape, and investigating how these vary in relation to urban form.
- Investigating the degree to which different components of biodiversity are correlated in urban parks, and how habitat management regimes affect the structure and functioning of various key components of the flora and fauna.

(2) Social and psychological benefits of green space

- Assessing how the distribution of biodiversity across the urban landscape is associated with human socio-economic factors, in particular how access to green space and neighbourhood biodiversity varies among human communities.
- Comparing the psychological benefits, including opportunity for reflection, place identity, and safety, gained by green space users in areas that differ in their levels of biodiversity.
- Establishing the relationship between peoples' perception of biodiversity in the landscape and ecological measures of biodiversity.
- Evaluating how natural versus artificial components of soundscapes of urban green spaces depend on levels of biodiversity.

(3) integrated approach to evaluating urban green space

- Determining how surrounding urban form and site characteristics of urban green spaces affect usage patterns and social/psychological benefits.
- Exploring potential conflict between management for biodiversity and management for people in urban green space.