

**DEVELOPING STANDARDS FOR ACCESSIBLE
NATURAL GREENSPACE IN TOWNS AND CITIES**

***DATBLYGU SAFONAU AR GYFER LLEOEDD GWYRDD
NATURIOL CROESAWGAR MEWN TREFI A
DINASOEDD***

**July 2002
Gorffnaf 2002**

A report for:



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Executive Summary

Background

The concept of standards for the provision of accessible natural greenspace in towns and cities arose from a body of work in the early 1990s that sought to recognise the importance of nature in the urban context. English Nature subsequently adopted the idea, publishing Research Report No. 153, *Accessible Natural Greenspace in Towns and Cities - a Review of Appropriate Size and Distance Criteria*, in 1995 and publicising the standard through the leaflet *A Space for Nature* in 1996. A review of the standard was undertaken in 2002 and implementation guidance developed.

The standard took on an added relevance as a new agenda for improving urban quality of life emerged following the publication of the report of the Urban Task Force, *Towards an Urban Renaissance*, in 1999 to which government responded with a range of initiatives both general, such as the Urban White Paper of 2000, and specific to the issue of open space, such as the setting-up of the Urban Green Spaces Task Force. There was an emerging recognition of the role of green spaces in improving urban areas and a growing appreciation that many years of underinvestment had seen a steep decline in the overall quality of this important resource.

In Wales, this work was not formally promoted. Local government was extensively reorganised in 1996 and a devolved national assembly was set-up in 1998. The effects of this were that the structures for developing urban planning and nature conservation policy in England and Wales became separated, while local government has been in an extended period of transition to its new unitary authority form. The Countryside Council for Wales therefore commissioned this report to examine whether the model might be useful in Wales and how best to promote its use.

The Structure of the Project

The project aimed to build on the earlier work undertaken by English Nature in producing an updated scientific review and looking in detail at the emerging policy structures that might influence the way in which government and local authorities can use and support the standard. To examine the model in the Welsh context, a review of relevant policy was conducted and consultation with specialist individuals and bodies was undertaken.

The report is structured to report on three key elements, beginning with evidence of the importance of urban greenspace, followed by the review of policy in Wales and concluding with a discussion of practical issues surrounding the use of model. The report concludes with a number of key findings and a range of recommendations.

Key Findings

The review found that recent work broadly endorsed the scientific basis of EN Research Report No. 153, though many aspects of the role that greenspace plays in an urban context are thinly covered. However, the value of greenspace in supporting biodiversity and human recreation was found to be well supported and the structure of the standard itself withstood this scrutiny. Further evidence for the economic and environmental value of greenspace was revealed and a growing body of work indicating its potential contribution to human health and wellbeing was reviewed.

There is a rapid change taking place in many aspects of the public policy framework affecting greenspace planning and management. Local authority service delivery has been targeted by a number of initiatives to improve quality, value and community involvement. At central

government level change is ongoing, a Green Paper on the planning system having recently been published by the Westminster Government, the publication in May 2002 of *Green Spaces Better Places*, the final report of the Urban Green Spaces Task Force and the rapid development of a strategic spatial planning policy for Wales.

The trend of change in the policy environment is generally working to promote greenspace issues up the policy agenda, thereby creating a more conducive framework for the accessible natural greenspace standards model. This is especially so in Wales, where the Welsh Assembly Government is very strongly committed to urban regeneration according to sustainable development principles and to improving quality of life (and the quality of the environment) for urban communities.

Because the model has not been actively promoted in Wales, there was a very low level of awareness of it among consultees. This lack of awareness meant that many local authorities had not worked with the standard at all. A range of barriers, technical and institutional, to the implementation of the model were identified.

Great variations were found in the way in which local authority greenspace services are structured and in the quality, scope and currentness of the available data. Although the use of open space standards by local authorities was found to be widespread, such standards exclusively focused on the provision of sport and recreation facilities to the exclusion of natural greenspace.

Recommendations

The project was able to identify a number of significant barriers to the implementation of the model, and has made recommendations to address many of them. Some of the key recommendations include:

- that **CCW** should provide additional support to the model by: providing practical guidance (in the form of an implementation tool-kit); implementing an outreach strategy to raise the profile of the model; and by using its influence to advocate the referencing of the model in national and regional policy guidance and when consulted about the content of local development plans or on individual planning issues;
- that **local authorities** should develop greenspace strategies as a means of ensuring balanced greenspace planning, including the use of the ANGS model alongside other measures; conduct regular audits of open space; and should set locally-appropriate greenspace standards; and
- that **central government for Wales** should work towards the development of a single framework for integrated greenspace planning as a long-term objective.

The Accessible Natural Greenspace Standards model is perhaps of higher relevance now than at the time of its first publication. Current developments within central and local government increasingly require that means to measure the quality of service delivery and to support policy-making are available. As just such a tool for natural greenspace planning, the model has great potential utility to local authorities, but must receive ongoing support through information dissemination, implementation guidance and with some measure of official recognition at national level. Provided such things are forthcoming, usage of the model by local authorities might grow.

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1 Introduction

The Countryside Council for Wales believes that accessible natural greenspaces have an important contribution to make to the quality of the environment and to quality of life in urban areas. Such sites are valued by the community, provide important refuges for wildlife in otherwise impoverished areas, and are beneficial to public health and wellbeing. There are established mechanisms for the designation and protection of sites with special natural value and standards for the provision of sports pitches and children's play space are routinely applied in urban planning. The accessible natural greenspace model seeks to enable planners and landscape managers to recognise the value of natural sites to local communities through the experience of nature they provide to visitors. It does this by encouraging the better understanding of the greenspace resource and allowing for the assessment of that resource against benchmarks.

A model for accessible natural greenspace standards was officially adopted in England, by English Nature (1996), and has been recently reviewed (Pauleit *et al.*, 2002). The model was justified in the following ways:

- everyday contact with nature is important for well-being and quality of life;
- everyone should be able to enjoy this contact, in safety, without having to make any special effort or journey to do so;
- natural greenspace in towns and cities can play an important part in helping to safeguard our national treasure of wildlife and geological features;
- accessible natural greenspaces give everyone an excellent chance to learn about nature and to help protect it in practical ways;
- adequate provision of vegetated areas helps to ensure that urban areas continue to function ecologically.

This report for CCW seeks to build on the recent work in England in order to assess the potential usefulness of the concept in urban planning in Wales.

1.1 The accessible natural greenspace standards model

The model adopted by English Nature enables local authorities to consider the provision of natural areas as part of a balanced policy to ensure that local communities have access to an appropriate mix of greenspaces providing for a range of recreational needs. English Nature recommends that provision should be made of at least 2ha of accessible natural greenspace per 1000 population according to a system of tiers into which sites of different sizes fit:

- no person should live more than 300m from their nearest area of natural greenspace;
- there should be at least one accessible 20ha site within 2km from home;
- there should be one accessible 100ha site within 5km;
- there should be one accessible 500ha site within 10km.

The model should be viewed as a means to assess the natural greenspace resource and to set local targets for continual improvement, as yardsticks for progress towards an aspiration to meet its requirements as fully as possible. Implementing the model is the starting point for a creative process of greenspace planning and management, and not an end in itself.

1.2 Accessible natural greenspace in an open space typology

The model can be applied alongside a typology designed for other purposes. The model typology for greenspaces recommended by the Urban Green Spaces Task Force (2002), for instance, is as follows:

- parks and gardens;
- country parks;
- natural and semi-natural urban greenspaces;
- green corridors;
- outdoor sports facilities;
- amenity greenspace;
- provision for children and young people;
- allotments, community gardens and urban farms;
- cemeteries and churchyards;

The majority of accessible natural greenspace is likely to fall within the *country parks*, *natural and semi-natural urban greenspace* and *green corridor* types. However, **all** the categories of open space suggested in Final Report of the Urban Green Space Task Force might include accessible natural greenspace, while it might also be found in other locations, such as institutional grounds and industrial estates. The model aims to consider all natural greenspace that is accessible, regardless of ownership and status. However, creative site management might make it possible to develop areas of accessible natural greenspace within existing sites that have a range of other primary functions.

The model is an addition to the tools available to local authorities working to meet the needs of their communities. It provides a flexible and inclusive method for the understanding of the existing local greenspace resource and a decision support mechanism for the determination of future policy. It is not intended to be an unwarranted impediment to development where local priorities dictate otherwise, nor is it intended to promote the provision of natural greenspace at the expense of other types of open space of value. The model promotes the concept of *multifunctional* space whereby an area of managed parkland or playing fields could also be said to be natural, at least in part, if the appropriate criteria are met.

1.3 The purpose of this report

This report seeks to explore the potential for the application of accessible natural greenspace standards in urban areas in Wales. In order to do this it will address three key issues:

- scientific evidence for the importance of natural greenspace in the urban context;
- the compatibility of the principles of the model with planning policy in Wales; and
- practical issues concerned with applying the model in practice.

The report has drawn on a recently-compiled review of international literature and of greenspace policy and practice in England, and has used this in combination with a fresh review of greenspace planning policy and practice in Wales taken from documentary sources and consultation with a number of stakeholders in local authorities, government agencies and voluntary bodies. The report concludes with an assessment of the usefulness of the model in Wales and makes a number of recommendations for future action.

2. The Importance of Accessible Natural Greenspace

2.1 Introduction

The original publications in which the model was proposed already provided a literature review, concentrating on the environmental, ecological and social functions of natural green space, and in particular size and distance criteria as well as accessibility issues (Box and Harrison 1993; Harrison *et al.* 1995). English Nature Research Report No.153 (Harrison *et al.* 1995) was published in 1995, while a recent review of the model (CURE 2002) has included an updated survey of scientific literature. The main purpose of this chapter is to give insight into the scientific context of the model by providing a summary of the main issues.

2.2 Benefits of natural greenspace

2.2.1 Recreation and nature experience

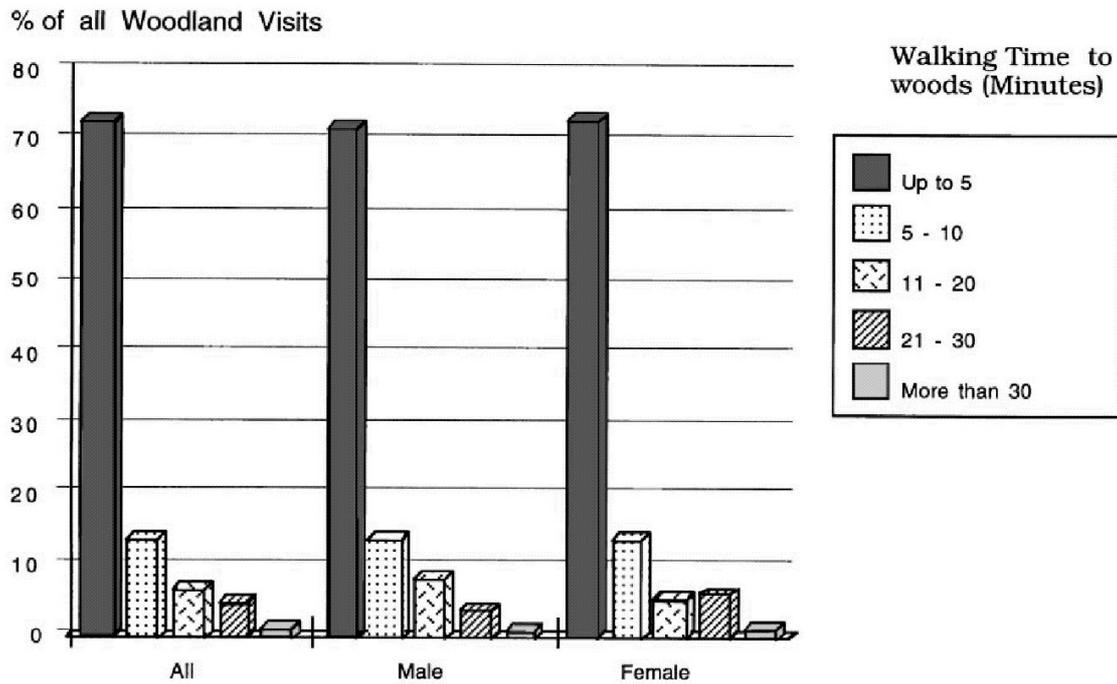
In a heavily urbanised Europe, the great majority of the human population is living in urban settlements, which are therefore the first place where most people experience nature on a day-to-day basis. People visit parks for a variety of reasons and the importance of different activities to individuals can vary (Dunnett *et al.* 2001). A desire to experience nature is an important motivation, but rarely the main one, to visit a site (Grahn 2001, Nohl 1984). Nature is rather one feature to be enjoyed amongst other qualities of a greenspace, such as its safety, facilities, cultural heritage or suitability as a meeting place. Because of this, larger parks, with a variety of facilities and features, tend to be more popular, better known and more frequently visited than small parks (Grahn 2001).

A conclusion for the model would be that it is desirable to provide natural areas within designated greenspace already accessible and under management for other recreational uses. This seems to be also important as unmanaged open spaces can give an impression of being potentially unsafe, and perceived lack of safety is a major reason not to visit open spaces, in particular by women (Millward and Mostyn 1988, Coles and Bussey 2000, MORI 2000, Grahn 2001). A formal setting at key points such as entrances and high standards of maintenance, including the rigorous removal of litter, are therefore critical to enhancing the utilisation of greenspace by the community.

Research in respect to woodlands has indicated an area of two hectares as the smallest wood that people wish to visit regularly (Coles and Bussey 2000). Smaller woods could be made more attractive when linked together by footpaths. In smaller woods, blocks which allow circular walks were preferred to narrow belts, while open structure woods were preferred by both sexes to woods with a dense canopy cover, in particular because of security concerns but also because open woodlands offer a more varied environment. Woods also offer an escape from urban life and a sense of tranquillity, which is one of the main reasons why people visit, no matter if the wood was a plantation or ancient in nature. A study of woodland visitors found that they described 'natural' mostly as a contrast to the urban setting, and every sign of urban intrusion reduced the pleasure to experience nature. Rubbish and signs of vandalism were particularly negative factors (Dunnett *et al.* 2001).

Most park users travel on foot (Llewelyn-Davis 1992, Comedia and Demos 1995, Curson *et al.* 1995) and the large majority of frequent park users are local residents (Llewelyn-Davis 1992). Distance is therefore a major factor for open space use and the importance of proximity is increasing in today's society. A walking distance of approximately 6 minutes from home has been identified as a threshold above which daily park visits significantly decreased (Grahn, oral comm). An extensive study on the use of woodland for recreation showed a strong correlation between distance and frequency of site visits. A walking distance

of no more than 5 minutes, corresponding to distances of 100-400 m, was considered as an ideal home range (Coles and Bussey 2000).



Source: Household Questionnaires - 592 cases

Fig. 2.1 The effect of urban woodland location on usage patterns (Coles and Bussey, 2000, p. 182)

While referring to a larger maximum walking distance of 15 minutes, distance has also been established as an indicator of urban environmental quality on a European level. The first European assessment of the environment reported that “*In the majority of European cities, more than half of the population meet this criterion.*” (Stanners and Bourdeau, 1995).

Overall, there is clear evidence that distance from home is an important factor for greenspace use. A distance of approximately 5-6 minutes foot walk from home seems to be a threshold beyond which the frequency of greenspace use sharply declines. In the original accessible natural greenspace standards model, a 300m straight line distance was suggested for the natural greenspace provision on the lowest level of the hierarchy. This distance reflects the fact that actual walking distances will be slightly longer as they follow the existing pattern of access routes. This difference between straight line and real distances should be taken into account, if the measurement of catchment areas for natural green space is based on actual walking distances.

2.2.2 Health benefits from urban greenspace

The relation between human health and green space provision and quality is still poorly researched in the European context. Most of the studies listed in the publication ‘*Trees & Healthy Living*’ (NUFU, 1999) have been undertaken in the US (such as Ulrich 1984, 1991). In Western societies, emphasis has been placed on medical approaches to illness and health. However, the decline of epidemic respiratory and infectious diseases since the early days of the Industrial Revolution can also be attributed to environmental improvements (McKeown 1979, cited in Henwood 2001). Reduced stress tolerance, involving suppression of the immune response, and changes in the integrity of societal organisation, are proposed as two main pathways by which poor environmental conditions negatively impact on health.

Recent research has been able to demonstrate that frequent parks users experience less health problems and stress symptoms (Grahn, oral comm) and that people living in greener environment report fewer health complaints (DeVries *et al.* 2000, cited in Dunnett *et al.* 2001), have better perceived general health and a better mental health. For instance, one often cited study reported that hospital patients were likely to recover more quickly with a view on a tree as compared with a view on a wall (Ulrich 1984), and further such evidence is emerging. However, evidence of a direct causal relationship between the level of greenspace provision and health is lacking and no difference has been demonstrated between the effects of managed greenspace, such as parks, and wilderness areas. The health benefits of outdoor environments can be further increased through initiatives to promote active enjoyment by walking, conservation work, and educational initiatives (Henwood 2001).

A number of studies (reviewed by Jorgensen, 2001) show that already small amounts of physical exercise have a benefit on health and well-being. However, no particular reference is given to natural greenspace. To promote physical exercise, The Countryside Agency in partnership with the British Heart Foundation recently launched a 'Walking the Way to Health' initiative, a five-year programme to encourage people in poor neighbourhoods to walk more. Green Gyms are another initiative by the *British Heart Foundation* based on evidence that access to the countryside and greenspaces are a major motivation for walking. In Wales, CCW has co-ordinated the establishment of a number of local Walking the Way to Health groups.

There is also considerable evidence that experience of nature can bolster mental health, and an extensive literature review of the psychological benefits of green space is provided by Rohde and Kendle (1994), while other more recent studies are cited by Henwood (2001).

Many deficits remain in research in this field. Little information is available on the relationship between the overall level of greenspace provision in urban areas, the configuration of greenspace and their quality, on the one hand, and health parameters, on the other. Further work is required before it is possible to suggest particular standards for greenspace provision according to health criteria.

2.2.3 Economic benefits from greenspace

The positive impact of greenspace on land and property prices has been shown in several recent studies. Wood and Handley (1999) noted the positive impact on property values of the proximity of water in the Mersey Basin. The analysis of data from over 1000 apartment sales in Joensuu, Finland, showed a positive correlation between prices and the amount of forested areas in the neighbourhood (Tyrväinen, 1997). According to Tyrväinen and Miettinen (2000) a one kilometre increase in the distance to the nearest urban forest area lead to an average 6 per cent decrease in the market price of the dwelling. In the Netherlands, prices for houses with a garden connected to a sizeable lake were up to 28% higher, whereas overlooking a lake or a garden increased the price by approx. 10% (Luttik, 2000). Similarly, a study in Zürich showed that hotel rooms had a higher price with a view on a green space, reflecting the market price of the hotel (Lange and Shaeffer, 2001). Open space size was positively and distance from open space negatively correlated with home sales prices in an American study (Bolitzer and Netusil, 2000).

2.2.4 Biodiversity

Vegetation, flora and fauna have been studied in many urban areas and excellent accounts are available (e.g. Gilbert 1989). Evidence suggests that there is a positive correlation between settlement size and species diversity (Harrison *et al.* 1995) and that city regions can be quite species rich due to the existing mix of remnants from natural landscapes (i.e. ancient woodlands), historical cultural landscapes (i.e. grassy heathlands), as well as typical habitats

of urban and post industrial landscapes (Pauleit and Duhme 2000). Landscapes at the urban fringe make an important contribution to species richness, due to the diversity of different land uses, including a variety of greenspace types (Kunick 1974). However, urban areas are highly dynamic and natural structures contained within them, such as remnants of ancient woodlands and landscapes associated with historical cultural practices, are at risk of destruction and fragmentation of habitats as well as deterioration of their habitat quality (Antrop 2000, Pirnat 2000, Miyashita 1998).

Inner urban areas, being densely built up and low in greenspace provision, are relatively species poor, having a high proportion of introduced species, often only thriving under the specific conditions which these sites offer, such as elevated air temperatures and disturbed soils, and where management is largely absent. Public greenspaces are generally intensively used and managed, and therefore often have a relatively low value for wildlife (Reeves 2000).

The overall greenspace provision, size, diversity of greenspace types, their history and the intensity of management and use are decisive factors for their species richness. Relics of ancient woodlands, of cultural landscapes, such as heathlands and hedgerows are of particular importance for nature conservation (see Gilbert 1989). Intensively managed vegetation usually has a low conservation value, although it can be important, e.g. as foraging grounds for migrant birds. Vegetation structures such as old stands of trees are important for some species groups such as birds, insects and bats in otherwise intensively managed and used parks and residential greenspace. Overall, the variety of greenspace types with their specific local characters make a key contribution to urban biodiversity (Niemala 1999).

Green corridors are a popular means used in urban planning to network greenspace and support biodiversity. While this concept has been criticised on the grounds that the overall amount and density of suitable habitat can be more important than direct linkage (Dawson 1994), efforts should be made to preserve coherence between habitats through linkage by corridors of the same habitat type and by maintaining a high density of these habitats (Dawson 1994, Kirby 1995). It is important, though, to clearly define the aims of green corridors and their functions. Ultimately, whether green space and corridors meet their goals depends on adequate planning and management (Briffet 2001).

Planning for conservation on the strategic level of the whole city will be of particular importance for species which range over large areas and maintain a low population density (Hostetler 1999). However, smaller scales are more important for other species and this contrast needs to be reflected in hierarchical approaches to greenspace planning, and the design of designated area systems (Flores *et al.* 1998).

2.2.5 Environmental services

Urban greenspace plays an important part in reducing the urban heat island effect in inner cities (Harrison *et al.* 1995, Eliasson 2000). For instance, daytime air temperatures in a large urban park can be over 2°C lower than in the surrounding built up areas (von Stulpnagel 1987, von Stulpnagel *et al.* 1990). Urban parks of at least 1 hectare in size can also reduce air temperatures in adjacent neighbourhoods, though this effect is limited to a zone 200-400 m from the edge of a large park on a calm day. This emphasises the important climatic role of networks of greenspace in built-up areas. This local climatic benefit reinforces the distance criteria proposed by the accessible natural greenspace model at its lowest level.

However, public green space cannot compensate for lack of vegetation within urban land uses (Pauleit and Duhme 2000) and planning for urban climates therefore needs to consider the whole urban green space resource. The distinction between natural and other forms of vegetation is not relevant to climate planning, though there are variations in the specific environmental performance (Figs. 2.2 and 2.3) of different land cover types and vegetation

structures such as groups of trees, shrubberies, rough grasslands, amenity grasslands, arable land and flower beds (Whitford *et al.* 2001). The potential of urban woodland to ameliorate urban air pollution and to capture dust has been widely investigated (Freer-Smith and Broadmeadow 1996, Beckett *et al.* 1998, NERC 2001 and McPherson *et al.* 1994, Henwood *et al.* 2001).

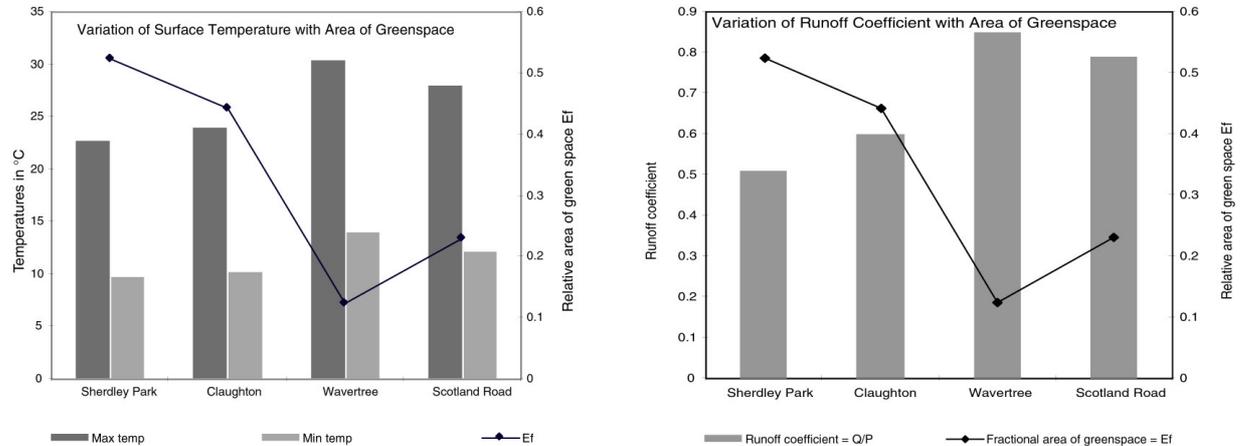


Fig. 2.1 Environmental performance of residential areas in Merseyside with different levels of greenspace provision (adapted from Whitford *et al.* 2001)

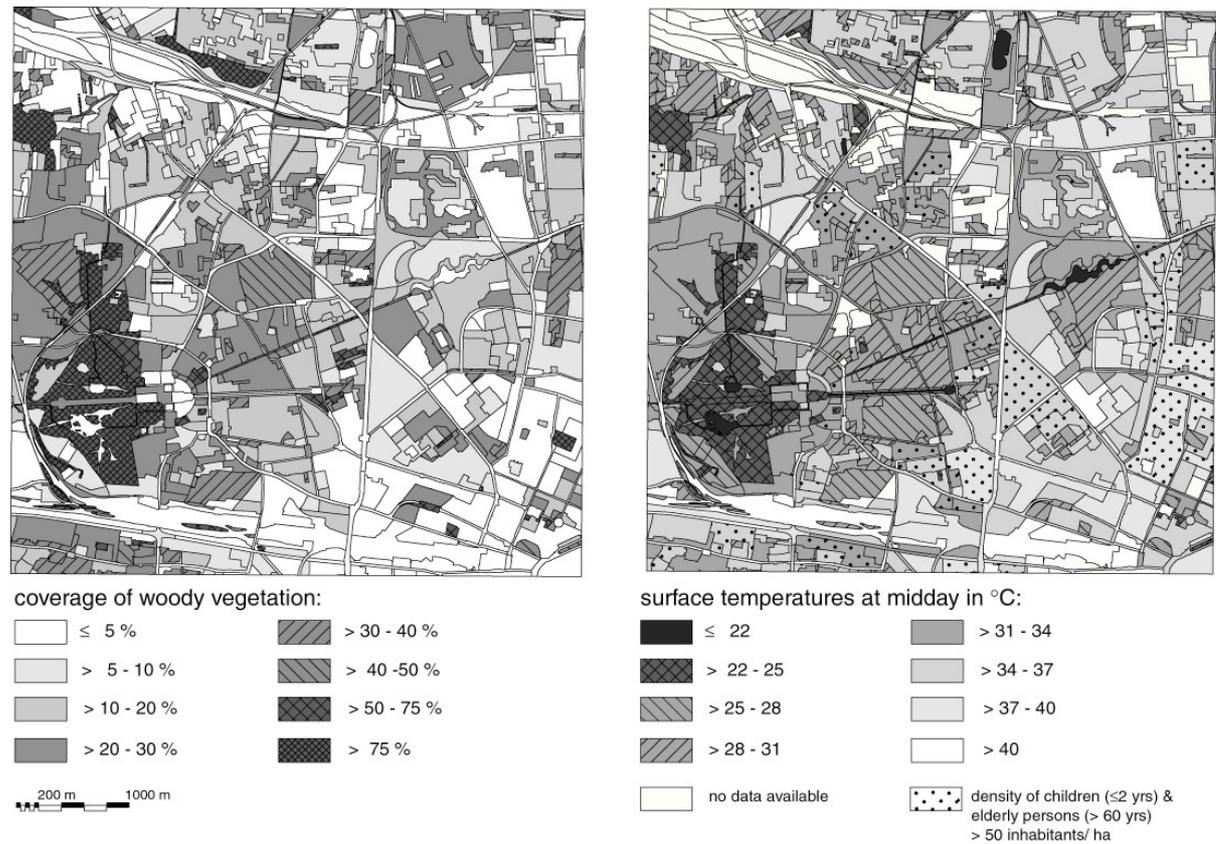


Fig. 2.2 Relation between the spatial distribution of woody vegetation and surface temperatures in Munich (adapted from Pauleit and Duhme, 2000).

2.3 Standards: arguments for and critique of green space standards

The setting of standards can strengthen the role of green space planning, in particular when standards relate to National and Regional Planning Policy Guidance. Adopting the standards

approach can facilitate communication and negotiation with other disciplines and stakeholders which also rely on standards.

The wide use of the National Playing Fields Association's *Six Acre Standard* was quoted as an example of the success of standards. In a similar way, the National Society of Allotment and Leisure Gardeners has put forward a separate standard to provide for 20 allotment plots per 1000 households. Most London Boroughs have applied a 'Hierarchy of Publicly Accessible Open Space', originally formulated in the Greater London Development Plan (GLDP) (GLA, 2001a). The hierarchy determines the significance of open space, from the local to the city level. Standards of this kind set a clear baseline against which the current state of provision and the success or failure of policies and plans can be measured (Box and Harrison, 1993). Maps of 'areas of deficiency' have been produced for London Boroughs showing where accessible natural green space standards are currently not met, and hence where action should be taken to improve provision.

While standards can provide an incentive for action, there are criticisms of the approach (Box and Harrison, 1993; Marriott, 1999; Dolphin, 2000; Kit Campbell Associates, 20001; GLA 2001b; Harding, 2000). The arguments brought forward against open space standards can be summarised as follows:

- a) Lack of scientific foundation;
- b) Quantitative standards tend to ignore quality, accessibility, resources and sustainability;
- c) A tendency to set universal standards, not accounting for the needs of the local community and the specific context of the urban landscape. They also fail to take into account environmental, geographical and social variation;
- d) Standards are rigid and do not adapt to changing needs;
- e) Standards are often not achievable and thus can be viewed as inappropriate in already densely built up areas;
- f) Open space hierarchies are used to assess deficits, but few realistic proposals are made about how to relieve the deficiencies identified. The question of management of open space is not addressed by existing standards; and
- g) Lack of integration of different types of standards. These can be complementary or overlap, thus complicating their application in the planning process.

These criticisms were prominent among issues raised by practitioners in England and Wales when consulted. A discussion of these issues and ways in which they might be addressed is provided in chapter 4. However, illustrations from Germany show that it is possible to find workable solutions. Cities such as Leipzig have adopted 'Environmental Quality Goals' comprising targets to protect habitats as well as local standards, e.g. to reduce air temperatures in the inner city (Stadt Leipzig, 1996). Quantitative targets and standards for provision of green space to improve urban climates and provide habitats for wildlife were proposed for the City of Munich, based on an analysis of urban green space provision and its impact on local environmental conditions (Pauleit and Duhme, 1992, 1995). This approach defined targets of environmental quality for strategic planning on a supply and demand-led basis.

2.4 Summary

This chapter has shown that there is growing recognition of the value of greenspace in urban areas as a social and recreational resource, to support biodiversity, to benefit human health and well-being, and to moderate urban climates and air pollution. Standards are one means of building this value into urban planning and the accessible natural greenspace model

particularly seeks recognition of the value of support for biodiversity to human quality of life. The next chapter examines how the model might fit into the existing structures and policies governing urban planning in Wales.

3. The Policy Context in Wales

3.1 Introduction

This chapter will review the prevailing framework for greenspace planning and management in and around urban areas in Wales. The potential of the accessible natural greenspace standards model to make a positive contribution to urban planning in Wales depends upon the extent to which it is compatible with national and local government policy and guidance and the degree to which it might influence the ongoing process of urban regeneration. The National Assembly and local government are therefore covered in detail, while other key players in urban regeneration, such as the Welsh Development Agency and Cadw, are also included.

The administrative structure in Wales is led by the Welsh Assembly, which has responsibility for local government, including for the land use planning system and the environment. Wales is then divided geographically into 22 unitary local authorities, which are the key agents in the planning and provision of greenspace services in urban areas, though there is a further network of local community councils. This structure came about as the result of a major local government reorganisation in 1996 and, while the structure is now established, the process of consolidating and replacing the policies and plans inherited from the previous structures remains ongoing.

3.2 The community strategy

Every county and county borough council in Wales is required by the Local Government Act to produce a *Community Strategy* to promote the economic, social and environmental well being of its area, and to contribute to sustainable development, over a 10 to 15 year period. It is stressed that community strategies and UDPs need to be complementary, but it is the *Community Strategy* that is intended to "...provide the overarching strategic framework for all the other plans and strategies for the local authority area." (National Assembly for Wales, 2001a, p5). Detailed guidance for the preparation of *Community Strategies* is currently under preparation.

3.3 Planning policy

Planning policy in Wales is driven by a framework produced by the National Assembly and implemented at the local level through the Unitary Development Plans produced by local authorities. The strategic framework is set out in *Planning Policy Wales* (Welsh Assembly Government, 2002), which is supported by a series of Technical Advice Notes (TANs), each of which provides implementation guidance for a specific area of planning policy. There is separate guidance for the preparation and content of UDPs (National Assembly for Wales, 2001a).

There is no mention in *Planning Policy Wales* of accessible natural greenspace *per se*. However the document makes a series of very clear commitments in respect of the principles underpinning the operation of the planning system in Wales, many of which are set out in language that is compatible with the concept of accessible natural greenspace and the use of standards to govern levels of provision at the local level.

There is a clear statement of commitment to sustainable development and a set of principles are set out which are said to "...underpin the Assembly Government's approach to planning policy for sustainable development" (ibid, p11). The very first of these principles is:

"putting people, and their quality of life now and in the future, at the centre of decision-making." (ibid, p11)

Accessible natural greenspace, with other types of open space, has a clear benefit for quality of life in urban areas and, as such, its consideration within the planning system is implicitly supported.

Planning Policy Wales also sets out a range of key policy objectives to be taken into account in the preparation of Unitary Development Plans by local authorities. In particular, the concept of accessible natural greenspace could be put forward as a tool to help planners:

"contribute to the protection and improvement of the environment, so as to improve the quality of life, and protect local and global ecosystems. ...and enhancement of the urban environment all need to be promoted." (ibid, p12)

Because the accessible natural greenspace model is unusual in considering both the quality of the natural environment for human experience and in support of biodiversity, it could have wide utility in evaluating and planning for these two key aspects of urban environmental performance. The inclusion within the model of a requirement for accessibility also addresses a further planning policy objective:

"promote access to employment, ...leisure and sports facilities and open and green space, maximising opportunities for community development and social welfare." (ibid, p14)

Accessible natural greenspace, along with other types of open space, also has benefits for the health and well-being of those that are able to utilise it. It therefore also has a clear role to play in addressing the need for planning policy to:

"contribute to the protection and, where possible, the improvement of people's health and well-being as a core component of sustainable development" (ibid, p14)

Two key priorities for urban development are to:

"secure environmentally-sound and socially inclusive regeneration..." and;

"foster sustainable change, in particular making it possible to live with less noise, congestion and traffic pollution, and improving the quality of life." (ibid, p15)

Greenspace provides environmental services that include the attenuation of noise and pollution and makes a valuable contribution to quality of life. In addressing these priorities, greenspace provision must therefore be a consideration for urban planners, and the accessible natural greenspace model is part of a systematic approach for doing so.

Planning Policy Wales also recognises the valuable role that long-term Green Belt and other temporary local planning designations have to play in urban planning. The accessible natural greenspace standards model is compatible with these tools, but can also be utilised independently of these and other means of protecting valuable open space resources. An accessible natural greenspace might be located in a Green Belt and enjoy designation as a Site of Importance for Nature Conservation, but it could also be located in an urban centre and have no other specific designation at all.

The Unitary Development Plan is identified as a key means of promoting the 'Sustainable Settlement Strategy', working towards:

- sustainable settlement patterns;
- maintaining and improving the vitality, attractiveness and viability of town, district, local and village centres; and
- foster recognition of mutual town-country dependence.

While these objectives are consistent with the enhanced recognition of greenspace generally, and of accessible natural greenspace, there is a tension with the imperative towards the encouragement of higher density development within urban areas. This initiative is at least partly driven by an understandable desire to limit green belt and rural encroachment by development, but does imply increased development pressure on the urban centre, potentially including its open spaces. This would seem to limit the potential for actively increasing the amount of urban land under greenspace, but this could also have positive effects on greenspace planning:

- as pressure on greenspace increases, the most effective use of the available resource will need to be promoted;
- as high density residential development decreases the amount of private greenspace available in gardens, the amount and quality of public greenspace of various types will become increasingly important to local communities;
- as development proceeds it may be possible to achieve gains of new high-quality greenspace or compensatory resources through the development control process.

Alongside the move to densification of development sits the stated preference for the re-use of 'brownfield' sites wherever possible. However the Welsh planning guidance is sensitive to the conservation value of many brownfield sites and does provide for the conversion of such sites into public open space, which might be accessible natural greenspace:

"The Assembly Government recognises that not all previously developed land is suitable for development. This may be, for example, because of its location, the presence of protected species or valuable habitat or industrial heritage, or because it is highly contaminated. For sites like these it may be appropriate to secure remediation for nature conservation, amenity value or to reduce risks to human health." (ibid, p23)

These themes are brought together in an emphasis on good design (including 'accessibility for all'), which is:

"...essential to ensure that areas, particularly those where higher density development takes place, offer high environmental quality, including open and green spaces. Landscape considerations are an integral part of the design process and can make a positive contribution to environmental protection and improvement, for example to biodiversity, air quality and the protection of water resources." (ibid, p26)

UDPs are required to set out clear policies supported where necessary by Supplementary Planning Guidance which will include any relevant design expectations and which will inform the preparation of Planning Briefs in respect of individual sites. At this level stakeholder participation and wider consultation is valuable. Audits and appraisals are also recommended as aids to the planning and development control function. All of these tools are relevant to greenspace issues. Audits and appraisals are important in understanding the extent and mix of purpose of the local greenspace resource, while the UDP, SPG and Planning Briefs are vital to the process of protecting and redeveloping sites with appropriate consideration for the provision of community greenspace of relevant types and to a certain standard.

A further point of compatibility between the accessible natural greenspace model and the planning framework for Wales is the aspiration to promote "**access for all**" which is couched mainly in terms of the built environment but which has obvious implications for public open space. In particular, local authorities are encouraged to consult disability access groups throughout the land use planning system, and to make use of access audits where appropriate in specific cases.

Local authorities are required to consider the impacts of UDP proposals by means of sustainability appraisal to review its potential economic, social and environmental (effectively through strategic environmental assessment) effects. Since greenspace is a key part of the urban environment, effects on it ought to be a consideration in any plan appraisal. The accessible natural greenspace model provides a means of assessing the provision of elements of the greenspace resource of a certain quality in a way that could be quite useful in sustainability assessment exercises.

Chapter 5 of *Planning Policy Wales* considers how the planning system can work to conserve and improve natural heritage and the coast. The need to balance conservation and development needs is stated and emphasis is given to opportunities for the integration of conservation and development. One passage has particular resonance for greenspace planning and the employment of standards of provision:

"With careful planning and design, not only can the potential for conflict be minimised, but new opportunities for sustainable development can also be created. For example, new development on previously developed land provides opportunities to restore and enhance the natural heritage through land rehabilitation, landscape management and the creation of new or improved habitats." (ibid, p48)

Accessible natural greenspace provision could therefore be addressed legitimately through planning gain procedures as part of a local system of assessing provision and taking action to address any deficiencies in respect of locally-adopted standards.

The Welsh Assembly Government is committed to the objectives of the UK Biodiversity Action Plan and to the promotion of Habitat and Species Action Plans relevant to Wales, particularly the preparation of Local Biodiversity Action Plans (LBAPs) by local authorities in partnership with other stakeholders.

3.4 Planning guidance: Technical Advice Note (TAN) 16: Sport and Recreation

TAN 16 (National Assembly for Wales 1998) is written with the interests of sport and physical recreation in mind, but does make a nod to the interests of biodiversity conservation in the setting of a primarily recreational purpose. The role of CCW is said to be that it "*advises on planning for outdoor recreation in the countryside and provides technical advice on nature and landscape conservation and planning policies for recreation facilities.*" (para 3). The Sports Council for Wales and the Environment Agency are named as the other key advisory bodies for elements of planning for sport and recreation. TAN16 is quite open to the possibilities of the multifunctional nature of open space:

"Consideration will need to be given in particular areas to the relationship between the recreational use of land and the interests of conservation. In some places, particularly in designated areas, access, sport and recreation uses may need to be managed to protect the natural or historic environment."(para 4.)

This statement is quite consistent with the idea of accessible natural greenspace, whereby access and recreation is promoted in greenspaces that can provide an experience of nature to the visitor.

The guidance explicitly avoids prescribing national standards of recreational provision, but does set out the National Playing Fields Association model as an *'illustrative'* annex. The use of a standard, and the levels which are set, is left entirely to the discretion of local planning authorities, in the context of local circumstances. No other standards models are mentioned.

One further provision recognises the value of undeveloped land which has recreation or amenity value and recommends that this *"should be protected if it can be shown that there is (or would be) a deficiency in accessible public open space in the area."* (para 9). This implies that levels of provision in relation to local communities should be known, which is a need recognised and addressed with the accessible natural greenspace standards model.

3.5 Planning guidance: Technical Advice Note (TAN) 5: Nature Conservation and Planning

This guidance is primarily concerned with procedures governing development activities in relation to sites with officially designated status under the full range of biodiversity protection classifications. However, there are several statements relevant to the accessible natural greenspace model, though there is no specific mention of it in the document.

The importance of good environmental information is emphasised in the preparation of development plans and to this end TAN5 (National Assembly for Wales 1996) recommends that *"... nature conservation issues should be included in surveys of local authority areas."* (para 4). This is a basic need for effective implementation of the accessible natural greenspace standards model.

Perhaps the most significant statement is that *"Local authorities should make reasonable provision for Local Nature Reserves (LNR) and natural green space."* (para 26). The guidance provides no clarification of what is meant by 'reasonable provision' or of what constitutes 'natural greenspace'. The accessible natural greenspace model addresses both of these issues in detail and could therefore be of considerable assistance to local authorities seeking to meet the requirements of this planning guidance.

The accessible natural greenspace standards model is also capable of bringing together many of the elements that contribute to support for biodiversity outside statutorily designated sites. TAN 5 recognises the importance of this:

"Statutory sites and non-statutory sites, together with features which provide wildlife corridors, links or stepping stones from one habitat to another, all contribute to the network necessary to ensure the maintenance of the current range and diversity of our flora, fauna, geological and landform features and the survival of important species. Sensitive landscaping and planting, the creation, maintenance and management of landscape features important to wildlife, and the skilled adaptation of derelict areas can provide extended habitats." (para 28).

The model provides a framework for the assessment, spatial analysis and planning of greenspace that would be very helpful in achieving a better general understanding of the greenspace resource, while addressing the specific objectives of the model itself.

3.6 The management of greenspace within local authorities

Most of the existing public green space, which makes up the urban green space system, is owned and managed by local authorities, which are also the local planning authorities. As with the operation of the statutory planning system, the activities of local government in Wales is substantially directed by central government. The current UK Government is generally pursuing a 'Modernising' Agenda for local government, which may offer significant opportunities for furthering the aims of the Countryside Council for Wales. In addition, local authorities have been pressed to develop Local Agenda 21 strategies and take a lead in forming the partnerships for Biodiversity Action Plans – these may also have an important role to play in the promotion of green spaces at the local authority level.

The UK Government's modernising agenda can be summarised as;

- councils are empowered to lead their communities;
- councils' political decision-making processes are efficient, transparent and accountable;
- there is continuous improvement in the efficiency and quality of the services for which councils are responsible;
- councils actively involve and engage local people in local decisions; and
- councils have the powers they need to ensure that they can promote and improve the well-being of their areas and contribute to sustainable development.

Whilst all these aims could help the promotion of accessible natural greenspace, two statutory requirements which underpin this agenda are particularly important: *Communities First* and *Best Value*.

3.7 Communities first

The Welsh Assembly Government has created a programme called *Communities First* to address "...poverty and the lack of services and facilities in some parts of Wales." (National Assembly for Wales, 2001b, page 3). Among the aims of the initiative in qualifying areas is "*Improving housing and the surrounding environment*", which would seem compatible with initiatives that encompass local greenspace issues.

Communities First embraces a range of cross-cutting themes, to some of which accessible natural greenspace could contribute significantly. These include:

- *"That there is a clean and pleasant physical environment, free from litter and industrial heritage scars;*
- *That there are safe, stimulating play and recreational areas for children and people of all ages;*
- *That healthy lifestyles are promoted as an integrated part of wider action to address the social, environmental and economic factors that affect health."* (Ibid p21-22).

This programme could therefore be an appropriate vehicle for the promotion of the accessible natural greenspace model in those urban areas to which it applies and in conjunction with other regeneration efforts. The model could contribute to improved quality of life by helping to assess the existing local greenspace resource and guide the enhancement of provision in an appropriate way.

3.8 Best value

The achievement of ‘*Best Value*’ (Local Government Act 1999) requires local authorities to make arrangements to secure continuous improvement in the way in which they carry out their functions. They have to review all services in a five year rolling programme and publish annual Performance Plans. The Audit Commission’s Best Value Inspectorate reports on these services, rating each local authority both for their performance and for the likelihood of their being able to improve.

The weakness of this system is that local authorities are left to describe the scope of the service for review. If their role in promoting Accessible Natural Green Space is not offered, it is not inspected. Whilst all services must be reviewed by the local authority over a five year rolling programme, services associated with nature conservation may form only a small part of the specified service. Providing and maintaining green spaces is not a statutory duty of local authorities and some local authorities may place the entire service as a mere subsection of a leisure service review, making it difficult to identify.

However, recent proposals in Wales for the *Wales Programme for Improvement*¹ as an alternative to the *Best Value* approach suggest that peer review and self-inspection regimes can be as effective as external independent inspection, and that service reviews should be prioritised according to risk and performance. Under this model service review would not be automatic and therefore certain services might be excluded from performance scrutiny for long periods of time.

Other plans, again having no direct relationship with the statutory development plans or the planning system, could also be helpful in promoting Accessible Natural Green Space Standards particularly *Local Agenda 21* and the *Biodiversity Action Plan*.

3.9 Local agenda 21

It was a UK Government target that all authorities should have in place Local Agenda 21 Strategies by the year 2000. The possession of a LA 21 is a national Best Value performance indicator – Best Value Performance Indicator Advice to Auditors is as follows:

“Auditors/inspectors need to be made aware that some local authorities will have produced ‘stand-alone’ LA 21 strategies that clearly fit within the definition set out above. However, there are a number of other approaches which could equally meet the requirement for a LA 21 plan. These could be:

- *adopting a LA 21 statement setting out how other adopted plans and strategies meet the defined requirements of the Local Agenda 21 approach set out in “Sustainable Local Communities for the 21st Century” (a “plan of plans”)*
- *the integration of Local Agenda 21 with community planning in a community or well-being strategy, as part of a holistic approach to the well-being and quality of life of the area. Auditors/inspectors would need to satisfy themselves that the elements of the Local Agenda 21 process outlined above were satisfactorily covered”.*

3.10 Biodiversity action plans

The Biodiversity Action Plan process, arising from the UK Biodiversity Action Plan (1995), aims to deliver conservation objectives at the local level through a framework of local BAP partnerships, in which local authorities should be key players. The process has identified

¹ details can be found on the Welsh local Government Association Website:
www.wlga.gov.uk/policy/improvement/indexpage.html

priority species and key habitats at a national and international level and, together with regional and local conservation objectives, these are delivered through local Biodiversity Action Plans (LBAP). Most of the species and habitats identified in the UK BAP are not specifically urban and/or their presence in towns and cities is not of national significance.

However, there are species and habitats of national importance which are found in urban areas and, more importantly, the LBAP process allows the inclusion of local priorities. These may include, for example, cemeteries, railway linesides, parks and private gardens, all of which are crucially part of an urbanised green network, as well as generic actions that refer to planning issues, or accessibility to sites of interest. It is imperative that LBAPs show connections to existing LA21 strategies, Cultural, and Community Strategies, and the likely requirement for local authorities to produce green (or open) space strategies. In this respect the model may have a useful role to play.

3.11 Health promotion policy

The contribution that greenspace can make to human health and well-being has been noted in Chapter 2 of this report. There is increasing recognition of this importance in official public health policy, particularly in conjunction with efforts to promote physical activity. One such initiative is *Walking the Way to Health*², which is run jointly by the British Heart Foundation and the Countryside Agency. In Wales a national health promotion strategy has been developed which identified the promotion of healthier lifestyles as one of its five priorities. The National Assembly for Wales (2001c) has noted in respect to this strategy:

"Harnessing and, where appropriate, enhancing the natural environment for leisure activities helps to promote exercise and physical activity and is an important contribution to reducing the risk of coronary heart disease." (page 9)

By helping to ensure the provision of accessible natural space within walking distance for every urban resident, the accessible natural greenspace standards model would address this aspiration and thus contribute towards achieving the national goal of healthier lifestyles.

3.12 Other agencies

Two other government agencies might have a significant role to play in delivering the agenda for better urban environments. The first, and perhaps most important, is the Welsh Development Agency (WDA), which plays a key role in urban regeneration through development. Working successfully in partnership with WDA enables local authorities to ensure that development is conducted with a view to the best possible environmental outcomes, including new or improved greenspace where possible. The WDA has for some time recognised the biodiversity potential of brownfield land and sought to incorporate ecologically informed design into land reclamation practice (WDA, 1994).

Cadw is the agency that cares for historic monuments in Wales that are in the care of the state. Together with the National Trust it is responsible for significant amounts of greenspace in or close to urban areas in Wales. The appropriate management of this greenspace is important but is subject to a range of constraints associated with its cultural and historic significance. Nevertheless where possible, creative management could contribute to improved support for biodiversity at these sites to provide a more natural experience for the visitor.

² Walking the Way to Health website at <http://www.whi.org.uk/index.asp>

3.13 The influence of Westminster

Although local government in Wales is now very much the province of the Welsh National Assembly Government, the Westminster parliament has overseen recent work that is also likely to be influential. In particular, Westminster has recently become actively engaged in the improvement of urban greenspace. This is mainly driven by the House of Commons Environment Sub-committee *Inquiry into Town and Country Parks* (1999) which drew attention to the decline in the care and quality of town and country parks. Subsequently, the *Urban White Paper* (DETR 2000) acknowledged the need to make towns and cities more attractive places to live in order to assist the Government in meeting its target for 60% of household growth to be contained within existing urban areas. This policy aims to protect the countryside from further suburban development and promote the ideals of sustainable development. Sustainable development is one of several 'cross-cutting issues', such as better health, life-long learning and safer communities, which Government and local authorities are committed to pursuing.

The Urban White Paper (DETR, 2000) is taking forward the agenda of *Towards an Urban Renaissance*, the Report of Lord Rogers' Urban Task Force (1999). The Task Force Report explicitly acknowledged the importance of biodiversity and open space:

"We also need to promote the idea of the ecologically sensitive city in which humans recognise that they cohabit with nature. trees, woodland and other open space are all important in fostering biodiversity, in enhancing human health and well-being, and in reducing noise and pollution. We can use some of our previously developed land to create new areas of urban green space." (page 43)

However, the Urban White Paper did not explore this further. The Urban White Paper did however recognise the need to address the issues of quality and provision of urban greenspace.

As promised in the Urban White Paper, The Department of Transport, Local Government and the Regions has set up an 'Urban Green Spaces Task Force', under the chairmanship of the Parliamentary Under Secretary of State for Housing, Planning and Regeneration, Sally Keeble MP. A final report has been published, *"Green Spaces, Better Places"* (Urban Green Spaces Task Force, 2000), with a range of policy recommendations for Government in April 2002. In the absence of any existing standard 'green spaces typology', the Task Force has proposed categories which include "natural green spaces – urban wildlife, ecology and woodland areas", also "green corridors, including river-banks, canals and waterfronts", and "greening of urban vacant and derelict land".

3.14 Town and country parks inquiry

Considerable attention continues to be paid to the Report of the House of Commons Environment Sub-committee Inquiry into Town and Country Parks (November 1999). In the select committee's final report, *Human Well-being, Natural Landscapes and Wildlife in Urban Areas: a Review* (House of Commons Environment Sub-committee, 1999), concluded that: *"Human beings need to make contact with nature in the course of their daily lives, and no special effort (or journey) ought to be required for obtaining it"*. English Nature's Research Report no. 153, *Accessible natural greenspace in towns and cities: A review of appropriate size and distance criteria* (Harrison et al, 1995), found that to maintain good health by these means required that *"an accessible natural greenspace of two hectares should lie within 280 metres of everyone's home"* (para 38). The Report continues *"The memorandum of the Urban Forum of the UK Man and the Biosphere Committee offered figures of: One 2 ha site within 500m ... and one accessible 500 ha site within 10 km"* and noted that these standards were adopted by English Nature in 1996 with a modification that

“everyone should have access to a natural greenspace in less than 300m in a straight line from home” (para 39).

In addition, the Select Committee’s Report acknowledges the role of the Green Flag Awards³, which cover local authorities in both England and Wales. This scheme is also supported in the Urban White Paper and is attracting an increasing number of entries for an award whose judging criteria includes the conservation and appropriate management of natural features, wildlife and fauna. CCW is the major sponsor for the introduction of the Green Flag Awards into Wales.

3.15 Summary

Planning policy for Wales is set-out with sustainable development to the fore and the environment, including greenspace, firmly in mind. There is no direct reference to the accessible natural greenspace standards model, but there is ample evidence that its aims are complementary to those of the planning policy framework.

This chapter has shown that the Unitary Development Plan is the prime vehicle generally for setting-out statements and policies to promote natural greenspace in towns and cities, though it does this as one among many areas covered. Following the suggestion in TAN16, many of these base their more detailed policies around the National Playing Fields Association standard. The survey of local authorities conducted for this project confirmed this to be the case and found very low usage of the model or of any other system for managing the provision of natural greenspace (see Chapter 4 for further details). However, standards of provision can certainly aid a planning system to properly provide, protect and enhance natural accessible greenspace. Such standards must be relevant to the local context, suggesting that any national standard should be seen as offering guidance rather than specific direction, and that guidance on their interpretation and application is as important as the standards themselves.

The next chapter reviews the practical issues of implementing the model and seeks to suggest means to put it into practice.

³ Green Flag Awards website at <http://www.civictrust.org.uk/gfpa/gfpa.shtml>

4 Implementing the Accessible Natural Greenspace Standards Model

During the course of this work for the Countryside Council for Wales and from other recent research work undertaken in England, a number of issues were identified by local authorities and other stakeholders which were seen as potential problems for the implementation of a model based on accessible natural greenspace principles. These can be divided into technical and institutional categories and are summarised in Table 1, below, before selected items are discussed in more detail:

TECHNICAL BARRIERS	
Problematic definitions of 'natural' and 'accessible'	The definitions given within the original model are difficult to interpret and apply effectively and consistently.
Difficulty of mapping accessibility effectively	The effective mapping of accessibility distance criteria to take account of access points and route constraints is technically demanding, requires highly detailed data and is time consuming.
Lack of qualitative criteria	The model covers size and distance criteria, but not the relative quality of natural greenspace. Access to a site can be constrained by poor quality.
Information deficit	Local authorities do not generally hold the range of data required to implement the model.
Lack of implementation guidance	There is no companion implementation tool to support a local authority in working towards implementation of the model.
Unsuitability in extreme urban landscapes	The model can be said to be unachievable in many dense urban landscapes, and might be considered irrelevant in small urban centres surrounded by accessible countryside.
INSTITUTIONAL BARRIERS	
Lack of awareness of the model	Undoubtedly the single most significant barrier , as without knowledge of the standard a local authority cannot consider the practicalities of implementation.
Resource limitations	As a non-statutory service, greenspace planning and management often loses out in resource allocation. This can affect the ability of forward planners to research and evaluate new tools and systems for policy development, as well as land management and design professionals seeking practical means to improve services.
The influence of the local plan review cycle	The cycle of local plan review can mean, in practice, that there is a relatively short and infrequent time window for the evaluation and incorporation of new tools into policy proposals.
Lack of incentives	The lack of any official policy status for the model has the practical consequence that it is easy to overlook in favour of other priorities, particularly as no additional resources are linked to its implementation.
Fragmented management structure	The responsibility for greenspace is often divided among a number of service departments. This can hinder co-operation and cause wasteful competition for resources and a fragmented, uncoordinated information resource.
Additionality with other standards	The size criteria for sites under the model can be seen as potentially additional to similar requirements for amenity open space. This can be seen as increasing the burden on developers and planners unreasonably.

Table 1 Barriers to Implementation of the accessible natural greenspace model.

4.1 Awareness of the accessible natural greenspace standards model

As the model has never been formally promoted in Wales, it is perhaps not surprising that there was no awareness of it among those consulted. In England, where the standard has been recommended by English Nature since 1996, less than half of those consulted were aware of the model and only a quarter felt that they knew enough to offer an informed opinion on its provisions.

Raising awareness of the accessible natural greenspace model among those it is intended to help is an essential first step to promoting its use. However, the English experience has revealed the difficulty of achieving this and indicates the need for a well-planned and effectively resourced outreach programme to ensure a raised profile for the model.

4.2 Clear and operational definitions of natural greenspace

The definition of natural greenspace originally associated with the accessible natural greenspace model, i.e. as areas *naturally colonised by plants and animals* (Harrison *et al*, 1995), is generally not thought by those consulted to be clear and practical. In theory, the definition would exclude all man-made types of vegetation. However, these predominate in urban landscapes and can have high biodiversity value. Moreover, the definition would discourage the further active creation of habitats. Taking the definition strictly would require complete knowledge of the site history in order to decide whether a site has been naturally colonised or is the result of planting and extensive management. Since most visitors to a site probably could not tell the difference and would not find the distinction significant, the end result can be considered more important than how it came to be.

Alternatively, natural greenspace could be identified as places where human control and activities are not intensive so that natural processes are allowed to predominate. This would be a more inclusive definition of naturalness as, for instance, plantations which are not managed, would be considered as natural. However, at which point do natural processes predominate? This is difficult to determine and it can be argued that there is considerable room for interpretation. However an informed subjective judgement on this basis is sufficient for the purposes of the model and simple guidance along these lines should be included in implementation guidance, with illustrations of how it can be applied in practice.

The Greater London Authority has based the survey of natural greenspace on a manual for a Phase I habitat survey adapted to the London situation. This approach identifies the habitat types of nature conservation interest and eventually evaluates sites to a range of criteria which include those of social benefit. While this approach does not solve the theoretical question, it offers a pragmatic solution to the challenge of defining natural greenspace, though in a manner requiring significant expertise and resources. Urban habitat surveys have been undertaken in many cities and towns in Europe, and thus are a well established method. The advantage of this approach is that it provides clear criteria for the delineation of natural greenspace based on habitat characteristics which can be readily observed from aerial photographs and in field surveys.

The definition of natural green space should also be compatible with established designations. It was suggested in the expert interviews that the accessible natural greenspace standards fit in with the national guidance on 'Sites of Importance for Nature Conservation' (SINC) currently prepared by English Nature for DEFRA. However, there is some controversy amongst urban wildlife professionals over the draft DEFRA local sites systems guidance and the National Assembly for Wales will take its own view on this issue before publishing guidance in Wales.

4.3 Rules on how to determine and measure access and distances

The definition of access was mostly seen as more straightforward. However, those who had worked with the model acknowledged the difficulties of identification and measurement. Simply drawing an equal distance line around natural green spaces was judged as inadequate as this would not take into account the location of the access points, nor where the routes to the green space were and if there were barriers such as major roads or routes seen as unsafe. Analysis of these factors is possible using GIS technology. However physical factors are only one element in determining site usage, and ideally access considerations should also reflect on socio-demographic features such as gender, age, culture, and ethnic origin. Ease of access was considered as a major issue to improve the use of green space, but awareness of access rights might also be a potential barrier.

4.4 More flexibility as regards size criteria and the hierarchy

The model proposes accessible natural green spaces of increasingly large size at the higher levels of the hierarchy. The size thresholds were considered as somewhat arbitrary but it was acknowledged that this would always be the case. More importantly, there was concern that small natural greenspaces might be ignored by the model. In particular, in densely built-up areas, every natural site of natural green space can be important; small areas of rough grasslands and pioneer vegetation can support a diverse flora and fauna and help to break-up the hard infrastructure. The availability of the habitat is more important for these communities than a minimum size. Furthermore, in densely built-up areas, it would be often hard to create natural greenspaces of 2ha in size.

It was also stated that standards should reflect regional and local differences. This suggests that the application of standards should not simply be a top down approach. For instance, the higher levels of the natural green space hierarchy may be not applicable in small towns with good quality countryside on their doorstep. A widespread view among those consulted was that the application of standards was useful if the model used presented only aspirational comparative targets and left scope for local flexibility to set policy according to local circumstances.

4.5 Comprehensive information on the provision and quality of green space

There is still a significant information deficit on greenspace. This was considered as a major impediment to the implementation of the model, and beyond, to the adoption of any forward looking green space strategy and management. For instance, the report of the Green Space Investigative Committee for London states that:

'There is no up-to-date and authoritative record of London's green space. This is a shocking deficiency for a city which aims to be a beacon in urban planning and design.' (GLA 2001b, p. 14).

This situation can be seen in many locations across England and Wales, though there are variations so the pattern and level of information deficiency is not consistent.

Local authorities often hold only incomplete information on public green space whereas information on other green spaces such as those in private and institutional ownership, is completely missing or not available. This being the case, there is an inadequate basis for the rational planning and management of the urban green space resource. Among the areas of data inadequacy are:

- Quantitative provision of greenspace by categories;

- Quality/condition of greenspace;
- Functions and services of greenspace: biodiversity, environmental services, recreational use, landscape character etc;
- Access to greenspace;
- Ownership of greenspace;
- Land use planning status of greenspace sites; and
- Available resources to support policy and management planning.

The National Biodiversity Network and local Biological Record Centres are active in this respect, and their work could provide a useful resource for local authorities. The local Biological Record Centres are intended to be the local nodes of the National Biodiversity Network, managed by local stakeholder partnerships and acting as "*a local access point for information on local species, habitats and sites*". The National Federation for Biological Recording⁴ currently lists 39 active local BRCs in England and Wales, structured usually at a county or conurbation level.

4.6 Geographic information systems

Geographic Information Systems are an important tool for applications such as implementing the accessible natural greenspace model. These systems can not only identify discrete greenspaces and calculate their size, but can also assign attributes to them and display catchment distances taking into account route options and barriers. It is therefore possible to bring effective electronic tools to bear on the implementation of the accessible natural greenspace standards model.

Most local authorities already use GIS for planning purposes and the number is continuing to grow. A survey of a sample of English Local authorities suggested that 87% either had or were in the process of installing GIS systems, and consultation in Wales suggests a very similar figure.

The Countryside Council for Wales has worked to provide local authorities with a GIS tool to help them to better understand the landscape for which they are responsible. The *LANDMAP Information System* (CCW and the Wales Landscape Partnership Group, 2001) provides a means to record and make available information about landscape qualities in order to contribute to more sustainable landscape planning. CCW has worked with local authorities to assist them to implement the method, which records layered information about the landscape on three levels: contextual information (form and function); evaluated aspects (earth science, biodiversity visual and sensory, history and archaeology; culture); and associated information such as public perception.

Unfortunately *LANDMAP* was designed primarily for use with rural landscapes and, in its current form, might not be sensitive enough at the fine scales required for urban greenspace. However there may be potential for linkage to *LANDMAP* in the implementation of the accessible natural greenspace standards model, and this could usefully be explored further.

4.7 Planning and implementation

There is a need to clearly relate the model to policies and plans, as the model's perceived lack of any formal standing may be a major factor in its low rate of usage. The use of planning gain, in particular in areas with a high development pressure, and section 106 agreements as

⁴ National Federation for Biological Recording website at www.nfbr.org.uk

mechanisms to create and manage green space are mentioned as mechanisms with the potential to help local authorities improve the provision and management of natural greenspace. Moreover, there is potential to include the model in some form within supplementary planning guidance and development briefs. There is also scope for the use of the planning system in innovative ways to support wider greenspace planning aims, for instance to connect together and improve small or relatively poor quality greenspaces, and in the promotion of new concepts such as green roofs and walls in areas where other options are not feasible.

It might also be possible to include the model as a best practice indicator to benchmark Local Authorities in the Best Value review.

4.8 Funding and better management of existing green space

Pressure on resources is perceived as a major threat to greenspace services and natural areas requiring specialist management are particularly vulnerable. Section 106 agreements can be particularly important to generate funds for the management of green space through the planning system, but consultees considered it problematic that sums commuted for open space often last only for short periods of time and may not be used for other purposes. The role of Section 106 agreements is open to review under the Westminster Government's Green Paper on the planning system (DLTR 2001), which may have implications for Wales in due course, and it is considered likely that the end result of this could be a more flexible mechanism, which would have increased potential as a tool to support the model.

4.9 Lack of qualitative criteria

The accessible natural greenspace standards model is primarily intended to measure quantity and spatial distribution, but criteria for the consideration of the quality of a greenspace is missing. This was viewed with some concern by consultees, as the model accords no apparent advantage to sites that enjoy high levels of investment and sensitive management over those that do not.

In fact, though the model is not intended to measure quality, it is implicit within the principles of the model. Sites that are of very poor quality are unlikely to qualify as accessible and natural either because the site lacks natural attributes or because footpaths are so poor as to render it inaccessible. At the other extreme, sites of increasing quality can be recognised as such through designation (e.g. SINC, LNR, SSSI) at various levels of significance. Thus the model recognises the issue of quality and applies a minimum threshold, but does not attempt to replicate other existing mechanisms for its recognition.

4.10 Local plan cycle

Local government in Wales is in transition following the re-organisation of 1996. This has the advantage that there is a uniform structure of unitary authorities under the Welsh National Assembly. This is unlike England, where a mixed system of county councils, district authorities and unitary authorities operates, with further complication in London (where there is now a Greater London Assembly and elected Mayor) and the English regions (for which devolution proposals are mooted that would change or eliminate the role played by county councils).

However, the current situation in Wales is that the new unitary authorities are still working to produce their first unitary development plans, and have to contend with a disparate range of plans, inherited from predecessor authorities, while they do so. This is a significant task and there is a concern that there will be a limited capacity for the authorities to evaluate and adopt new policy ideas, such as the accessible natural greenspace model, as the new plans are

developed. In addition to this, the lifespan of the new unitary development plans will be up to 15 years before a full review is conducted (though partial reviews will take place every 3-5 years). This implies that the 'windows of opportunity' to encourage local authorities to incorporate the model into unitary development plans may be infrequent and that a continuing campaign to develop a high profile for it is a necessity of any significant take-up is to be achieved.

The current situation presents a powerful case for prompt action to ensure that the accessible natural greenspace standards model is put before local authorities. The current round of comprehensive Unitary Development Plan drafting is in its latter stages and opportunities to input to a similar process in the future may not occur for ten to fifteen years.

4.11 Extreme urban landscapes

A key issue for consultees was the apparent rigidity of the standards set out by the model when set against the real-world circumstances of urban areas at the two ends of the spectrum. Thus in large, densely built-up city centres levels of provision are quite likely to be well below the standard, while opportunities for rapid improvement of the position may be severely limited. On the other hand, small market-towns in rural landscapes might have open countryside within a short distance of the town centre. In these cases the standards could therefore seem unrealistic or irrelevant, which would be a significant disincentive to the use of the model.

This problem can be addressed by encouraging local authorities to adapt the stated standards to suit their own local circumstances. In this way the model's standards can be used as an aspirational yardstick from which can be drawn realistic progress targets given prevailing local circumstances. Thus in a large, dense urban area the policy might be to meet the standard in the long-term, but over the period of the current development plan a certain improvement objective could be set. Alternatively, in the rural market town, the policy could be to implement only the most local level of the standard, thus ensuring that residents can access a relevant greenspace with 300m, while taking the view that the surrounding countryside can be assumed to provide needs on the larger scale. In the case of rural market towns there seems to be clear scope to link the accessible natural greenspace model to existing or proposed countryside access initiatives or to non site-based ranger services so as to ensure that apparently accessible countryside is accessible in reality.

Encouraging the model to be used in a flexible way might make it more appealing as a tool for local authorities. As long as decision-making is transparent and the rationale behind policy is explained, it will be apparent whether the 'spirit' of the model (i.e. striving for continual improvement of provision to meet the needs of the community) is being adequately honoured.

4.12 Summary

We have recognised that there are many valid practical and conceptual obstacles to the successful use of the model in real-world urban greenspace planning. Some of these obstacles, such as institutional organisation and resource limitations, are part of the context within which the standard must function. Others, though can be overcome by technical or procedural means. Ignorance of the model, in particular, requires a significant programme of outreach and education for practitioners, and current stage of the UDP cycle suggests that this should take place as soon as possible.

Unfortunately, while we can anticipate obstacles and plan means to overcome them or work within the constraints they set, the realities of implementing the model can only be fully revealed through experience in each urban area. Initial implementation efforts are likely to be

imperfect, but this experience will be invaluable in developing an effective implementation strategy for future repetitions of the process. Implementation guidance and pilot projects are excellent means to support and develop implementation experience, and should be considered as means for taking the model forward.

5 Moving Forward

5.1 Conclusions

This report set out to examine the applicability of the accessible natural greenspace standards model in Wales, based upon recent work to review the latest scientific literature, a survey on the use of the model in England, an examination of the Welsh policy context and consultation with a small number of key stakeholders in the principality. Through this process it has been possible to identify a range of issues, positive and negative, affecting the potential usefulness of the approach in Wales. The accessible natural greenspace standards model serves to bring these issues sharply into focus.

We conclude that the accessible natural greenspace model can play an important role in sustainable planning for urban areas in Wales. Here, as elsewhere, evidence is growing for the value of urban greenspace in social, environmental and economic contexts. The principles behind the accessible natural greenspace model are supported, certainly at the most local level, by studies suggesting the need of urban dwellers to have ready access to an experience of nature. However the application of standards can be made more effective if implementation is holistic, considering accessible natural greenspace as part of a multifunctional resource alongside playing fields and other types of open space. This can be achieved through the development of comprehensive greenspace strategies, which would bring together different interest groups and sources of information to support rational, informed decision-making to achieve balanced policy on the provision, protection and management of the total greenspace resource, within financial constraints, to best address the needs of the community and the need to support biodiversity.

Standards are attractive to practitioners because they can provide a relatively simple means of measuring and communicating performance. In an area of service provision such as greenspace, that is non-statutory and can be considered to have suffered perennial neglect in favour of other priorities, standards can focus the attention of public and policy-makers effectively, and are perceived as having the potential to drive policy development and attract resources. However, in order to achieve this, the standards need to enjoy a degree of formal standing (e.g. through a reference in planning guidance) to provide the credibility that might encourage local authority take-up.

There is, however, a growing dissatisfaction with the idea of uniform quantitative standards that are equally applicable in every urban area. The most obvious and widely-used example of such a standard is the NPFA '*Six Acre Standard*' for sports field and children's play provision, which is widely used by local authorities. Such standards are most effectively applied when simple spatial variables, such as size, location and access distance are the main criteria. However this approach tends to ignore issues of quality and the standards can become ends in themselves, whereas ideally they should exist to serve broader community planning objectives.

Perhaps the biggest problem with such an approach, though, is that the same quantitative standards are put forward to form the basis of action for all urban areas, which can be very diverse in existing built form, community need and other factors affecting the scope for effective action, such as the existence of conservation areas and the relative pressure for development. There has also been a move towards the promotion of sustainable development in local government, with increased public consultation and measures, such as Best Value, to drive service improvement through qualitative, rather than quantitative, means.

It is unsurprising to find a widespread lack of awareness in Wales concerning the accessible natural greenspace model, as no previous attempts to promote it had been undertaken.

However the planning policy framework in Wales is a structure into which the accessible natural greenspace model might fit quite well. There is a strong commitment to sustainable development, recognition of the importance of quality of the environment (including greenspace) to quality of life, and acceptance that local standards might play an important role in achieving improvement. The model could help local authorities address this agenda by providing a better spatial understanding of the overall greenspace resource and its component parts, and by contributing to informed decision-making. The existence of the standard generates an information need which can benefit the whole planning process.

Wales has relatively few large urban centres (four of more than 50,000 population) and most local authorities cover an urban/rural mix. Indeed, while the model can be applied in full in the larger centres, which should be the priority areas for its use, the relatively small size and proximity to the open countryside of many urban areas in Wales might make the accessible natural greenspace standards model seem to lack relevance. However, though the model might be redundant at the larger scales of its provisions, it's most local level remains important in any urban zone. Local residents should be able to reach a site of accessible natural greenspace within five minutes walk of their homes, and it cannot be assumed that the countryside surrounding a settlement can meet this need. In many parts of Wales the close proximity of post-industrial landscapes to housing areas, especially in the linear settlements of the Welsh valleys, makes the application of the model particularly appropriate.

Many local authorities in Wales include a high proportion of countryside of scenic and/or natural value, cover significant numbers of protected cultural and historic sites and have economies to which tourism makes a substantial contribution. That being the case, it is not surprising to find that urban greenspace might be just one of a number of competing priorities within a local authority greenspace service. However, accessible natural greenspace standards can play a part in developing the appropriate use of existing greenspace to the benefit of both residents and visitors. While this might be achieved in part through the development of new sites acquired through the planning system, improvements in provision are equally likely to be achieved through greater attention to the quality and character of existing greenspace and by improving access to them.

5.2 Recommendations

The recommendations made in this report deal with the

- 1) For the promotion of the model, CCW should:
 - a) actively advocate the accessible natural greenspace standards model as tool that can help local authorities plan more effectively for balanced provision of greenspace. The model should be promoted as:
 - (i) a flexible and inclusive means of recognising the value of nature to local communities;
 - (ii) a tool that provides point-of-reference standards for provision of accessible natural greenspace which can be rationally tailored to local needs; and
 - (iii) adaptable to different urban circumstances, providing options for implementation to suit both large and small urban centres. However, the priority should be given to larger urban centres initially.
 - b) the Countryside Council for Wales should work for the model to gain formal standing, perhaps by adopting it as CCW policy and/or by recommending the inclusion of a reference to it within the official planning framework for Wales.

- c) the Countryside Council for Wales should engage with key stakeholders to raise the profile of the model with; policy-makers within the Welsh Assembly Government, WDA, local authorities, landscape professionals and local conservation groups such as the Wildlife Trusts. It could do so by producing printed information, by including the model within the CCW web-site, promoting pilot implementation projects, and/or by holding practitioner workshops around Wales. This should be done with the opportunity to influence the ongoing round of UDP preparation firmly in mind.
- 2) To address the technical and methodological barriers to the implementation of the model:
- a) Facilitate the production of implementation guidance to address some of the technical and methodological barriers that have been identified as impeding the successful application of the model, including
 - (i) a practical and operational means of defining ‘natural’ greenspace;
 - (ii) a framework for assessing accessibility;
 - (iii) a procedure for the spatial analysis of greenspace provision based on GIS technology;
 - (iv) suggestions for practical ways to address identified deficiencies in provision through policy mechanisms, the development control process and by management means.
 - b) Recommend a simple process approach, or 'staged pathway' to implementation (Fig. 5.1). Such an approach would set out a step-by-step method of greenspace analysis, defining the information needed at each stage and applying criteria-based filters to refine the analysis. Such an approach might be represented as follows:

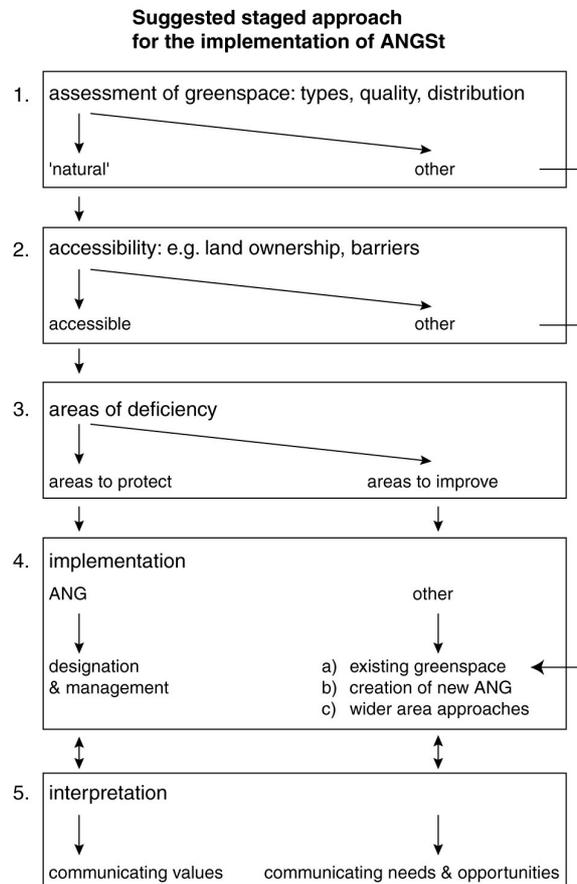


Fig. 5.1 Outline of a staged approach for the implementation of accessible natural greenspace standards

- c) Such an approach would not only address the specific needs of an analysis of accessible natural greenspace provision, but would also provide much other useful greenspace information. However, to conduct the process properly requires data and, to be useful, this must be kept current. CCW should therefore use its influence to encourage the regular practice of open space audits and other surveys, such as Phase 1 Habitat Surveys, by local authorities in Wales. Local authorities in Wales already seem generally to work well in partnership with outside bodies on nature conservation issues, including on data collation, and CCW should encourage these links. Opportunities to link this to the developing LANDMAP system should be explored.
- 3) The comprehensive Greenspace Strategy should be adopted as the primary vehicle for local authority greenspace planning and management. This would include accessible natural greenspace, but would also cover all other greenspace issues in a holistic way. Thus each area of greenspace policy could be brought together, a balanced approach derived and communicated effectively to the public. Accessible natural greenspace is an important component of the urban greenspace resource, but the adoption of standards for its provision should not imply that it can be managed in isolation, as to do so may be detrimental to other forms of greenspace that are also important to the community and might lead to lost opportunities for the synergistic, multifunctional, management of the urban greenspace stock.

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