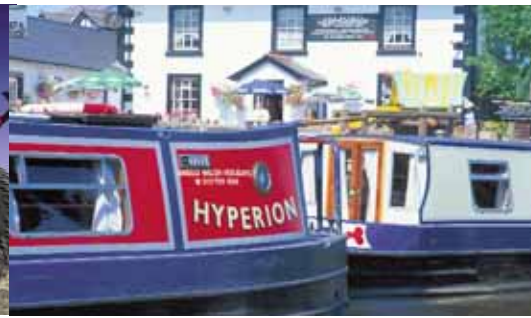




This issue ...'Green Infrastructure'

- Green Infrastructure - A Concept that's Finally Come of Age? • A Living Wales: Green Infrastructure and Ecosystem Services • A Green Network to Change the Face of Central Scotland •
- Grey to Green: How We Shift Funding and Skills to Green our Cities • Green Infrastructure: Development in Ireland • The Importance of Children's Play on Green Infrastructure •
- Commons for Communities • How can We Improve the Access Network to Secure Sustainable, Active and Healthy Communities? • Agency Profile: National Parks & Wildlife Service •
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- gives easy access to information on countryside and related recreation matters
- reaches organisations and individuals in the public, private and voluntary sectors
- networks thousands of interested people

The Network helps the work of agencies and individuals in three areas:

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to encourage co-operation between members in identifying and promoting the need for research related to countryside recreation, to encourage joint ventures in undertaking research, and to disseminate information about members' recreation programmes.

Liaison:

to promote information exchange relating to countryside recreation, and to foster general debate about relevant trends and issues.

Good Practice:

to share information to develop best practice through training and professional development in provision for and management of countryside recreation.

Chair: Geoff Hughes

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Editorial

Wendy Thompson, Principal specialist for accessible greenspace, Natural England

As this edition of the journal goes to press, change to the public sector is in progress and announcements have just been made about Government funding and delivery which will undoubtedly impact on the way countryside recreation is managed across the UK and Ireland. It is a time when questions are being asked about future priorities and ways to deliver services to people with a focus on local. It is therefore particularly interesting to see how working with local communities is developed in each of the contributions that follow in this journal on the topic Green Infrastructure.

The first article by Andy Gale suggests the term Green Infrastructure has come of age and that it is Big Society friendly. He also points out that the environmental sector already knows how to deliver green infrastructure and as readers of Countryside Recreation many of you will recognise this from your experiences in countryside and greenspace management.

The theme is developed further by Russell Elliott and Pete Frost who present more directly the links between Green Infrastructure and Ecosystem Services. They demonstrate how the Countryside Council for Wales recognised the importance of accessible green infrastructure for health and human well-being and how it has supported local authorities in a practical way with funding and advice through a Green Space Toolkit. In Ireland good progress has been made in preparing a national Green Infrastructure policy. Dr Mary Tubridy explains the work that went into preparing this and the expectations for the future. In Scotland too there is a big push to improve Green Infrastructure and Rob Garner reports on the vision and goals set by the Central Scotland Green Network. He notes that it is the only green project amongst 14 national priorities which leads nicely to Helen Beck's article which argues for a shift between resources for grey infrastructure to resources for green infrastructure.

Accessible green infrastructure is important to maximise the benefits to people and the final three contributions focus on different types of accessible space. Neil Coleman argues that playing outside is a right that children today should be entitled to and that there should be a variety of green places where children feel welcome within easy reach. Kate Ashbrook highlights the importance of commons as part of our green infrastructure and presents examples of good practice where the involvement of the community is vital. Similarly Victoria Lloyd argues that the process for gathering

information and community engagement is crucial to the success of any access project and shows how the Durham Growth Point Access Prioritisation Project worked at the local level to identify priorities for improving the access network. Finally the Case Study in this edition of the journal is about blue infrastructure and informs readers about how the Environment Agency has improved access to water on the Medway Canoe Trail.

Many years of practice have demonstrated that little is achieved unless the community is involved and, to maximise the full benefits that green (and blue) infrastructure can provide, places need to be welcoming for people to enjoy. Not everyone is fortunate to have that sort of green space within easy reach but when they do the benefits are vast.

In this time of change it seems to be all the more important to keep sharing evidence and good practice and to ensure that there is join-up across sectors such as environment, recreation, health, transport, education, culture, sport, play and tourism - a role that the CRN has supported for over 40 years. With the changes taking place in the bodies that support CRN we are currently reviewing the network to ensure its sustainability. For the short term the CRN members are aiming to continue to encourage joint research between member agencies and to prepare at least one journal and one seminar per year. If resources allow we'll do more. As always your thoughts and ideas on this and on any of the articles presented in this journal are welcome and as future plans are confirmed we will let you know more through the email network and the CRN website.

Wendy Thompson is Principal Specialist for accessible greenspace in Natural England, and Communications Lead for the Countryside Recreation Network

Green Infrastructure - A Concept that's Finally Come of Age?

Andrew Gale, Natural England



A pond, part of a sustainable urban drainage scheme in Upton, Northamptonshire

For the best part of a decade the concept of green infrastructure has been steadily encroaching on the consciousness of UK policy makers, planners and developers. Realisation has dawned that housing development, especially on the scale calculated to meet current needs, simply can't be countenanced unless it properly accommodates the natural environment. We also need to create much greener places that foster individual and community pride, health and wellbeing, rather than more soulless beige and grey estates.

A mere one hundred years after Ebenezer Howard called for 'the countryside to invade the town' we may have an opportunity to make a Twenty First Century version of the Garden Cities vision a living reality for all. But perhaps I'm getting a bit carried away! Perhaps it would be useful to take stock and get a proper grasp of where we've arrived and where our green infrastructure journey may actually be taking us, especially as we enter an era of major policy shifts, public sector cuts and wider ongoing economic uncertainty.

Recognition that green space is actually good for people has been around ever since 'respectable' Victorians fretted about the social consequences of industrialisation and

urbanisation. Their response was to create the first municipal parks and to seek other green spaces as 'public walks and places of exercise, calculated to promote the health and comfort of the inhabitants and...benefit the working classes by distracting them from their drinking, gambling and other low and debasing pleasures'¹. The need for green spaces to promote altogether healthier lifestyles hasn't changed even if the language used to describe a set of social ills has become less entertainingly colourful!

That longstanding justification for accessible green space is however, now joined by a host of other very good reasons for incorporating green infrastructure networks into the fabric of our towns and cities. It delivers a wide range of other benefits or 'ecosystem services', environmental, social and economic.

This doesn't mean that everyone concerned with housing supply is 'on message', far from it. Poor quality developments are still being built. Green infrastructure is still too often taken to mean tightly mown grass and a few lollipop trees or some thorny shrubs planted along the road side guaranteed to snag every passing windblown crisp packet. But there is now an acceptance amongst leading professionals in the planning and development sector that good development has to go hand-in-hand with plenty of high quality, locally accessible and varied green spaces. This means that local authorities and their communities should be better placed than ever to demand good green infrastructure as a core component of any new development. Whilst decrying the bad let's not forget all the examples of really good green infrastructure such as the wildflower

meadows in the middle of Milton Keynes, the swales and ponds forming the Sustainable Urban Drainage System in Upton, the award winning Nene Valley Regional Park, river restoration in Lewisham and countless other developments, schemes and projects, large and small and far too numerous to list (so apologies if I've not mentioned yours!). A point I'm often making to audiences is that we already have the experience, skills, tools and techniques needed to deliver green infrastructure. That experience and those skills have been honed over many decades through numerous schemes to integrate nature conservation and green space provision within wider social and planning strategies and plans. They are currently vested in local authorities, Countryside Management teams, country parks, community forests etc, waiting to be unleashed on the rest of the country in response to local needs. Because we already know how to 'do' green infrastructure we don't have to spend lots of money developing new tools. Instead we can move directly to delivery, applying what we already know to a contemporary social and environmental agenda. A visit to the annual Ecobuild Conference at Earls Court reveals that the private sector has also made a substantial investment in associated technologies for green roofs, green walls and other contributions designed to help individual buildings function more sustainably and in harmony with their wider environmental setting.

So great things are being achieved. What we have yet to achieve however, is complete recognition that green infrastructure is also 'critical infrastructure' – on a par with systems to supply and manage power, water and transport. National policy has however been creeping in the right direction by endorsing green infrastructure in a number of ways. All of the Growth Areas have to produce green infrastructure strategies. The Ecotowns programme established a 40% minimum green infrastructure standard for cutting edge sustainable communities. Perhaps most crucially Planning Policy Statement 12 requires Local Development Framework Core Strategies to include an assessment of infrastructure requirements, including green infrastructure.

The result is that single and multi-local authority green infrastructure strategies and frameworks are emerging right across the country to provide a new context for individual development decisions and to inform spatial planning for sustainable development.

All change?

The Coalition Government has a new take on spatial planning. Ministers look set to replace Planning Policy Statements with a single and probably less prescriptive National Planning Framework, which will leave detailed policy decisions to local planning authorities. Top down housing targets are out along with Regional Spatial Strategies (which did contain some very useful green infrastructure policies). In comes a bottom up approach under the twin banners of 'Localism' and 'Big Society'.

The way in which Green Infrastructure is designed and applied already chimes with this approach to planning.

Green infrastructure strategies can only be pulled together by local authorities in partnership with local voluntary and private sector bodies. It's only local authorities, organisations and communities that can identify environmental pinch points and exactly where and how a uniquely local set of environmental and other priorities can best be served by green infrastructure. So the whole process is naturally steeped in Localism.

Green infrastructure is also very 'Big Society friendly'. There's a clear track record of community groups participating or leading green space projects. Examples include the Millennium and Doorstep Greens schemes, which although they benefited from some government and Lottery funding were about local groups assuming leadership and ownership of both delivery and long term site management. Many other community based projects to improve the local natural environment abound and such schemes offer opportunities for everyone to contribute, regardless of their experience and skills. Community led projects to improve the natural environment can quickly make a dramatic difference to the character and feel of a place. This can help to generate civic pride, confidence and a readiness to tackle more ambitious projects.



A wildflower meadow, part of a sustainable urban drainage scheme, Upton, Northamptonshire

Revenue funding – that perennial problem

Of course the issue of funding can quickly dampen optimism about the prospects for green infrastructure. Green Infrastructure, and green space provision generally, faces a major and perennial problem i.e. the absence of secure long term revenue funding streams for management. Without even the protection offered by a statutory duty on local authorities to manage their green spaces, any funding is immediately put at risk by a squeeze on local authority budgets. So as we enter a period of funding austerity we have to marshal ever more persuasive arguments about why green infrastructure is not just desirable but essential and cost effective. Meanwhile, and accepting that no approach is entirely recession proof, we can take inspiration from management models designed to distance green space management from a total reliance on local authority funding. A notable example is of course the Milton Keynes Green Space Trust. Such approaches are not appropriate everywhere but it is good to know that alternative models have been tested and show to be both practical and effective.

Adapting places to cope with climate change

The central role of green infrastructure in climate change adaptation could be something of a trump card in securing some funding. The floods of 2007 and 2009, widely viewed

as a symptom of climatic instability, are still relatively fresh in the nation's collective memory. They have also lumbered councils, communities and insurance companies with a multi-billion pound clean-up bill. Green infrastructure must be at the heart of any sensible adaptation strategy. There is nothing like vast unbroken swathes of concrete and tarmac for exacerbating urban flooding and there's nothing quite like extensive green spaces for soaking up and removing unwanted water. Until recently planners and developers could avoid using green infrastructure based Sustainable Urban Drainage Schemes (SUDS) because it wasn't clear who would or could manage them. The Flood and Water Management Act 2010 helps to put pay to that excuse because it removes the automatic right for new developments to be connected to already overloaded sewers and, crucially, enables local authorities to adopt SUDS. Similarly, a generous network of green spaces can provide a useful and natural air conditioning system to moderate urban air temperatures and counter the dreaded 'urban heat island' effect. Unlike energy hungry artificial air conditioning systems they don't add CO₂ to the atmosphere. Good green infrastructure however, isn't just sitting idle waiting for the next extreme weather event. In the meantime it's a place for nature to thrive, somewhere for people to exercise and play and a means of taking the benefits of the natural environment into every neighbourhood. In other words it's a truly multifunctional resource. In these fiscally challenging times we must make it clear that if you invest in green infrastructure your returns, environmental, social and economic are going to be many and varied.

Adapting old places as opposed to creating new ones

Establishing a green infrastructure network within an already built up area poses many additional challenges and calls for a more flexible and creative approach. This is where realising the full multifunctional potential of existing green spaces becomes particularly important, where the contribution of private gardens (constituting a huge percentage of our suburbs) need to be factored into the equation, and where green roofs and walls can really come into their own. The relationship between the urban fringe and the established built environment is also important with urban fringe country parks and community forests directly supporting urban sustainability and quality of life.

A Natural Environment White Paper to endorse GI?

Spring 2011 will see the publication of a Natural Environment White Paper. A discussion document seeking views on what the White Paper should include is positive about green infrastructure. It emphasises the importance of the 'Ecosystems Approach' for delivering a host of essential ecosystem services, and recognises that a healthy natural environment provides invaluable social and economic benefits for free. It also specifically refers to green infrastructure in recognising that: '...we know not only that parks, green spaces and waterways are valuable to the health and wellbeing of individuals and communities but

also that, properly managed, they form a network of "green infrastructure" that can help us manage surface water flooding, filter pollution and cool the city air by between 6 and 12°C – something that will become increasingly vital in a changing climate'.

Other encouragement from the Coalition

Meanwhile the government continues to encourage neighbouring local authorities to collaborate on green infrastructure and other cross-boundary natural environment issues. In July this year DCLG's Chief Planner wrote to Chief Planning Officers about the revocation of Regional Strategies. In that letter he advised that: 'Local authorities should continue to work together, and with communities, on conservation, restoration and enhancement of the natural environment – including biodiversity, geo-diversity and landscape interests...(and) continue...to address cross boundary issues such as the provision of green infrastructure and wildlife corridors'.

Conclusion

So in summary where are we? Whilst there is certainly no room for complacency green infrastructure is now a well established concept within spatial planning and certainly within the lexicon of planning, development and land management. So in these terms at least, and to return to the title of this article, the concept has indeed 'come of age'. The vital importance of green infrastructure is recognised across the political spectrum even if there may be differences in emphasis about how it should be represented within policy and to some extent how it can best be delivered. The importance of green infrastructure isn't going to diminish. Even if the housing building sector is temporarily subdued the latent demand for millions of new and affordable homes isn't going away and nor is the need to design and adapt places to cope with climate change. Funding, both capital and especially revenue, is going to remain a problem. Green infrastructure will need to compete ever more fiercely with other demands on reduced local authority budgets and seek new and novel financing measures. We do need to assemble more robust and quantitative evidence for the benefits of green infrastructure, especially its economic benefits. That's something that Natural England is keen to work with others to achieve. So if you know of any studies that help to do this or case studies which clearly illustrate those economic benefits please do let us know. In the meantime however, green infrastructure practitioners already have a good story to tell and a really good product to sell.

References

1- *The Parliamentary Select Committee for Public Walks, (1883)*

Photographic References

All photographs credited to Andrew Gale.

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A Living Wales: Green Infrastructure and Ecosystem Services

Russell Elliott and Peter Frost, Countryside Council for Wales



In a country like Wales with three National Parks and five Areas of Outstanding Natural Beauty to serve just under three million inhabitants, urban green infrastructure may at first sight appear to be a non-issue.

However, some 80% of our population live in towns and cities and the legacies of our industrial past means that the natural environment and the ecosystem services it provides us are crucial to our well-being.

The range of ecosystem services which support our health and well-being include:

- Resources for basic survival, such as clean air and water;
- A contribution to good physical and mental health, for example through access to green spaces, both urban and rural, and genetic resources for medicines;
- Protection from hazards, through the regulation of our climate and water cycle;
- Support for a strong and healthy economy, through raw materials for industry and agriculture, or through tourism and recreation;
- Social, cultural and educational benefits, and wellbeing and inspiration from interaction with nature.

Taken together the ecosystem features which supply these services form our green infrastructure. They make up the natural capital assets which are of fundamental value to human societies and irreplaceable by artificial alternatives.

In the past our environment supplied ecosystem services in such quantities that they were regarded as being free and infinitely renewable. As development pressure has increased, however, demand has started to outstrip the 'carrying capacity' of the natural environment to the point where green infrastructure is degraded, leading to the loss of ecosystem services. Often the value of ecosystem services is not recognised until their delivery is interrupted. This was clearly demonstrated when Foot and Mouth disease restricted opportunities for informal recreation and there was a very clear economic impact in rural Wales resulting from the loss of visitor spend.



Re-creation

We need a model of development which recognises the full significance of our environment and the ecosystem services it generates. A model that supports the resilience of dynamic landscapes. Sustainable development is about strengthening the ability of social and ecological systems to adapt to, and benefit from change, rather than trying to achieve a static balance between people and nature. There is no single optimal mix or level of ecosystem service production. The environmental demands and impacts of human societies are always changing, highlighting the need to maintain flexibility and options in the supply of services. We need to build in resilience so that societies, and the ecosystems on which they depend, can absorb change and re-create and renew themselves.

A Living Wales

This resilience requires that the key aspects of Wales' 'green infrastructure' are defined and that a more holistic, integrated approach to the stewardship of Wales' natural capital is adopted. We need an approach that acknowledges the intimate dependency of our relationship with nature and seeks to optimise the range of services and benefits that the nation's resources and landscapes provide. This is the aim of A Living Wales: A Natural Environment Framework, a consultation launched by the Welsh Assembly Government. The consultation sets out how the WAG and its agencies seek to take forward its commitment to sustainable development by ensuring that our green infrastructure is properly managed to provide the right mix of ecosystem services and enhance well-being.

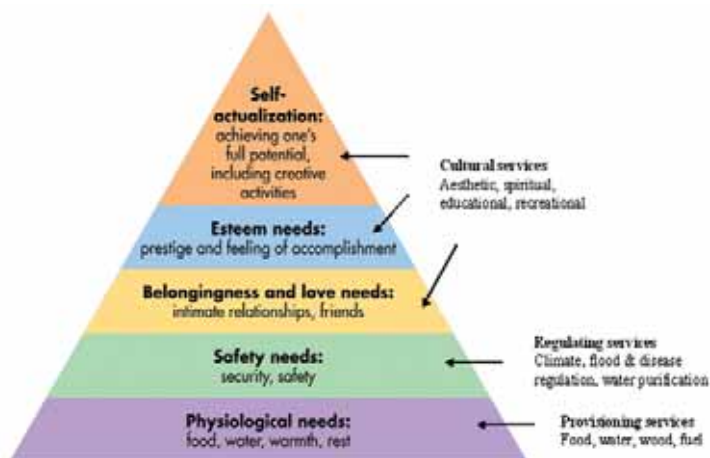
The Natural Environment Framework seeks to shift the focus of much of our environmental policy and effort onto a clear sustainable development agenda with human well-being a more explicit and central guiding concern. It seeks to shift the focus onto conserving and securing Wales' 'natural capital' and the 'Green and Blue infrastructure' of our country and its surrounding seas, on which so much else depends. To be truly sustainable it needs to be done in ways that promote social justice and equality of opportunity, enhance the natural and cultural environment, and respect environmental limits.

Ecosystem Services and Well-being

Ecosystem services are a very useful concept in demonstrating the links people have to places, something which given the geography of Wales and the way it has shaped our history, is never far from people's minds. These deep historical and cultural links to the natural environment are demonstrated by the many words in the Welsh language which link people and place. Words like 'bro', 'cynefin', 'milltir sgwar' and 'hiraeth' have connotations of the natural homeland of Wales and its wildlife, as well as family, friends and community. Countryside recreation plays an important role in shaping this relationship between people and places.

Cultural ecosystem services

The central place of cultural ecosystem services, such as recreation, is shown below, contributing to 'self-actualisation' at the top of Maslow's pyramid of human needs.



Urban Green Infrastructure for health and well-being

Perhaps the most important ecosystem service provided by urban green infrastructure is the maintenance of human health and mental well-being.

Wales is not a healthy nation: according to figures recently released 57% of adults are classified as overweight or obese and 27% of people report having a limiting long-term illness. This is perhaps not so surprising when over three quarters of people in Wales do not do the recommended minimum weekly amount of exercise. Much of this ill-health can be traced to the working environment in our former heavy industries, and to the psychological effects of their withdrawal which left entire communities without work. A study found that people who have access to a green open space within 50 metres suffer stress less often than do people who have to walk further to such a space. (Grahm 2003). Exposure to nature has also been found to have a positive affect on mood, concentration, self-discipline and physiological stress (Van den Berg 2007). Several studies have shown that nature within a 5 minute walk encourages the use of outdoor spaces and the occurrence of health promoting activities (Giddof-Gunnarsson 2007). For example residents in high 'greenery' environments were 3.3 times as likely to take frequent physical exercise than those from the least green environments (Ellaway 2005). It was found that people with a green space in 1 km radius around their home have: better self-perceived health; fewer health complaints; and have a lower self-rated propensity for psychiatric morbidity (Mass 2009). Another Dutch study found that 15 of 24 disease clusters were lower in living environments with more green space in a 1km radius (Mass 2009, 2).

CCW's Greenspace Toolkit

Following research initiated by the Urban Forum of the

UNESCO UK Man and the Biosphere Committee, and in conjunction with Natural England (and its predecessors) (CCW 2002) CCW developed a toolkit (CCW 2006) to help local authorities plan for the provision of sufficient quantities of appropriate quality green space in the right place for their citizens. CCW's Greenspace Toolkit was launched by the Environment Minister at the National Assembly in May 2006 and CCW offered all local authorities £8,000 each in grant aid to produce a greenspace assessment for towns and cities in their area. Use of the toolkit by all local authorities to create such an assessment was included as a target in the Wales Environment Strategy's first and second action plans. CCW's grant aid offer to support local authorities initial assessment came to an end this financial year and in the coming years CCW will focus its support to help local authorities use their assessments to drive improvements in greenspace provision. The Greenspace Toolkit recommended the following evidence-based standards for the provision of accessible natural green space (in England a similar standard is known as the Accessible Natural Greenspace Standard or ANGSt):



That provision should be made of at least 2ha of accessible natural greenspace per 1,000 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 green space (if measured as a straight line distance, 400m if measured as true walking distance);
- 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.

Use of the CCW toolkit confirmed fears about the extent of access to the right quantity and quality of green space. For example the analysis conducted across the five local authorities in the Heads of the Valleys area indicated that of the 1048 km² total area assessed, 379 km² were classed as green space but on average only 55% of people in the area lived within a 400m walk of green space judged to be

accessible and natural (exeGes/IS 2007). 17 of all 22 local authorities in Wales accepted CCW's offer of grant aid to support the undertaking of their green space assessments. Several such as Gwynedd intend to use their assessment to inform their Local Development Plan whilst others such as Newport are developing supplementary planning guidance using the evidence base from the toolkit assessment. Swansea has used its assessment to pursue a bid for substantial European funding and Cardiff has worked with BTCV to further examine local community engagement with green space. Despite this impressive mapping and policy activity much remains to be done. The Greenspace Toolkit is designed as much to open dialogue with local people about green space provision as it is to map that provision. Most local authorities in Wales conducted their assessments using aerial photography and GIS data sets, but have yet to ground-truth their assessments. Some, like Blaenau Gwent have identified priority areas for action and will be working with local residents and voluntary groups to both test the results of their assessment and to do work to improve the quality and accessibility of local natural green space.

The role of private gardens

Not all green spaces are natural or accessible, but all play a part in ameliorating heat island effects and many of these spaces are crucial in the management of rainfall, particularly during storms. Private gardens form the most obvious green network in Welsh towns and cities and may play an underestimated, and increasingly threatened role in rain water infiltration. The Biodiversity in Urban Gardens (BUGS II) project assessed the extent and characteristics of gardens in five cities across the UK. The research revealed that of the 90.8 km² within the urban boundary of Cardiff 21 km² or 16.2% could be defined as private gardens (Loram 2007). In times of high land prices and high demand for housing large gardens become attractive development sites. At the height of the recent property boom large gardens were sold as development plots for housing. Such gardens are likely to contain mature trees and to contribute to the overall biodiversity of an urban area. They also aid the heat island amelioration of that area and are a permeable surface which will reduce peak run-off from high rainfall. It can be seen that if all gardens in Cardiff were used for development, the total area of open space in the city would be reduced by over 16%. A more insidious threat to the ecosystem services provided by gardens is the conversion of front gardens to parking space which usually involves paving or otherwise sealing the ground surface. Taking the lower estimate from the BUGS II research indicating that 26% of the total garden area for an average city is composed of front gardens and applying this to the total garden area of Cardiff then 5.46 km² of the urban area of that city is front garden. If this were all to be paved over for parking then the amount of permeable surface available for the absorption of rainfall could fall by around 6%. Given that research from London shows that most storm floods occur in local sub-catchments, such a reduction in local permeable surfaces could create real problems.

Conclusion

By the time this article goes to press CCW will have held an exploratory meeting of stakeholders to decide if there is merit in creating an Urban Green Infrastructure Forum for Wales to network practitioners in this field. Clearly, CCW's Greenspace Toolkit cannot address all of Wales' urban green infrastructure issues and a variety of responses are needed. In the long term CCW hopes to work with the Urban Forum of the UNESCO UK MAB Committee to develop further toolkits which will set evidence-based standards for, and help calculate the provision of other ecosystem services such as heat island amelioration, rain water management, and air quality management. In the interim, CCW is working closely with the Welsh Assembly Government, the Welsh Parks Forum, the Design Commission for Wales and Environment Agency (Wales) to promote the quality management of green spaces via the Green Flag Awards. Local biodiversity is being addressed via the Wales Biodiversity Partnership and Local Biodiversity Action Plan groups and a pilot methodology has been developed by Gwent Wildlife Trust for surveying the new UK BAP Priority Habitat: Open Mosaic Habitats on Previously Developed Land.

The problems in the Welsh economy bring issues around our environment into sharper relief. On the one hand, environmental protection can seem more restrictive of businesses and growth than before, and even seem like a 'luxury we can no longer afford'. On the other hand, the Welsh environment is itself a major component of the Welsh economy - the ultimate source of many income streams and much of our employment. It is potentially the key to future economic strength built on 'green and blue technologies' and the attractiveness of Wales as a place to live and work.



Creative use of tram lines for Green infrastructure in Bilbao

References

Developing Standards for Accessible Natural GreenSpace in Towns and Cities. 2002 CCW. Bangor. unpublished

A place for nature at your doorstep: The role of Local Nature Reserves. 2003 CCW. Bangor

Providing Accessible Natural Greenspace in Towns and Cities: A Practical Guide to Assessing the Resource and Implementing Local Standards for Provision in Wales. 2006 CCW. Bangor

Ellaway, A Macintyre, S, Bonnefoy, X, 2005. Graffiti, greenery and obesity in adults: Secondary analyses of European cross sectional survey. *BMJ* 331, 611-612.

Heads of the Valleys Greenspace Provision Report September 2007. 2007. exeGesIS Spatial Data Management, Brecon. Unpublished

Gildof-Gunnarsson, A. and Ohrstrom E. 2007. Noise and well-being in urban residential environments: The potential role perceived availability to nearby green areas. *Landscape and Urban Planning*, 83 115-126

Grahn, P. and Stigsdotter, U.A. 2003. Landscape planning and stress. *Urban Forestry and Urban Greening* 2 (1): 1-18

Handley, J and Carter, J (2006) *Adaptation Strategies for Climate Change in the Urban Environment.* Draft final report to the National Steering Group. University of Manchester. Available at: <http://www.sed.manchester.ac.uk/research/cure/research/asccue/publications.htm>

Urban domestic gardens (X): the extent & structure of the resource in five major cities. Alison Loram, Jamie Tratalos, Philip H. Warren, Kevin J. Gaston. *Journal of Landscape Ecology* (2007) 22:601-615

Mass, J, van Dillen, S, Verheij, R and Grenewegan P. 2009. Social contacts as a possible mechanism behind the relation between green space and health 15 586-595.

Mass, J, Verheij R, Vries, S, Spreeuwenberg, Schellevis P, Groenewegan P 2009. Morbidity is related to a green living environment. EMGO Institute VU University Medical Centre, Amsterdam

Photographic References

All photographs but the last one credited to the Countryside Council for Wales.

"Creative use of tram lines for green infrastructure in Bilbao" photograph credited to Peter Frost.

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A Green Network to Change the Face of Central Scotland

Rob Garner, Scottish Natural Heritage



Walkers

The Central Scotland Green Network (CSGN) was launched by Scotland's Environment Minister Roseanna Cunningham in September 2009. Describing the CSGN as an "ambitious new greenspace project, the biggest of its kind in Europe," the Minister set out how the initiative will see the central belt of Scotland transformed into a more attractive place, benefiting over three million people who live or do business there.

CSGN as a national priority

The development of a Central Scotland Green Network comprises one of 14 priority 'National Developments' in the second National Planning Framework for Scotland (2nd National Planning Framework). The other thirteen priorities comprise hard infrastructure provisions, like the replacement Forth crossing, strategic rail and airport enhancements, and electricity grid reinforcements. The priority now given to the CSGN provides important recognition of how targeted green infrastructure can rank alongside such more traditional infrastructure projects in achieving sustainable development objectives at a national level.

Green networks in and around towns and cities are increasingly seen as a mechanism to deliver many social, environmental and economic outcomes. The CSGN is aimed

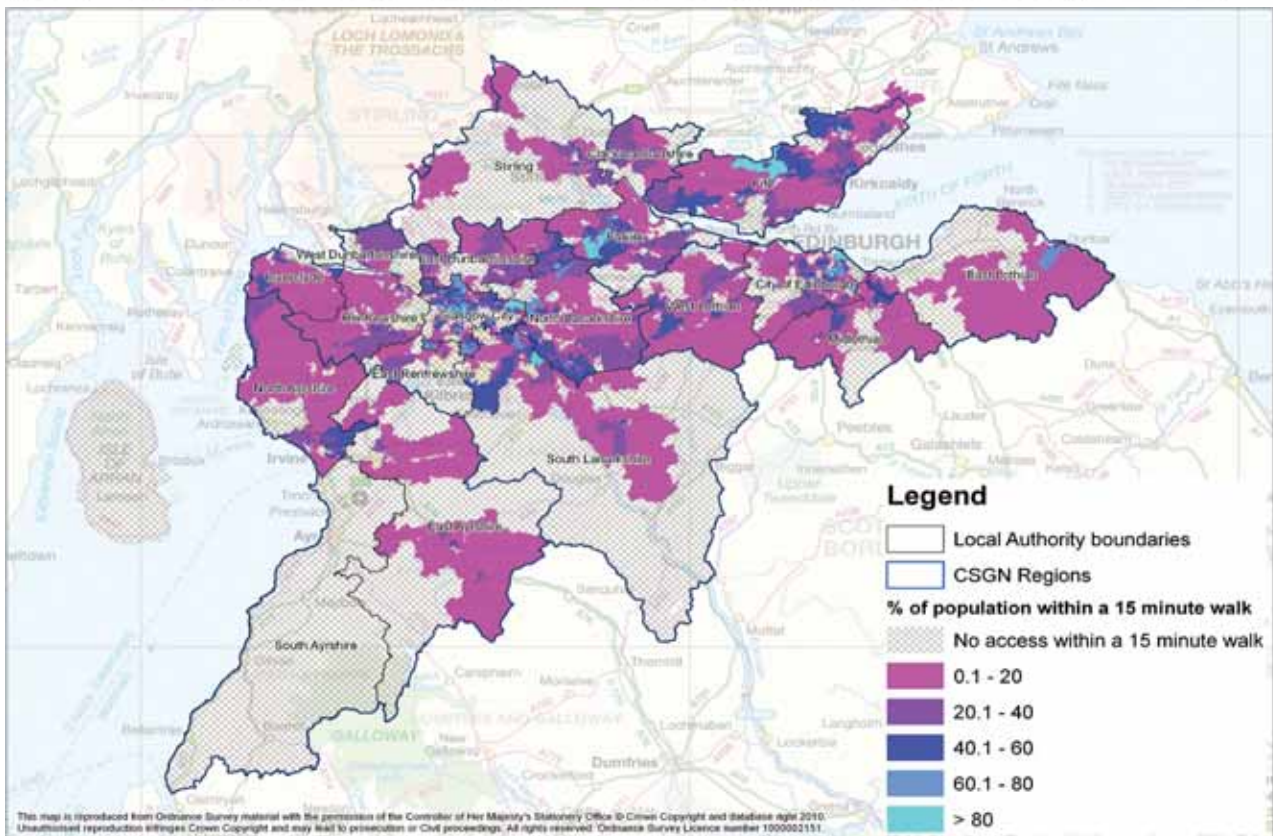
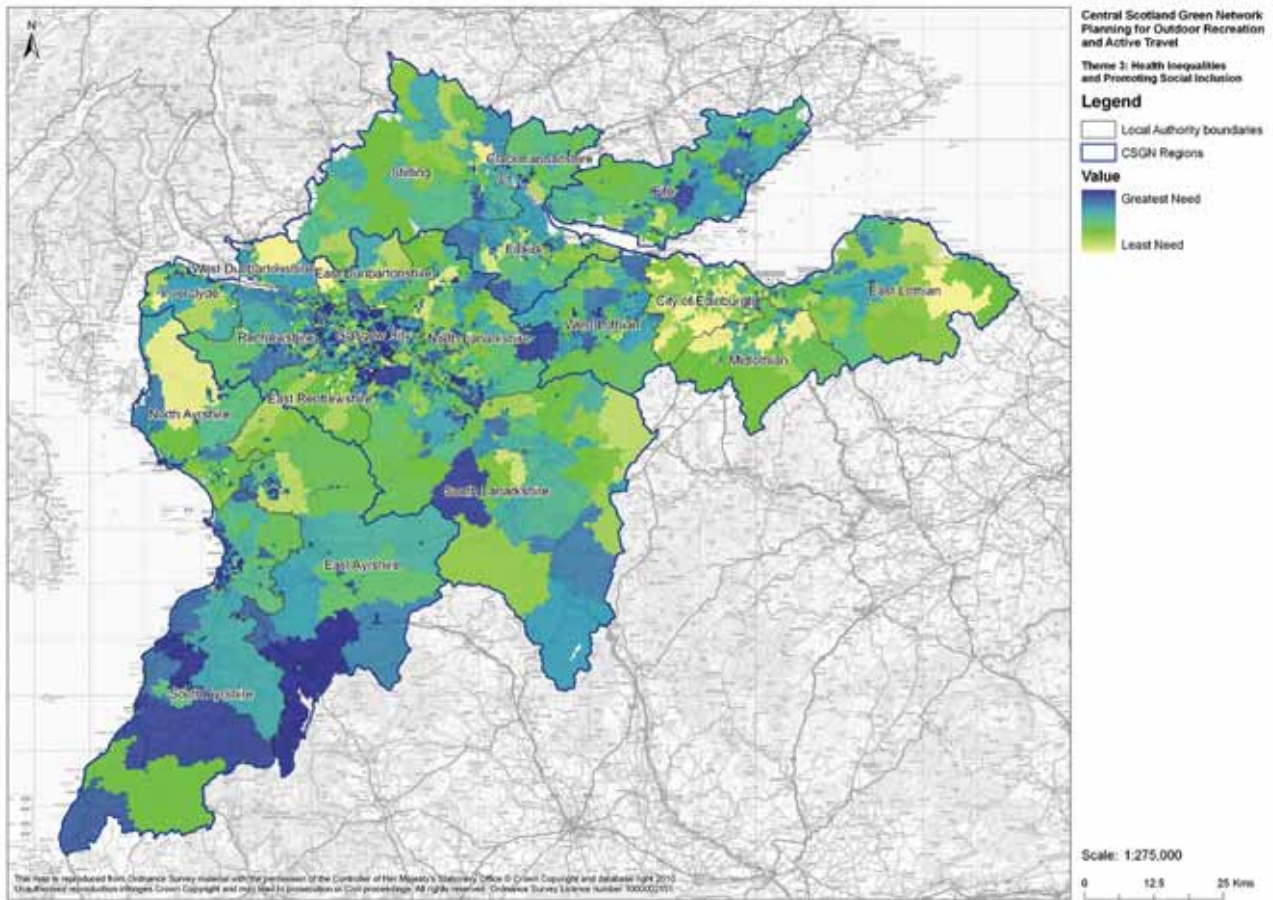
at delivering 'a step change in the quality of the environment for the benefit of people, landscape and nature'. To do this, the CSGN will build upon a base of existing partnerships across this area, but aims to think in a new way about the landscape, so that it will:

- drive economic competitiveness by creating distinctive high quality settings;
- increase life expectancy and well-being;
- help to promote prosperous and sustainable communities;
- apply the principle of working with nature to tackle climate change.

CSGN vision

The Prospectus for the CSGN was put out to public consultation earlier this year. It has a long-term vision over 30-40 years, with action programmes set out in three phases over the first twenty years. The consultation prospectus sets out 10 goals for that period up to 2030.

Some of the ten goals are quite specific, for example delivering a threefold increase in the area of land used for community growing – allotments, orchards and gardens; and ensuring every home in Central Scotland is within 300m of an attractive, safe and well-maintained green space or accessible countryside. Other goals are more general, such as that to improve the green infrastructure of all our major



towns and cities by investing in green and blue space, tree planting and sustainable urban drainage.

To make a start, the CSGN Development Fund of £900,000 had been set up by the Forestry Commission with Scottish Natural Heritage, to support first-stage applications for development work leading to high quality projects.

Recreation and active travel

One of the ten key goals proposed for the CSGN is 'to deliver a network of high-quality routes for active travel and recreation throughout Central Scotland'

These routes are intended to promote active travel and healthier lifestyles, and to respond to the research showing that improving green and open spaces has a major impact on health, life chances and community life, among the wider social, environmental and economic benefits. The prospectus points to developing strategic walking and cycling networks for active travel and leisure, and also to creating and enhancing managed places for people to enjoy the outdoors.

Work started towards this goal when SNH and the CSGN Support Unit recently appointed consultants AECOM to carry out analysis of the existing network of strategic paths and managed places for outdoor recreation, and to identify strategic opportunities for improved provision. The component parts of this research were to:

- Gather baseline information on the strategic paths resource, and on the distribution of strategic managed places for outdoor recreation;
- Review plans, strategies and proposals which relate to the development of these networks and resources;
- Carry out spatial analysis of relationships of paths and managed places with socio-economic information (such as data on population levels, multiple deprivation, health inequalities and activity levels), to indicate variations in demand and needs;
- Carry out stakeholder workshop consultations;
- From these analyses, identify and scope opportunities for new and improved provisions, linked to other planned development, and make recommendations on future thematic and spatial opportunities for action.

The digital spatial analysis was able to generate mapping of existing supply of strategic routes and places, and compare this to indicators of demand and need. That fed into composite maps, illustrating supply and demand in recreation and travel opportunities. This analysis was obviously very dependant on the particular indicators and criteria selected, but produced comprehensive mapping and a guide to localised priorities.

The stakeholder workshops generated more experience-based assessments, producing summaries of relative strengths, weaknesses, opportunities and threats in different parts of the CSGN area.

These two strands combined to produce broad recommendations on likely strategic opportunities for actions. Some of these are thematic approaches, such as partnership working to develop active travel plans, targeting new health walks initiatives to areas of greatest need, or targeted promotion of active travel initiatives. In addition, a more specific group of spatial opportunity locations is presented, recommending links to certain places (such as Cumbernauld-Glasgow) or initiatives (such as the 2014 Commonwealth Games Legacy).

The study has produced robust and versatile data inventories and analyses, and the opportunities identified are seen as a key starting point for more detailed future collaboration and working. This initial base study will be crucial in moving forward with planning the recreational and travel opportunities, which are a key element in the Green Network approach to delivering a high quality accessible environment, as a real asset for the people of Central Scotland.

References

The Scottish Government (2009) 'National Planning Framework for Scotland 2'

CSGN (2010) 'Central Scotland Green Network Prospectus' CSGN Support Unit.

AECOM Environment (2010) 'Planning for Outdoor Recreation and Active Travel in the Central Scotland Green Network'. CSGN

The study report is now available on the CSGN website, as: Planning for Outdoor Recreation and Active Travel in the CSGN (Aecom, 2010)

http://www.centralscotlandgreenet-work.org/index.php?option=com_content&view=article&id=45&Itemid=28

Central Scotland Green Networks' website:
<http://www.centralscotlandgreennetwork.org>

Photographic References

All photographs and maps credited to Scottish Natural Heritage.

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Grey to Green: How We Shift Funding and Skills to Green Our Cities

Helen Beck, CABI Space

"Children in wildflower meadow", Old Rough, Kirby, Merseyside



Green infrastructure, our natural assets such as parks and green spaces, do not receive anything like the investment or management that goes into grey infrastructure, elements such as the road network or sewerage system. CABI's 'Grey to Green' initiative questions whether this is smart investment, given the dangers of climate change and the opportunities to improve public health.

CABI is the Commission for Architecture and the Built Environment, the government's advisor on architecture, urban design and public space. Our work includes hands-on advice, training, research and the provision of practical resources and networking. We inspire people with confidence and support them to stand up for better quality buildings and spaces. Our remit is urban England but many of our resources are applicable to rural areas.

Parks and open spaces are the backbone of successful, healthy and vibrant urban areas. Most of our towns and cities are endowed with a haphazard legacy of trees, parks, gardens, allotments, cemeteries, woodlands, green corridors, rivers and waterways. These green assets are often neglected and poorly connected, seen as a liability and burden on the public purse instead of a way to

deliver critical environmental and social and wellbeing services.

From grey to green?

CABI's Grey to Green report, published last year identifies green infrastructure as one of the most practical and cost effective tools we have for dealing with environmental and social problems. In an increasingly straitened financial context, it is vital that resourcing the management and maintenance of our green assets is recognised as a valid and important area of expenditure. Our research and the practical experience on the ground show that severe budget cuts in this area are a false economy.

Green infrastructure is multi-functional. It offers a working landscape and a low impact alternative to addressing some problems we have previously solved with heavy engineering. For instance soft landscape areas absorb heavy rainfall. At the same time these spaces clean and cool the air and provide valuable space for exercise, play and socialising. In contrast, most grey infrastructure has a single function; for example the sole purpose of storm water pipes is to move excess rainfall.

The Grey to Green report suggests that the £1.28bn budget for widening a 63-mile section of the M25 could pay for 3.2m trees to store three million tonnes of carbon; or 5,000 miles of off-road routes for cyclists and pedestrians. Figures produced by PricewaterhouseCoopers for CABI show how a shift in spending from grey to green

of just 0.5% in some local authorities could increase investment in urban green space by 141%.

Most green infrastructure is created at a local level and there is a key role for community groups and councillors to play. Grey to Green suggests that councillors organise regular 'green surgeries' in every ward – along the lines of alternative local Gardeners Question Time.

The community is best placed to know the specific needs and priorities for their neighbourhoods' green spaces and local people can take a central role in driving the improvements they need. This can have a positive impact for both places and individuals.

A proven track record

Green spaces have a proven track record in reducing the impact of deprivation, delivering better health and wellbeing and creating a strong community. For example, living in a greener environment reduces mortality and can help reduce the significant gap in life expectancy between rich and poor. Over the last two years a major programme of research commissioned by CABI has gauged the state of England's urban green space and why it matters for people's health and wellbeing. The results of this programme are published in two research reports Urban Green Nation: Building the evidence base and Community Green: using local spaces to tackle inequality and improve health.

Overall, our findings strongly suggest that investing in the quality of local parks and green spaces is an important way to tackle inequalities in health and well-being and to improve residents' perceptions of their area. A key opportunity is improving the open space associated with social housing. Urban Green Nation: Building the evidence base compiled and analysed existing national level data relating to green space in urban areas in England. The research investigated over 70 major data sources and assembled an inventory of over 16,000 individual green spaces. It is the first study of its kind.

The report shows that people are using their urban parks and open spaces more, and they value these spaces. Almost nine out of 10 people use parks and open spaces. Parks and open spaces are the most frequently used service of all the services tracked. This compares with 32% for concert hall visits and 26% for galleries. Heritage Lottery Fund research reports 1.8 billion visits to parks in England every year. Good quality green and open spaces matter for local authority performance too. Urban Green Nation found that if people are satisfied with local parks they tend to be satisfied with their council.

Furthermore, people appreciate their local spaces and this appreciation is increasing. Defra research shows in 2007, 91% of people thought it was very or fairly important to have green spaces near to where they live. By 2009 this had risen to 95%.

Inequalities in provision

However, our research shows that the quality of local green spaces differs dramatically according to people's socio

economic and cultural background. People in deprived areas, wherever they live, receive a far worse provision of parks and green spaces than their neighbours. People from minority ethnic groups tend to have less local green space and it is of a poorer quality.

The most affluent 20% of wards in urban England have five times the amount of parks and general green space (excluding private gardens) than the most deprived 10% of wards. Wards that have almost no black and minority ethnic residents (fewer than 2% of ward population) have six times as many parks as wards where more than 40% of the population are people from black and minority ethnic groups. They have 11 times more public green space if all types (excluding gardens) are looked at.

Community Green: using local spaces to tackle inequality and improve health develops this evidence base further. It examines the impact of the quality of local green spaces on the health and wellbeing of people in six deprived and ethnically diverse areas.

The report found that people view green space as a key service, alongside housing, education and policing. Half of the 500 people interviewed reported they would do more exercise if green spaces were improved, and half expected they would have better mental health. The study also reveals a number of barriers to better use of public green space by black and minority ethnic people. Only half of Bangladeshi people, for example, reported feeling safe using their local green space, compared with three quarters of white people interviewed.

Significantly, less than one per cent of people living in social housing said they use the green space on their estate and the biggest barriers were fear about personal safety, lack of facilities and poor quality. Yet, 17% of households in England are social tenants and social landlords are responsible for the large areas of green spaces that surround these homes. In some areas, particularly London, this green space stock may be greater than the amount owned and managed by the local authority.

Opportunities for change

In response, we recommend there should be more scope for communities to take charge over temporarily vacant land, and that social landlords and local authorities responsible for green spaces should work with voluntary groups to make it easier for people to improve the green spaces on their doorsteps.

A forthcoming guide being published jointly with the Asset Transfer Unit, explores the variety and creativity of the asset transfer approach in relation to public open spaces. It uses examples ranging from a charitable trust that was set up to manage land with a 99-year lease from the local authority, to community groups that initiate temporary uses of land awaiting development.

An important opportunity is improving the open space on social housing estates. CABI and the National Housing Federation, with the partnership of Neighbourhoods Green and over 30 social landlords, have produced a practical

action plan to support improvements. **Decent homes need decent spaces** sets out 10 priorities for change and provides practical examples to help social landlords provide more opportunities for residents to enjoy the space on their doorsteps and meet their neighbours in a safe and pleasant environment.



Making the shift professionally

A key barrier to moving forward, however, is the fact that there is a chronic shortage of people with the right skills to design and manage green infrastructure, which is essential to harness the benefits set out above.

Before the recession, a survey by the Homes and Communities Agency Academy revealed labour shortages of over 90 per cent in landscape architecture and urban design. In a survey of 54 local authorities in 2008, 68 per cent of authorities said a lack of skills in horticulture was affecting overall service delivery. The most common gaps in operational skills were horticulture (51 per cent), conservation (34 per cent), arboriculture (29 per cent) and ecology (27 per cent). The most common deficiencies in managerial skills were identified as design (29 per cent), finance and funding (24 per cent), and marketing (19 per cent).

CABE and partners have published Skills to grow: seven priorities to improve green space skills. This strategy sets out priorities that will create the conditions for an effective green space sector. Our work over the next 6 months includes free one day CPD workshops to share good practice and address skills gaps around three key topics; working effectively with the community; planning for and responding to the challenge of climate change; and fundraising skills.

The recently launched ParksMatch website www.parksmatch.org.uk provides a forum for green space managers to share their experiences and success stories, network and ask questions. Small grants are also available to fund visits to learn from other organisations.

Looking ahead

It has never been more important to argue and prove the worth of green infrastructure. With predicted cuts of up to 40% for local authority green space departments it is critical

we make the best use of existing evidence to increase understanding of the benefits of green space to communities.

Opportunities remain.

Many green spaces remain underused because of their poor quality, yet our research shows providing good-quality local green space is a hugely effective way to tackle inequality. A latent and underutilised resource is the space on social housing estates.

The Grey to Green report argues that we need not only a shift in investment strategies but a change in culture. The functional value green infrastructure contributes to an area is in stark contrast to more orthodox, capital-intensive and technologically based grey infrastructure approaches.

Given the wider benefits that accrue from green infrastructure it would be short sighted to lose sight of the long term picture in favour of immediate cost savings.

References

To find out more about the work of CABE and the publications mentioned above visit www.cabe.org.uk and <http://www.cabe.org.uk/publications> For more information on CABE's training programmes visit <http://www.cabe.org.uk/public-space/skills>

On 20th October 2010, the Government decided as part of the Comprehensive Review to withdraw funding from CABE. This will take effect from April 2011. While CABE has not been abolished, the withdrawal of funding means that the organisations in its present form must be wound up by the end of March 2011. To find out more: <http://www.cabe.org.uk/news/the-future-of-cabe>

Photographic References

"Children in wildflower meadow" photograph credited to Landlife
"Raised flower beds" photograph credited to Jane Sebire
"Girls in saris on play equipment" photograph credited to Jane Sebire

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Green Infrastructure: Development in Ireland

Mary Tubridy, Mary Tubridy and Associates



National trail day 2010- Group on marked trail in the Wicklow Mountains National Park

The first reference to Green Infrastructure was in a study of ecological networks commissioned by the Environmental Protection Agency in 2002 to support the National Spatial Strategy.¹ This study referred to a map of ecological networks as a map of Green Infrastructure.

Several years later in 2008, an international conference titled “Green Infrastructure; Connecting nature; people and places” at Malahide Dublin, sponsored by Fingal County Council and the Heritage Council titled introduced the concept to a wide audience. Presentations included case studies from the USA, England, Scotland, The Netherlands, Sweden and Ireland.²

Comhar-working together

Since the Malahide conference particular support has been given to the adoption of the Green Infrastructure approach to planning by Comhar, which produced a policy document on Green Infrastructure in August 2010.³ Comhar (an Irish word pronounced “core” and meaning “working together”) is a government supported forum for national consultation and dialogue on all issues relating to sustainable development. It was set up in 1999 by the Department of the Environment, Heritage and Local Government and has 25 members drawn from the State sector, the economic sector, environmental/social/community Non-Governmental Organisations and the professional/academic sector nominated by various panels.

Preparation of Comhar’s report on Green Infrastructure

Preparation of the Comhar document was carried out by a team of consultants led by a Geographic Information Systems consultancy - Compass Informatics. This paper describes the work involved in preparing the policy and some of its conclusions. Extensive consultations underpinned three main research tasks:

- An examination of how Green Infrastructure was interpreted internationally. This was carried out in association with Professor Rob Jongmann, Netherlands;
- A review of legislation, policy and practice within Ireland. The review was informed by a survey to discover how information on biodiversity informed planning within local authorities;
- The elaboration of (desk based) case studies developed jointly by the team of consultants which included a landscape architect, an ecologist (this author), a spatial planner and GIS (Geographic Information Systems) specialists.

Green Infrastructure definition:

An interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations. Comhar (2010)

Consultations took place by means of a survey of local authorities, at a series of workshops and at a national conference on biodiversity in 2010. The conference was opened by the Minister for the Environment, Heritage and Local Government who referred to Green Infrastructure in his opening address. The objective of the consultations was to maximise stakeholder involvement in the development of the policy document. Comhar staff and members were closely involved in the consultation exercises and in recording and disseminating the results through their website.

The final report was endorsed by the Biodiversity Forum and membership of Comhar. It was launched in August 2010. Implementation of its recommendations will be a key element of the Comhar work programme over the next three years⁴

Green Infrastructure review internationally

The desk based review of Green Infrastructure internationally revealed that it is a flexible planning tool that has been interpreted in various contexts and always gives particular consideration to ecosystem benefits. In the United States the planning approach highlights services provided by water and is related to Greenways. Within the European Union, Green Infrastructure is being promoted by the Biodiversity Unit, DG Environment of the European Commission, and the European Network of Environment and Sustainable Development Advisory Councils (to which Comhar is affiliated) as an approach to biodiversity management post 2010. The Commission is currently developing a Green Infrastructure Strategy.⁵ In England and Scotland Green Infrastructure inspired studies are principally concerned with developing multifunctional networks of greenspaces to benefit recreation, biodiversity and increasingly climate change adaptation. Green Infrastructure planning in Wales has a broad focus and is linked to improving socio-economic conditions particularly in rural areas. A presentation on Green Infrastructure planning in Wales was made at the national conference on biodiversity in 2010 which revealed many similarities between development issues in both countries.

Practice within Ireland

While Green Infrastructure is currently not mentioned in national legislation or policy documents the review identified planning approaches, studies, initiatives and works which directly or indirectly reflect Green Infrastructure principles. Comhairle Na Tuaithe (pronounced coe-ir-le-na-two-ha and which can be translated as the Countryside Council) was presented as an example of a planning approach which supports Green Infrastructure principles. Over the last five years this national stakeholder partnership has defused the “access” issue and produced a National Countryside Recreation Strategy based on a shared vision of a multi-functional countryside where recreational facilities will be developed with respect for landowners and recreational users.⁶

The success of Comhairle na Tuaithe has enabled the principal authorities to develop facilities to support outdoor recreation/special interest tourism. Trail development has

increased as direct negotiations on access and management arrangements can be carried out on a farm by farm basis by Rural Recreation Officers funded by the Rural Development Programme. Through Bord Failte (the Tourist Board) European Union funding has been allocated to support trail development and Coillte has been given resources to maximise its potential as a provider of recreational amenities. Within the Irish Sports Council a new Trails Office⁷ is co-ordinating all trail developments. Strategic planning initiatives have occurred at a local level. Within County Wicklow a Countryside Recreational Strategy was produced through widespread stakeholder involvement.⁸ Other relevant initiatives include certain spatial planning studies such as the plan to integrate biodiversity management and open space planning in Dublin’s inner city⁹ and strategic planning of open spaces in Galway City to create multi-functional network Galway City Council (2008).¹⁰ A previous issue of this journal highlighted plans for a network of cycling routes linking parks in South County Dublin.¹¹ The Comhar review highlighted wetland enhancement works which reflect Green Infrastructure planning principles in a small catchment in County Waterford. These are led by Dr Rory Harrington, an ecologist with the National Parks and Wildlife Service. Dr Harrington made a presentation on his work at Green Week June 2010.¹²



Local Planning

Within the last year certain planning authorities have taken initiatives to highlight Green Infrastructure.

The Dublin and Mid East Regional Authority has recently produced Planning Guidelines 2010.¹³ These guidelines (to which planning authorities within the region must adhere) contain a chapter on Green Infrastructure. This highlights its value for recreation and contains a map showing a regional network of green routes.

The process of preparing the Draft Fingal County Development Plan 2011-2017 involved integrating Green Infrastructure considerations with related topics (Biodiversity, Landscape, Open Spaces, Parks and Recreation, Heritage and Water Management) and producing a separate chapter on Green Infrastructure which also focused on outdoor recreation.¹⁴ The Draft Dublin City Development Plan 2011-1017¹⁵ includes a number of objectives related to water treatment, biodiversity, amenity and transport which support the Green Infrastructure approach to planning. Green Infrastructure is mentioned explicitly. Proposals include a new type of zoning which will cover 'green networks' and an objective to develop a Strategic Green Network. This includes a cycling route around Dublin Bay which will be developed to assist coastal defences. Support for the introduction of Green Infrastructure type planning has come from a network of professionals (of various backgrounds) under the umbrella of the Urban Forum an initiative of the Urban Institute University College Dublin. In partnership with the Institute of Ecology and Environmental Management (IEEM) this group is preparing a brochure on Green Infrastructure (in press).

Case studies to inform the research

Case studies were carried out to give practical examples of Green Infrastructure led planning and clarify issues and opportunities in various environments.

An urban case study focused on a relatively small suburban area (in Dublin City adjacent to Dublin Bay). A rural/peri-urban case study covered a river catchment adjacent to Dublin and the coast, and the rural case study looked at area in the Midlands which is dominated by cutover raised bogs.

For each area information on natural environmental features was assembled in a Geographic Information System (GIS). This revealed the variety and limitations of the data sets (digital and non digital) which could be available for Green Infrastructure planning.

The principal Green Infrastructure assets within each area were then listed and reference made to the services which they provide. Within the urban case study area the principal asset was Dublin Bay which was described as a core area of international importance linked functionally and spatially to inland watercourses within Ireland and internationally to biodiversity areas which are important for migratory bird species. Services highlighted passive and active recreation, landscape values, routes for pedestrians and cyclists, flood control and coastal defences. GIS generated maps were produced showing the principal features of Green Infrastructure which were important for biodiversity and recreation.

Strategic objectives for management were then elaborated. In the urban case study the principal objective was to maintain the Green Infrastructure associated with the key core area and improve connectivity and multi -functionality of the network as an amenity.

Suggestions for possible actions to implement this objective related to improving water quality in urban streams, recognising the value of green spaces used by migratory geese, better linkages between green spaces, making existing public spaces more attractive to biodiversity and developing a Greenway around the coast. It was suggested that a network approach would allow conflicting uses to be accommodated and thus resolve conflicts between biodiversity/heritage protection/security and public usage.

A similar process was followed for other case study areas. Based on the results of case studies and consultations a SWOT (Strengths, Weakness, Opportunities, Threats) exercise was carried out to inform the final section of the report which contained a series of recommendations principally directed to government.

Principal recommendations by Comhar

That the value of Green Infrastructure should be recognised in the National Development Plan and sectoral plans for agriculture, transport, forestry and tourism.

The report stated that the promotion of Green Infrastructure by central government is needed both to maximise its potential to resolve major land management issues and standardise an interpretation and initiatives which are increasingly being seen in local plans. Major exercises have been carried out to produce management plans to comply with European Union Directives on water and flooding. It was suggested that Green Infrastructure planning offers a mechanism to implement these plans. If Green Infrastructure principles were highlighted in planning for outdoor recreation, greenways and networks would be given greater attention.

Green Infrastructure should be promoted as a tool to integrate biodiversity and development in the National Biodiversity Plan.

The first Biodiversity Action Plan for Ireland concentrated on listing habitats and species. The current draft BAP plan focuses on the value of the ecosystem services provided by biodiversity. It states: That Green Infrastructure is a useful tool to plan for recreational green space provision in urban areas.¹⁶

That a national assessment of Green Infrastructure should be commissioned.

Case studies simply listed forms of Green Infrastructure and its functions. Consultations revealed that there is a particular interest both in providing better information on Green

Infrastructure and measuring its potential to deliver ecosystem benefits.

The Department of the Environment, Heritage and Local Government should promote relevant planning practices

The report outlined a methodology to facilitate Green Infrastructure planning which maximizes stakeholder involvement. It recommended that training should be provided to implement this methodology. There are indications that the Draft Planning Guidelines for Local Area Plans due in early 2011 will include a reference to Green Infrastructure. Other incentives to implement Green Infrastructure through local plans arise from their obligations to implement Articles 6 and 10 of the Habitats Directive. These requirements may provide more incentives for practical training.

Conclusions

The Green Infrastructure concept has taken root among key professionals and sympathetic politicians. As a result certain strategic and spatial plans are starting to refer to ecosystem services and Green Infrastructure.

There are particular opportunities for Green Infrastructure planning in urban/peri-urban where the focus is likely to be recreation provision in managed green spaces or green route development. The rural case study and consultations with farmers confirmed that Green Infrastructure planning in these areas will be particularly challenging.

Significant developments have occurred in outdoor recreation over the last five years led by Comhairle na Tuaithe and its approach to planning. This deserves more attention as a model for land management which strongly reflects Green Infrastructure concepts and objectives.



References

- 1 - www.epa.ie/.../pubs/.../epa_ecological_network_ertdi5_synthesis.pdf
- 2 - www.fingalcoco.ie/Planning/ConservationHeritage/GreenInfrastructure
- 3 - www.comharsdc.ie/themes/index.aspx?TAuto=10
- 4 - (Cathy Maguire, Research Director, Comhar, personal comment 2010)
- 5 - http://ec.europa.eu/environment/nature/ecosystems/index_en.htm
- 6 - www.pobail.ie/en/RuralDevelopment/NationalRuralDevelopment/ComhairlenaTuaithe
- 7 - www.irishtrails.ie/Home
- 8 - www.wicklow.ie/Apps/WicklowBeta/CommunityEnterprise/Publications.aspx
- 9 - www.dublincity.ie/Planning/OtherDevelopmentPlans/LocalAreaPlans/LibertiesLocalAreaPlan/.../LibertiesAreaPlan.aspx
- 10 - (Galway City Recreation and Amenity Needs Study, Galway City Council) - www.galwaycity.ie/AllServices/Planning/Publications/#d.en.4691
- 11 - Hannon, M (2008). *The development of a green route system for South Dublin*. (Vol 16(1) 12-16, Spring 2008 Countryside Recreation, Countryside Recreation Network)-www.countrysiderecreation.org.uk/journal/Spring%202008/Spring%202008.pdf
- 12 - ec.europa.eu/environment/greenweek/content/dr-rory-harrington.html
- 13 - www.rpg.ie
- 14 - www.fingalcoco.ie/Planning/FingalDevelopmentPlan2011-2017
- 15 - www.dublincitydevelopmentplan.ie
- 16 - www.npws.ie/en/PublicationsLiterature/NationalBiodiversityPlan

Photographic References

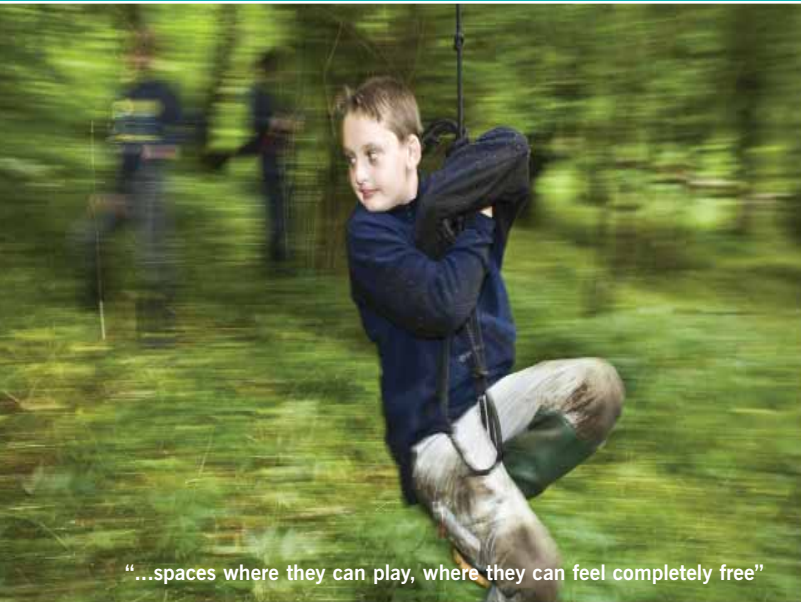
Introductory photograph credited to Helen Lawless, *Mountaineering Ireland*
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The Importance of Children's Play on Green Infrastructure

Neil Coleman, Play England



"...spaces where they can play, where they can feel completely free"



"...where they can safely push at the boundaries, learning and experimenting"

Think back to your childhood. Where was your favourite place to play? For the vast majority, this is usually somewhere outdoors in nature. Yet, children today are increasingly denied access to such places; with potentially harmful consequences. This presents an urgent challenge, and one which planners and managers of green space are well able to address.

Historically, children's play in England has been taken for granted. The pervading attitude seems to have been that in this green and pleasant land children have surely always had access to an abundance of open space. Why should they need to bother planners or policy makers? Consequently, beetles have more protection than children, with biodiversity promoted under planning policy guidance, whilst children's play has to make do with short-term (and currently highly vulnerable), spending programmes. In spite of children's play being recognised as a human right under Article 31 of the UN Convention on the Rights of the Child, signed by the UK more than 20 years ago, the only serious commitment to it has been a 10-year play strategy launched by the Labour government in 2008 and now itself close to being history.

The belief or assumption that children's play is not something that should concern planning policy is, in part, an

intuitive recognition that it is something natural and spontaneous that happens wherever children are. It is true that playing is instinctive behaviour for children, requiring little or no adult intervention for it to be both enjoyable and beneficial for them. But the increasingly substantial research in this area suggests very strongly that children need space for play, and the more natural the space, the richer the benefits. The trouble is that this space, as far as children are concerned, is becoming scarce.

Recent research commissioned by Play England shows the scale of the problem: an ICM poll for Playday 2010 revealed that 90% of adults played outside as children whereas today, 1 in 3 children say they don't play outside at all¹. These findings suggest that well over three million children spend virtually all their free time in their own home.

The association with obesity is compelling. Around 1 in 4 children are classed as clinically obese² in this country and unsupervised free play is the best possible regular calorie burner for children.³

The same ICM research also found that 47% of adults think it is unsafe for children to play out without supervision, and that 1 in 3 (37%) parents are concerned they will be judged by their neighbours if they let their children play out unsupervised. What can those with influence over green infrastructure do to help address this serious problem?

For a start we can make existing green spaces more welcoming for children. Getting rid of the 'No ball games',

'keep out' and 'keep off the grass' signs is an obvious move but what about the more subtle barriers. Green infrastructure is what Natural England describes as 'a strategically planned and delivered network of high quality green spaces and other environmental features'⁴.

So it is the interconnected multi-functional urban green space running through our villages, towns and cities that serve as ecological corridors for wildlife, for combating climate change, as natural flood prevention and as sport, recreation and attractive amenity space. And it is where our children should be found, playing in the woods and green spaces throughout our communities. Without children these places fail in one of their primary purposes, which should be as somewhere for young people to use and enjoy.

The important point with green infrastructure is that everyone should be within easy daily reach of a selection of differing connected green places, and they should be welcome there. But not everyone is. Access can be a barrier for children, and so can the attitudes of some adults towards children when they play.

For many decades the emphasis for public bodies has been on managing urban green spaces primarily for their appearance, to make them look tidy and to show people that a community takes pride in its open spaces. These changes mean that our green spaces have become increasingly sanitised, with much of the scrub, brambles, nettles and dense woodland replaced by flat, open short-mown grass. What has happened to the dens in the bushes, the rope swings hanging from branches over a ditch and the other signs of children testing their limits or taking a few risks as they play? They now get removed as soon as they appear. Nobody asks the children what they feel about any of it. Eventually this repeated treatment is enough to make anyone feel they aren't welcome, and yet it is a simple thing to remedy, provided the will and determination is there. Attitudes need to change and it is organisations such as the Eden Project with their 'Mud between your toes' campaign, National Trust with the 'Wild Child' programme, and Natural England and a few others who are leading the transformation.

The other main barrier children face today is the busy road and railway network that cuts them off from parks and green spaces. To address this, local urban planners must audit all open space from a play aspect, not just for biodiversity and sport, and then put plans into action to remove the barriers that prevent access to a variety of play opportunities.

It's not just about distance to travel; it's about safe routes, crossing points and the type of housing too. Children living twenty floors up will need access to playable green space closer to home than those living in suburbia. Fortunately, a few master planners and urban designers are now coming to recognise, increasingly through Play England's Play Shaper

professional development programme, that children's play needs to be prioritised equally alongside drainage and habitat.

Most importantly of all, support from community leaders is needed to drive home the message that children need tolerance from adults, and freedom to play in natural places, just as we did when we were their age.

Children's need to play outside is increasingly being recognised as one of the main building blocks of childhood. Play can no longer be passed off as some sort of fluffy, non essential element of a child's life. Children's play is a primary function of green infrastructure and it is time for everyone to take action to ensure we protect our children's right to play in these precious green places.

Today's children are as much entitled to enjoy the fields, meadows, woodlands, streams and muddy ditches as we did when we were young. Whether discovering buttercups, bees and grasshoppers, building dens in the woods or just laying back in warm grass making shapes from the clouds, playing outside in nature is the essence of a good childhood. Its loss diminishes us all.

References

- 1 - *Play England (2010) ICM Opinion poll [online]. London: NCB/Play England. Last accessed on 5 October 2010 at http://www.playday.org.uk/playday_campaigns/2010_our_place/play_day_2010_research.aspx*
- 2 - *(National Centre for Social Research, revised Jan 2007)*
- 3 - *(Roger L. Mackett, 2007)*
- 4 - *(Natural England)*
<http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/greeninfrastructure/default.aspx>

Photographic References

All photographs credited to Play England/Nick Turner Photography

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Spaces where they can play, where they can feel completely free, where they can safely push at the boundaries, learning and experimenting. Places where different generations can meet, binding the community together... If you ask adults if they used to play near their homes as children, 71% will tell you they did. Every single day. That compares to just 21% of children now. It's not right, and it has to change. But, despite how obvious that is, I do appreciate that there's no easy answer. So we have to be innovative, we have to find new solutions. No, we need to work out how we can empower people to deliver these changes in their own neighbourhoods... By giving councils more power over how they spend their money.. By giving communities more control over what gets built in their neighbourhoods... And by making it easier for volunteers and charities to get involved.

Nick Clegg, Children and Families Taskforce's announcement (chaired by David Cameron)

Commons for Communities

Kate Asbrook, The Open Spaces Society



Odiham open day

In these times of austerity, the governments of England and Wales would be wise to protect budgets which affect common land because no other land type provides such public benefit for wildlife, biodiversity, landscape, archaeology, culture, recreation and access.

Common is land on which the owner has rights in common with others, and the public has a right to walk (with a right to ride on many). It has existed since pre-medieval times, and was once extensive, but a vast amount was lost during the inclosure movement of the eighteenth and nineteenth centuries. The Commons Registration Act 1965 required all commons to be registered, but allowed only three years for this. Unregistered land ceased to be common and was lost.

Even so, there are just under 400,000 hectares (about the size of Suffolk) of common land in England and about 173,000 hectares (eight per cent of the land area) in Wales (the Commons Registration Act did not apply in Scotland or Ireland). Commons come in all shapes and sizes: from the mountains of the Lake District and Snowdonia to the moors of Dartmoor and Plynlimon, the heaths of Cornwall, Suffolk and Surrey, the coast of Norfolk and the Chiltern woodlands. They vary in size from huge moorlands, which are thousands of hectares, to tiny pockets of land often lost under bramble, scrub or concrete.

Contrary to its name, all common land is owned, and it is held

in common with those whose properties have rights there, to graze stock, collect wood and bracken, dig peat or take sand and gravel, for instance. The old practice of exercising these rights, as an essential adjunct to the personal economy of the rightholder, has declined in many areas as lifestyles alter. This is particularly marked in the lowlands, and has led to changes in vegetation and habitat as commons have become scrubbed over or covered in trees. At the same time their value for recreation has increased. For many people, access to their local common has been a part of their daily life since childhood, providing fresh air, a sense of belonging and identity and somewhere to take daily exercise or walk the dog, on land which feels as though it has remained unchanged for centuries.

But what is outstanding is the extent to which commons coincide with statutory designations. Natural England has established that, in England, 55 per cent of common land by area is designated as sites of special scientific interest (SSSI) and 20 per cent of SSSIs are common land; 48 per cent by area fall within a National Park, 31 per cent by area are within an Area of Outstanding Natural Beauty, 11 per cent of scheduled ancient monuments are on common land—and nearly 100 per cent of commons are access land. The Countryside Council for Wales reports that 45 per cent of Welsh commons are in National Parks, and 45 per cent are SSSIs.

If public value can be measured, at least to some extent, by statutory designations, commons score highly. The public interest in sites designated for nature-conservation value can be measured more or less objectively against criteria in legislation

or government guidance: there are clear outcomes which have been set. But the interests of the community have not been recognised against which they can be judged and there is a danger that local people may not be heard and may lose out when decisions are made about the management of commons.

To help fill this gap, Natural England commissioned a report from the Open Spaces Society, *Finding Common Ground*.¹ This identifies some of the dilemmas facing commons managers. For instance, the SSSI targets for a heathland may point to grazing, and that probably requires fencing because the common is crossed by busy roads. But fencing interferes with the wild, open landscape and is a physical and psychological barrier to public access. So the report recommends that all alternatives are considered (eg mowing, shepherding, slowing the traffic). If fencing is finally deemed necessary, there may be ways to mitigate its effects (eg hiding it in vegetation, providing numerous access points, using plain not barbed wire).

The report recommends that those who manage commons should identify and involve the community at the start of their deliberations. That community may be the villagers who live round the common or, in a National Park, may in addition be the thousands of visitors. Managers need to identify the users of the common: such as walkers, horse-riders, dog-walkers and bird-watchers, and find ways of engaging with them, through drop-in sessions, open days, walks and talks, newsletters and website. They should research the history of the common, and understand people's perceptions. They should start with a blank sheet of paper and allow everyone to express their views. It may be a long, painstaking process, and it should not be rushed.

In addition, if the plan involves works on the common, the manager may need the consent of the Secretary of State for Environment, Food and Rural Affairs, or of the Welsh Assembly Government, unless the work comes within the exemption scheme (which applies in England only, until Wales implements part 3 of the Commons Act 2006).

Hart District Council has recently published its management plan for Odiham Common in north Hampshire.² The Council owns the common which is an SSSI. It appointed a steering group consisting of the local authorities, National Trust, Open Spaces Society and local societies, and spent 18 months identifying the stakeholders and gathering their views on the common's future. The result is broad agreement for a ten-year management plan, and has been a worthwhile investment of time and money.

Commons in the strict legal sense are unique to England and Wales, but many other countries have shared use of land—and that land is under threat, from development, flooding, draining, privatisation, abandonment—and much more. We can use our experience on our own commons to help others everywhere to protect special places for their communities.

References

1 - Ashbrook, K and Hodgson, N (2010) 'Finding Common Ground', [online]. Last accessed on 25 October 2010 at URL: <http://www.oss.org.uk/publications/free-publications/>, Open Spaces Society, Henley-on-Thames

2 - Land Use Consultants (2010) 'A management plan for Odiham Common', [online]. Last accessed on 25 October 2010 at URL http://www.hart.gov.uk/index/leisure/leisure-countryside/leisure-odiham_common_project.htm, Land Use Consultants, London

Photographic Reference

Introductory photograph credited to Kate Ashbrook
"Downley Common" photograph credited to John Willson

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Downley Common

How Can we Improve the Access Network to Secure Sustainable, Active and Healthy Communities

Victoria Lloyd, Durham County Council



Tunnel walk

As any Access Manager will know, opportunities to be proactive are few and far between. More often than not, access work is reactive; responding to the barrage of problems reported to us. This means that strategic planning for improvements can become adhoc, creating “wish lists” without necessarily having the evidence base to properly justify the paths included. And while all this is going on, when do we ever have the opportunity to actually study the network, to really drill down to examine which paths people use, and why, and how might we manage them if a housing development creates greater and/or different demand?

This article explores how, in County Durham, we carried out an innovative project to address these issues by creating a methodology which helps identify our priority paths for improvement. It covers the background of the project, the creation of the methodology, the key findings, lessons learnt and conclusions. The article will help other Access and Rights of Way Managers to be proactive by sharing information on the studies and the methodology used which created a sound evidence base to identify paths for improvement. This can help to secure funding and strategically manage the access network.

An opportunity - “original, innovative, challenging, and very worthwhile”

In County Durham we have 3470.8 km of public rights of way. We also have many permissive routes. The Rights of

Way Improvement Plan (ROWIP) helped us look at this largely magnificent free-to-use resource and think about how it could be better planned and improved. The County Durham Local Access Forum (CDLAF) came up with the original idea to include an “under the microscope” study of the network in specific locations as an action in the ROWIP. We worked with the CDLAF and Natural England and we commissioned JPC and Leisure and the Environment (LandE) to pilot the project as major housing growth and regeneration initiatives emerged throughout the County. The work has initially focussed on two planned 'Housing Growth Point' areas: Peterlee/Easington and Spennymoor. The longer term intent is to roll the work out to cover other areas.

There are large parts of both study areas (especially Peterlee/Easington) within the worst national quartile in terms of deprivation, and there are several areas in the worst 5% in England. The correlation between deprivation, lack of physical activity and ill-health is already well established and significant parts of East Durham have documented high rates of ill health that can be attributed in no small part to poor diet and lack of exercise. The project’s main aim was to see how future planning could help to best improve the local Access Network for the benefit of existing and future residents. The study areas were based on 2km buffers around the growth point allocations. The main focus was on the Public Rights of Way but we also considered permissive routes, potential links, and the physical relationships between all the above and other spaces that local people can use and enjoy.

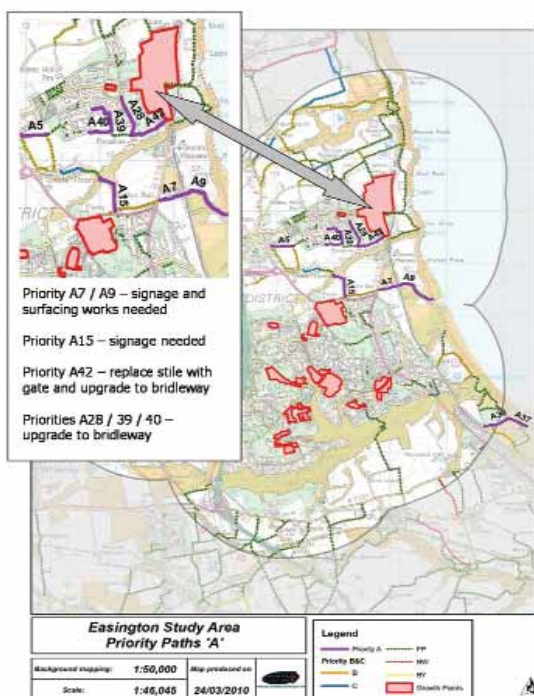
Study Method

We developed and trialled a method for evaluating the Access Network in relation to a variety of considerations that an overseeing Project Steering Group felt to be important. In essence, the method embraced:

- Field studies – using a predefined 'field sheet'. A simple scoring system was devised to record the quality of features such as surfacing, stiles, estimated levels of use. The scoring system also covered the estimated potential for a given route to improve with investment.
- Site surveys – via questionnaires allowed some basic people profiling.
- Stakeholder consultation – face to face meetings or phone calls with path users, resource managers, local councils and relevant agencies and representative organisations.
- Desk-top work - desk research and analysis, to draw together the themes and findings from both the fieldwork and consultation. This part of the project made considerable use of Geographical Information Systems-GIS
- Working with the Project Steering Group – consisted of main partners (Durham County Council, Natural England, Local Access Forum and consultants). The Steering Group suggested the relative 'weighting' to be attached to the various features the study was seeking to evaluate and score through the analysis and project managed the studies.

Key Findings and Priorities

As the main findings and priority lists created are of two specific areas of County Durham we have not included the details within this article. Though below are the mapped Priority paths for one study area which gives an indication of the results of the study.



From vision to reality - how can the findings and recommendations of the study help to improve the access network? - Outcomes

- The studies have produced a full report and summary, site and GIS data, consultation results, workshop reports and in May the CDLAF hosted the launch event of the pilot projects.
- The study also has an influencing role through policy and partner engagement. Opportunities include influencing how the Rights of Way/Access budget is allocated and influencing the content of the Local Transport Plan and the Local Development Framework (land use planning policy).
- The project has also provided a 'shopping list' of researched path projects for various 'proactive' and 'reactive' initiatives. It is intended that Section 106 agreements and the Community Infrastructure Levy will help to fund path improvements where appropriate.

Early Successes

- We have secured funds from the Local Transport Plan Area Programme to deliver path improvements in Spennymoor.
- We are likely to secure funding to roll out studies and carry out improvements in Peterlee through the Limestone Landscapes (Heritage Lottery Funded project).
- The project will be referenced in forthcoming plans and strategies including the County Council's Rights of Way Improvement Plan, Local Transport Plan 3 and the Green Infrastructure Strategy.

We intend to include people counting and monitoring as part of the improvement programme. This will enable us to identify demand but also profile existing users. By comparing this data to local demographics we should be able to establish who doesn't use the network and have a clearer idea of who to target to promote the network and encourage use.

Conclusion

This innovative new project can help access managers to create sound evidence based prioritised action plans for path improvements, help to secure funding and strategically manage the access network. If you are inspired to use this methodology, be sure that you replicate it accurately and use all elements (i.e. the field studies, stakeholder consultation, site questionnaires and desktop work). This research work needs investment so it needs funding, but it is just as important as the delivery work to improve paths. The methodology is proven to work and can produce the evidence base you need to secure funding and help justify plans for strategically improving the path network you manage.

References

www.jpc-consultants.co.uk - www.lande.co.uk

www.durham.gov.uk/prow

Natural England's LTP and ROWIP Integration good practice note

Photographic References

All photographs credited to Durham County Council

Contact Details

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Agency Profile

Each issue of *Countryside Recreation* will profile a relevant agency/organisation.

National Parks & Wildlife Service

Dermot Kelly, Parks & Reserves Unit



Comhshaol, Oidhreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government



Blueglen, GLENVEAGH National Park, County Donegal

The National Parks & Wildlife Service (NPWS) of Ireland is the statutory body charged with the conservation of Ireland's diverse range of habitats and species. Part of the Department of the Environment, Heritage & Local Government, NPWS has a very wide brief which covers such areas as the conservation of flora & fauna, enforcement of the Wildlife Acts and protecting as well as promoting the recreational use of Ireland's national parks and nature reserves.

There are in the region of 250 staff working within NPWS who are located across the country in eight regions. The current structure of the Service comprises three sections

Regional Management, Property and Finance – responsible for overseeing and coordinating the country's six National Parks and 78 Nature Reserves and managing conservation staff in the regions.

Designated Areas and Legislation - responsible for the implementation of the EU Habitats and Birds Directives and for the implementation, review and updating of Irish nature conservation law.

Science and Biodiversity – responsible for Species and Biodiversity, Conservation Systems and Informatics and Marine and Habitats.

NPWS also has an important educational function promoting (a) **awareness**, (b) **knowledge** and (c) **appreciation** of Ireland's native flora, fauna and their habitats.

The aim is to foster individual and collective responsibility for the welfare and conservation of our natural heritage and provide **information** and **advice** on environmental issues.

With this in mind, NPWS Education staff are also involved in a wide variety of events and activities at local and regional level including schools outreach programmes, public walks and talks, family days, exhibitions, open days.

Nationally, education staff work closely with other sections of the Department of the Environment, Heritage and Local Government including the Heritage Council, Notice Nature Campaign and Local Authorities, supporting such events as Heritage Week, National Biodiversity Day, Tree Week, etc.

The Education Programmes also link into the Department of Education and Science and, the Department of Enterprise, Trade and Employment, and it's Discover Primary Science (DPS) and Science Week initiatives.

In addition, education staff work closely with local communities, special interest groups and individual members of the public.

The National Parks & Wildlife Service of Ireland is also committed through its stewardship of c. 64,171 ha. of National Parks, 16,871ha. of nature reserves (one in almost every county) and 25,438 of land acquired for conservation purposes to promoting the recreational usage of the countryside in a sympathetic and sustainable manner.

A key feature of promoting the use of national parks and nature reserves is a commitment to maximise facilities such as visitor centres, nature trails and improved accessibility to sites within the remit of NPWS.

NPWS cooperates with other agencies in Ireland such as the National Trails Office and Failte Ireland to ensure best practice in this regard.



NPWS is supportive of non-governmental organisations involved with nature conservation and the promotion of the countryside for recreational purposes.

NPWS is a partner with the Golden Eagle Trust which is implementing a project which has led to the re-introduction of three species of eagles to Ireland - the White-tailed Sea Eagle, the Golden Eagle & the Red Kite.

NPWS is also a frequent collaborator with Birdwatch Ireland in its work of protecting Ireland's wild birds.

Like most agencies, the challenge for NPWS in the future is to continue to carry out its wide ranging remit without losing sight of its primary functions – to protect and preserve.

Photographic References

All photographs credited to National Parks and Wildlife Service

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News



Coast Alive!

Coast Alive is an ambitious programme funded under EU Interreg IV B which seeks to deliver healthy and inspiring recreational activities along stunning European coastlines around the North Sea. The Coast Alive! Project has a total of 26 partners and sub partners from the Netherlands, UK, Denmark, Sweden and Norway. The aim of the project is to develop a set of strategies and procedures for mobilising more people to use local paths and outdoor facilities for recreation and for fitness. The project builds on two previous EU funded projects that developed around 12,000 km of paths. Now we want people to use them, all year and as often as possible! At the same time, we are very keen to preserve our natural and cultural heritage, work with relevant organisations and with small businesses along the routes to boost facilities, build reputations and map out ways of reaching new users of all ages. Through development of a toolkit, which will give specific details of the many approaches used to encourage countryside visits, the initiative will have a lasting legacy. If you want to learn more, contact:

Tor Titlestad or Magne Haugseng:

magne@live.co.uk ; tor.titlestad@post.hfk.no ; davidhassall@talktalk.net

Snowdonia National Park Recreation Strategy

The Snowdonia National Park Authority is about to prepare a draft Recreation Strategy for the National Park. The Strategy will provide guidance for the outdoor recreation sector in Snowdonia and offer a series of objectives aimed at:

- Improving health and wellbeing levels
- Improving access to Snowdonia's special qualities
- Increasing social inclusion
- Increasing understanding and appreciation of the National Park
- Proving better community benefits and participation
- Facilitating partnership working
- Increasing economic benefit
- Delivering sustainability
- Improving associated infrastructure
- Protecting areas of tranquility
- Reinforcing Snowdonia's strong sense of place

Together these objectives will seek to capitalise on the area's reputation as one of the country's premier locations for outdoor recreation whilst protecting those qualities which confer its designation. Production of the Strategy sits within the overarching strategy for Snowdonia provided by the Snowdonia National Park Management Plan and will respond to an increasing appetite for a variety of outdoor recreation opportunities locally. Although the Strategy will view outdoor recreation in a positive light, it will highlight some negative impacts, such as traffic congestion, landuse conflict and inappropriate recreation activities. Guidance to manage or mitigate impact will be included where

possible or will prompt further studies for more complex issues. A draft version will be published and consulted upon during Autumn 2010.

Please check our website for updates: <http://www.eryri-npa.co.uk/>

Public Attitudes to Angling 2010 – Key Results from a survey of attitudes and participation in England and Wales for the Environment Agency

How many people have been freshwater fishing?

20% of the population over 12 years old said they had been freshwater fishing in the last ten years, about 9 million people; 9% had been fishing in the last two years, about 4 million people; 7% had been fishing in the last year, about 3 million people. These estimates have a precision of 1% or so each way.

How can I find out more about the survey?

The full report, by Diane Simpson and Guy Mawle, is called: *Public Attitudes to Angling 2010*. Environment Agency, Bristol.

It can be downloaded free from the publications catalogue on the Environment Agency's website:

<http://publications.environment-agency.gov.uk/epages/epublications.storefront/4c286ecd006ab088273fc0a8029606d1/Product/VIEW/GEHO0610BSOS&2DE&2DE>

General enquiries: **08708-506506** or enquiries@environment-agency.gov.uk

Technical enquiries: guy.mawle@environment-agency.gov.uk

Urban Regeneration & Greenspace Partnership (URGP)

New web pages have been launched on the Forest Research website to provide information on green infrastructure and greenspace.

The URGPs support efforts to maximise the benefits of green infrastructure (GI) to a range of parties from all sectors, including community groups, local authorities, planners, developers, researchers and non-government organisations (NGOs).

The partnership's objectives are to:

- provide a facility that enables individuals, community groups, local councils and NGOs to promote their greenspace initiatives, events and examples of best practice;
- promote the benefits of greenspace and green infrastructure;
- disseminate best practice, case studies and evidence notes on greenspace establishment and management;
- create a URGPs database and a network of research, monitoring and evaluation sites covering local to national spatial scales;
- provide a GI knowledge hub to aid knowledge transfer and the dissemination of evidence of the benefits of GI;
- provide information about the partners' specialist activities related to GI.

More here: <http://www.forestry.gov.uk/fr/URGC-69WK5>

Case Study



River Medway Canoe Trail - Clean sweep for paddlers and fish

Most of us have witnessed the surge in mountain biking and walking trails across the UK, but the Environment Agency have really pushed the boat out with their new Canoe Trail on the River Medway in Kent.

Three years ago, only a small number of determined canoeists, who were prepared to put up with the lack of riverside access, poor facilities and tricky portages, were ever seen paddling on the River Medway. But thanks to new technology, the Medway Canoe Trail has turned this river into a first class venue for canoeists of all abilities. The trail flows along 29km of beautiful meandering waterway from the heart of historic Tonbridge, through the county town of Maidstone, to the journey's end at Allington. Since it was opened, canoe traffic on the river has already increased by 25 per cent, and with more improvements in the pipeline, this increase is set to continue. Graded as easy, the whole trail will take the average canoeist two days. There are a number of campsites for an overnight stop, and there are also a few different launch points for those that choose to break it into smaller sections. As well as enjoying some enthralling paddling, there's a good chance that paddlers will see a variety of wildlife from otters to kingfishers as they glide by. Navigation's no problem either, as we have produced a free, splash-proof Medway Canoe Trail Guide, which tells paddlers everything they need to know for their journey down river. Before the trail was opened in June paddlers were faced with difficult riverside access and tricky portages around the locks and weirs on route. But now all the locks have purpose built landing platforms so that paddlers can easily portage (carry) their canoes around each lock, and safely re-enter the water on the other side. These platforms have been described by the British Canoe Union as "Gold Standard", and they also won the Small Project of the Year Award from the Institution of Civil Engineers. But that's not all, the Environment Agency has also provided toilets and showers picnic tables, a campsite, car parking, a disabled access ramp, and revolutionary new combined canoe and fish passes to get over the weirs.

The combined canoe and fish pass

These revolutionary 'log flume' canoe and fish passes at Porters Lock and Eldridges Lock are one of the really unique aspects of the trail. They were designed by the University of Kassel in Germany, and they allow fish to swim up river and canoeists to float down river, without having to get out of their canoes. Some paddlers admit they have travelled to the river just to try the passes for themselves!

How do the passes work?

The passes use 'brushes' made from recycled plastic, which are anchored to the bottom of the channel. They are flexible enough to allow a canoe hull to glide over the top without damaging it, yet rigid enough to slow the water down and create back-flows and eddies, to allow fish to travel up them. The Medway boasts more than 21 species of freshwater fish, including roach, dace, pike, eel and sea trout, and migration is vital if they are to take advantage of the best spawning and feeding grounds.

What do the passes look like?

The first part of the pass consists of an 80 metre long concrete channel, 1.5 metres wide and 60cm deep with a water level drop of 1.6 metres. An entrance pool at the top allows canoeists to line themselves up for the first slope. After the first drop, a three metre wide resting pool lets canoeists line up for the final slope of 20 metres. At the end of the second slope, the channel narrows to provide a faster flow of water so that fish can find the pass entrance. Crucially, there are enough brushes to ensure the pass performs well even under reduced flow conditions during the summer.

The cost of the combined pass at Eldridges Lock including purchase of land, design, contract documentation, supervision, supply of the fish brushes and construction was around £200k.

Here are a few of the great comments we've received from customers:

"I would like to thank your staff at Allington for the help and guidance during one of the best holidays I have spent in many a year just chilling out on the river. Thank you once again". Michael Andrews, canoeist

"We did the Medway from Hartlake Bridge to Tea Pot Island and thought that the canoe passes, portage platforms and signage were excellent. It was so nice to see the Environment Agency positively encouraging the public to use the river. Thanks". Richard Odell, canoeist

Licences

The Environment Agency is the Navigation Authority on the Medway and unless you are a British Canoe Union member, you will need a licence to canoe on the river from Allington to Tonbridge. You can buy **short term licences** from the following places: Allington Lock 01622 752864 - Environment Agency Kent and East Sussex Area Office 01732 223222. **Annual licences** can also be obtained from this office - Bow Bridge Marina 01622 812802 - Medway Wharf Marina 01622 813927 - Allington Marina 01622 752057 - Tonbridge Tourist Information Centre 01732 770929.

Find out more

Find out more from the Medway Canoe Trail website www.medwaycanoeatrail.co.uk or www.allingtonlock.co.uk - Download your free Medway Canoe Trail Guide from www.visitrivermedway.co.uk or get your free splash-proof version of the Medway Canoe Trail Guide by e-mailing your address to: michelle.waterman@environment-agency.gov.uk.

Photographic reference: *Introductory Photograph credited to Tony Thorogood.*

Countryside Recreation Network Publications List

Price (incl.postage) Tick

REPORTS

Volunteering in the Natural Outdoors (2008)	£15
A Countryside for Health and Wellbeing: The Physical and Mental Health Benefits of Green Exercise (2005)	£20
Social Exclusion in Countryside Leisure in the United Kingdom - the role of the countryside in addressing social exclusion (2001)	£10

CONFERENCE PROCEEDINGS

Removing Barriers; Creating Opportunities: Social Inclusion in the Countryside (2001)	£15
Managing the Challenge of Access (2000)	£15
Is the Honeypot Overflowing? (1998)	£15
Making Access for All a Reality (1997)	£15

WORKSHOP PROCEEDINGS

Who visits and why? Results from National Surveys of Visitors to the Outdoors (2010)	£20
Managing Outdoor Events and their Impacts (2010)	£20
Accessible Outdoors:Outdoor Access for Disabled People (2010)	£20
Education in the Outdoors (2010)	£20
Growing Up Outdoors the Next Steps: Children's Health and the Outdoors (2009)	£20
A New Era for Country Parks? (2009)	£20
Making a Splash:Providing Opportunities for Water Recreation in Inland Water (2009)	£20
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Arts in the Outdoors (2008)	£15
Preparing for Climate Change in the Outdoor Recreation Sector (2008)	£15
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