



4.5 Inspiring people

The perceived social public benefits from the natural environment are many and varied, ranging from health and wellbeing to social cohesion and economic growth.

Research into the relationships between people and the natural environment is a developing area amongst stakeholders and the academic community. Although the links appear to be inherently obvious, firm evidence of the benefits currently remains limited. Natural England is only one amongst many with an interest in exploring and developing a body of evidence around the relationships between people and the environment and our evolving work in this area is therefore highly reliant on successful partnerships with a wide range of stakeholders and the academic community.

*To see a world in a grain of sand,
And a heaven in a wild flower,
Hold infinity in the palm of your hand,
An eternity in an hour.*

William Blake

4.5.1 The natural environment as a source of inspiration

England's landscapes and wildlife have been a source of artistic, spiritual and cultural inspiration to painters, musicians, sculptors, poets and writers for many centuries. From the seascapes of Turner to the idyllic pastoral landscapes of Constable or the poetry of John Clare and the prose of Thomas Hardy, we have a rich cultural resource.

According to Nature in Art, the world's first museum dedicated exclusively to art inspired by nature: 'Artists have the uncanny ability to see the natural world through fresh eyes. They can draw our attention to both the minutest detail and the bigger picture. Art can prick the conscience, sow the seed of awareness and nurture appreciation of our natural world.' (English Nature 2004a). The strong links between art and our National Nature Reserves are revealed in Rollins (2003).

Evidence suggests that, despite all the technological advances around us, the human brain still responds to nature. The Biophilia Hypothesis (Kellert & Wilson 1993), first proposed by EO Wilson attempted to explain this response as:

"the innately emotional affiliation of human beings to other living organisms. Innate means hereditary and hence part of human nature"

This underlying fundamental relationship between nature and man goes some way to explain why creating more and easier access to the natural environment, whether physical or virtual, can result in a range of benefits to our quality of life.

Wild words for wild places

A series of poetry workshops was organised at the four large National Nature Reserves in Northumbria. At Lindisfarne and Castle Eden Dene, the workshops were open to anyone – local people and visitors. At Teesmouth, there was a special event for one group of people from Stockton. In Moor House-Upper Teesdale the poets were children and teachers from the tiny school overlooking the reserve.

The final work, a 56-page book called *Wild words for wild places*, features wonderful words from children, conservation volunteers, established writers' groups and people who just wanted to give writing a go. It proved to be an inspiration, a way of bringing people even closer to the countryside around them.

4.5.2 Benefits from access to natural green space

A recent review (Newton 2007) found that engagement with the natural environment brought the following benefits:

- populations in areas with higher levels of greenery have higher levels of physical activity and lower levels of obesity;
- “green” exercise enhanced mood, improved self-esteem and lowered blood pressure more effectively than exercise alone;
- reduced stress and improved recovery from stress;
- improved mental alertness, attention and cognitive performance;
- reduced levels of depression;
- reduced levels of aggression and violent behaviour;
- enhanced social interaction.

Newton concluded that more research is required to find out if and how society benefits from more people enjoying the natural environment.

The following sections examine current evidence on the benefits from access to natural green space, relating to young people, under-represented groups, health and wellbeing, and community cohesion.

4.5.2.1 Young people

Natural green space provides both informal and formal opportunities for young people. Play is a vital part of a child’s healthy and fulfilled development, and there is evidence that children often prefer to play in natural or wild places, and that direct experience of playing in the natural world helps children develop their cognitive skills of balance, co-ordination and spatial awareness and encourages children to work constructively together (Maxey 1999). A lack of opportunity to play can result in poorer ability in motor tasks, less physical activity, poorer ability to cope with stressful situations, reduced ability to assess risk and poorer social skills (Lester & Maudsley 2006).

Recent research commissioned by Natural England (Ward-Thomson *et al.* 2006), has investigated the role that ‘wild adventure space’ can play in meeting the developmental needs of young people, in the context of Anti-Social Behaviour Orders for teenagers and concerns about poor mental health, obesity and lack of physical activity in the population. The study set out evidence of the potential benefits for individuals and the wider community arising from young people’s engagement with wild adventure space, barriers to obtaining these benefits, gaps in understanding, issues for further study, and opportunities for provision of relevant and necessary resources. It found that engagement with outdoor activities has the potential to confer a multitude of benefits on young people’s development and therefore on society as a whole. It recommended the action needed to take this work forward and identified a range of potential partners.

A review of the benefits of more formal, educational access to natural green space (Rickinson *et al.* 2004) focused on three types of outdoor activities: fieldwork and visits, outdoor adventure activities and activities in the school grounds or community projects. The key benefits from outdoor adventure activities were increased independence, confidence, self esteem, self efficacy, personal effectiveness and coping strategies. Projects in the school grounds or in the community generated pride in the local area, increased motivation towards learning and a sense of belonging and responsibility.

Baby Birds learn to fly in Sandwell

Sandwell's human fledglings learn about wildlife at the popular 'Baby Birds' parents and toddlers group. The group meets every week in the education room of the RSPB visitor centre at Sandwell Valley Nature Reserve. The meetings are led by a field teacher with the help of the Wildspace! Community Liaison Officer.

The centre provides wildlife-themed activities, wooden toys and cuddly animals in the shape of birds, mammals and insects. The children play outdoors whenever the weather allows while their parents and carers enjoy the fresh air and green surroundings.



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4.5.2.2 Under-represented groups

Research undertaken to support the diversity review (see 4.2.3) has highlighted some of the benefits of engagement with the natural environment to groups that have traditionally not used natural green space. As part of the review, four action research projects tested novel ways for engagement that can be independently sustained. For the participants, the benefits of increased access to outdoor recreation have broadly been improved health, social contact and the confidence to venture out independently into new environments; although some have discovered that a lack of confidence in using public transport affects their participation (Natural England 2006a).

By All Means, one of the action projects, focused on providing access to Kent's countryside for disabled people. Key benefits for participants in the project included increased confidence, as well as improved self esteem and sociability.

Other evidence has highlighted the potential role that access to natural green space can play in the context of education. Anecdotal information from the Forestry Commission's Forest Schools programme, and from rehabilitative pilot programmes with offenders and drug addicts, has suggested that the people who are failed by mainstream education provision are those that benefit most from outdoor environmental activities, both in terms of learning skills and personal development. Natural England is working with the Forestry Commission, the Ministry of Justice and other partners to develop a more robust evidence base about this relationship.

4.5.2.3 Health and wellbeing

There is a growing evidence base around the health and well being benefits of access to the natural environment.

Health inequalities are a significant problem, with people in the poorest areas having the shortest life expectancy and highest infant mortality. Those at risk of the worst health often live in poor environments, which contribute to chronic stress, low self esteem, obesity and physical inactivity. This discrepancy has not improved despite significant investment in the poorest areas. One of the challenges in terms of providing evidence to support this link is the relatively long time lag between interventions designed to improve health and the resulting change in health outcomes.

A large study of over 250,000 people in Holland has shown that the perception of health was related to the percentage of green space within a 3 km radius. Those with more green space felt the most healthy, with the strongest results amongst the poorest people (Maas *et al.* 2005). In Chicago, those living in poverty yet with greenery around are better able to cope with stress and major life events than those with barren surroundings, suggesting that the natural environment can help people cope with stress (Kuo 2001). There is an increasing understanding that physical activity undertaken in a natural environment, so-called 'green exercise', creates an immediate increase in self esteem and a more positive state (Kuo 2001).

Increasingly patients are being advised by health professionals to take physical activity, including walking schemes in the natural environment as well as gym-based activity. The *Walking Your Way to Health Initiative* (WHI) is a joint initiative between Natural England and the British Heart Foundation. WHI is for everyone with an interest in walking for health, but

The benefits of good quality urban green spaces: Queen Square Bristol

Good quality urban green spaces can provide significant economic, environmental, social and health benefits. Green and recreation spaces can attract businesses to an area and in some cases has been a key component of the economic success of new developments.

Prior to restoration in the 1990's, Queen Square in Bristol was bisected by a busy dual carriageway. Much of the square was used for parking and the remaining green space was largely inaccessible. By 1990 around one third of the office space around the square was vacant.

The aim of the restoration was to restore the historical character and create a tranquil public space. The dual carriageway was closed, parking was restricted and a pleasant green space was created.

Use of the square by pedestrians has increased markedly and a strong community of small professional businesses has developed. The business occupancy rate is high for properties overlooking the square.

Properties on the square command 16% higher prices than similar buildings situated just two streets away with no square to overlook. Higher property values are not a benefit per se but are a partial reflection (proxy) of the value of some of the above benefits that residents receive as a result of being in close proximity to good quality green space. Using differences in property prices as a measure of value is likely to provide an underestimate. For example it is likely that such measures will not capture all the above benefits and will not include an assessment of the benefits for non-resident visitors.

Source: CABE SPACE 2005

particularly those who take little exercise or who live in areas of poor health. The initiative offers information, support and encouragement to complete beginners, existing walkers and health and leisure professionals. WHI has helped to create over 525 local health walk schemes with volunteer walk leaders helping people to start and continue with physical exercise to benefit their physical and mental wellbeing (Natural England 2008a). There are sister schemes in Scotland and Wales. Care farming is an initiative in which commercial farms, woodlands and market gardens work with health and social care agencies to provide basic farming activities to improve participants' physical and mental health and wellbeing. A recent report (Hine *et al.* 2008) found that 64% of the care-farming participants surveyed experienced an improvement in their self esteem. Other reported benefits include improved physical health, independence, formation of a work habit and development of social skills. In a case study on a persistent offenders scheme on a care farm in Shropshire, West Mercia constabulary estimate that the savings to the community on just two offenders were £47,741.

4.5.2.4 Community cohesion

A sense of place, combining both our environment and our community, gives us an identity and a feeling of belonging, and a number of initiatives are designed to contribute to this sense of place.

The aim of the *Doorstep Greens Evaluation*, launched in April 2001 (Parks Agency 2005), was to provide grants of between £10,000 to £150,000 to local communities to help them to create and manage their own special local open space. Almost £13 million was provided by the Big Lottery Fund as part of the *Green Spaces and Sustainable Communities* programme with a further £15 million donated from other funders. By the end of 2006, the initiative had achieved 194 individual Doorstep Greens. The projects have nearly all been led by the community, which retain a dominant role in the planning, development and implementation.

4.5.3 Changing public behaviours

The broad objectives of enhancing and protecting the natural environment can only be secured through widespread public support and action. There is a widely held assumption that engagement with the natural environment can motivate people to espouse pro-environmental behaviours. However, there appears to be little or no evidence of the extent to which this engagement then leads to 'green' and ethical consumption choices or on the impact that those choices make on the individual's actual 'eco-footprint'.

This is confirmed in recent work on understanding and influencing environmental behaviour (Defra 2008b). This study reported that the greatest influences on people's behaviour are their perceptions of what is approved and accepted by the groups they identify with, particularly the 'micro-communities' with whom they interact – neighbours, friends in the pub or colleagues at work.

The study also highlighted the patterns of disconnection that exist between espoused values and actual behaviours. For example, unwillingness to reduce driving and air travel emerges as a particular barrier to reducing unsustainable consumption.

There is a requirement to secure more evidence and a better understanding of the issues at play here, and on this basis to develop more effective approaches to changing public behaviours.

Kirkby Thore Doorstep Green

The Sanderson's Croft Estate in the village of Kirkby Thore, near Penrith, has about 70 houses, most of which are occupied by housing association tenants. Although the estate houses many families, before the Doorstep Green project began there was nowhere for the children to play. A traditional playground had been vandalised some time ago and the play equipment removed.

Kirkby Thore's 0.28 ha Doorstep Green has been created following the demolition of three houses and two rows of garages in the centre of the estate by the owners Eden Housing Association. With concerns over the estate's poor reputation, empty houses and no waiting list, Eden Housing together with local residents felt that the Doorstep Green presented a good opportunity to improve the estate.

The project has contributed to restoring pride in the area and creating a framework for long-term sustainability, and all the properties are now let. This shows how high quality green space can influence choice of housing and improve the reputation of a residential area.

Chapter 4 Enjoying the natural environment

Evidence gaps

Areas where we believe we need more evidence on the condition of England's natural environment, how it is used and the most effective mechanisms to address the challenges we face.

- 1 People's use of the natural environment including the extent and nature of their engagement with green space locally.**
- 2 Nature and scale of the benefits to individuals, groups and society from engagement with the local environment.**
- 3 People's motivation for, and preferred methods of, engaging with the natural environment.**
- 4 Relationship between engagement with the natural environment and people's motivation to adopt pro-environmental behaviours.**
- 5 The socio-economic benefits arising from people accessing the natural environment.**