Key messages

• The natural environment plays an important part in promoting and maintaining health and wellbeing. It can also aid recovery from ill health.
• Contact with nature in shared areas can increase social interaction and mental wellbeing.
• Nature has been shown to reduce aggressive behaviour with different groups, including people suffering from Alzheimer’s disease. Even short walks and looking at images of nature can reduce negative feelings, such as anxiety and anger, and increase positive feelings.
• Some studies have suggested that the higher the quality and accessibility of the green space, the more likely it is to encourage high levels of walking and other physical activity.
• A number of studies have focused on the effect of exposure to nature in organisational settings, including hospitals and prisons, with positive effects observed in recovery time, painkiller requirements, and negative reactions.
• Access to green space is also associated with key determinants of inequalities in health. For example, a study in the Lancet suggested that income-related inequality in health would be less pronounced in populations with greater exposure to green space.

The Sustainable Social Care Programme encourages commissioners of adult social care to promote sustainable development across the sector, particularly to reduce carbon emissions and adapt to climate change. Sustainable development requires us to consider social, economic and environmental outcomes simultaneously. It also means having regard for the needs of future as well as present generations. For further information about the programme and related resources, please visit www.scie.org.uk/adults/sustainablesocialcare/index.asp

How does the natural environment improve health and help reduce health inequalities?

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Physical health

Local access to safe natural green space is associated with high levels of physical activity, (Bird, 2004, Cohen et al, 2007, Health Council of the Netherlands, 2004), and lower levels of obesity within communities (Ellaway et al, 2005). Evaluation of the national Green Gym® scheme run by BTCV concluded that the overall physical health status of participants improved significantly, and most significantly for people with the poorest physical and mental health (BTCV 2008).

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Sustainable social care: the natural environment

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exercise (Pretty et al., 2005). Mental health charity Mind found that self-esteem levels increased and depression levels decreased following a green walk (Mind, 2007). The increased physical activity (Ellaway et al., 2005, Cohen et al., 2007) and social cohesion (Kuo et al., 1998, Lewis, 1996), associated with access to green space are known to increase resilience to stress.

**Air quality, pollution and climate change**

There is a strong link between poor air quality and poor health and premature mortality. It is estimated that it reduces life expectancy in the UK by an average of seven to eight months (DH and DT, 2010). Green space and vegetation have a proven positive effect on air quality. For example, there is evidence that urban trees remove large amounts of air pollution and consequently improve urban air quality (Nowak et al., 2006). One study (Gill et al., 2007) found that an additional ten green spaces can also mitigate ‘urban heat islands’ by up to 4°C (7°F), offering help with climate change (London Climate Change Partnership, 2002).

**Active travel**

Accessible green space provides an incentive for walking and cycling. Walking or cycling can be a quicker and lower cost alternative to the car or public transport for short trips, and are often the easiest ways for most people to get more physically active, as well as increasing access to jobs and services for many.

**Social capital and cohesion**

Natural spaces offer opportunities for relaxation (Royal Commission on Environmental Pollution, 2007b), and have been shown to facilitate higher levels of social contact and social integration (Coley et al., 1997, Sullivan et al., 2004), particularly in underprivileged neighbourhoods (Pretty et al., 2007, Sullivan et al., 2004). Studies have shown that access to a natural environment provides a meeting place for all ages and has a positive effect on social interaction and cohesion for different age groups (Bird, 2007).

**Health inequalities**

By classifying the population of England on the basis of income deprivation and exposure to green space, research has shown that health inequalities related to income deprivation are lower in populations living in the greenest areas (Mitchell and Popham, 2008). The Marmot Review sets out how the physical as well as social characteristics of communities, and the degree to which these enable and promote healthy behaviours, contribute to inequalities in health (The Marmot Review, 2010).

**Nature and the elderly**

There is evidence that contact with nature is valued very highly by the elderly, including fresh air and sensory experience: sight, smell, touch and hearing. As an elderly person’s world is reduced as they become less active, access to even a small pocket of nature will be important.

Contact with nature significantly improves concentration, and, for people with dementia, it can introduce positive experience, improve their sense of coherence and reduce aggression and agitation (Bird, 2004).

**Benefits to social care service users: case studies**

The Marmot Review recommends public policy which improves the availability of good quality open and green spaces across the social gradient. Below are just a few short examples of practical action by local authorities, commissioners, provider organisations and people who use services themselves. They demonstrate how contact with nature and environmental activity contribute to positive social care outcomes. Further detail and additional examples are available on the SCIE website.

**St Helens, Merseyside: horticulture and exercise programme**

The council, St Helens Chamber, St Helens Coalition for Disabled People and St Helens
People’s Choice have supported the creation of a specially equipped garden at a resource centre for adults with learning disabilities. As well as boosting the wellbeing of attendants through gardening and outdoor exercise, the project aims to develop the centre as a social enterprise for people with learning disabilities. This involves hiring out the centre as a conference, training and activity venue to various groups.

Source: Improvement and Development Agency

**Phoenix Futures Conservation Therapy Programme: rehabilitation and recovery**

The Phoenix Futures Programme, in partnership with Natural England, contributes to the therapeutic rehabilitation of individuals with substance misuse problems through their active involvement in conservation projects on National Nature Reserves. Clients undertake a variety of work including habitat management, boundary construction and footpath repairs. Success has been demonstrated by increased retention in effective treatment.

Source: Natural England/Phoenix Futures

**Portsmouth: intergenerational gardening schemes**

At Alexandra Lodge care home, two volunteers run gardening sessions every week for residents. The group grows fruit and vegetables, as well as a wide variety of plants. The garden is well used during the rest of the week. Age has proved no barrier to taking part, with one group member 100 years old. The Alexandra Lodge group is now linked to Stamshaw adventure playground where local grandparents and a volunteer gardener run a gardening group for children. These gardening schemes have helped to boost the activity levels of participants, and provide opportunities to socialise across age groups.

Source: Improvement and Development Agency

**St Anne’s Community Services: new skills and confidence**

Bevin Court is a hostel in Sheffield for men aged 18+ who need temporary accommodation. One of their successful gardening projects, growing hanging baskets, not only raised money but also led to their being invited to contribute to the Places of Change Show Garden which was awarded a silver medal at the Chelsea Flower Show in 2010. A collaboration between government agencies, the Eden Project, Homeless Link, and the London Employer Accord, a journey through the garden represented the recovery of a homeless person via a path beginning with weeds leading to a beautiful ornamental garden with flowers and fountains. Participants from across the country were involved at every stage: from design, planting, gardening, construction, and carpentry during the site development, to on-site hospitality and multimedia facilities during the week of the show. In doing so, they gained new skills and confidence, and discovered new talents.

Source: St Anne’s Community Services

**RSPB: volunteering**

Wildlife charity the Royal Society for the Protection of Birds (RSPB) facilitates access to the environment, including through volunteering. One volunteer, who suffers from epilepsy and Asperger’s syndrome, came to Rye Meads nature reserve following a difficult period in his life including unemployment and bouts of depression. He says:

“Volunteering at the RSPB has completely changed my outlook and given me a new focus, making me feel better both mentally and physically.”

Source: RSPB

**Walking for Health: local schemes across the country**

Walking for Health (WfH) www.wfh.naturalengland.org.uk/ is a Natural England initiative offering information, support and encouragement to beginners, existing walkers and health and leisure professionals. WfH has helped to create more than 590 local health walk
schemes, trained over 40,000 volunteer walk leaders and, since 2000, is estimated to have encouraged more than a million people to walk more.

Source: Natural England

Resources and further information

The Sustainable Development Commission publishes evidence and good practice on health and related topics, and supports sustainable development in the NHS via the Good Corporate Citizenship Assessment Model [www.corporatecitizen.nhs.uk/pages/about.html](http://www.corporatecitizen.nhs.uk/pages/about.html) which is also applicable to other public service organisations. *Sustainable development: the key to tackling health inequalities* (2010) makes their contribution to the Marmot Review available to a wider audience.

[www.sd-commission.org.uk](http://www.sd-commission.org.uk)

The Improvement and Development Agency (IDEA) website’s Knowledge pages are a searchable source of information, policy guidance and good practice for local authorities including in the areas of social care, health and the environment.

[www.idea.gov.uk](http://www.idea.gov.uk)

The Centre for Local Sustainability at the Local Government Information Unit helps councils to improve management of environmental, social and economic resources. The report of the Sustainable Social Care Local Authority Learning Network convened by LGIU is published as *Independence, community and environment* (Bradshaw et al, 2010).

[https://member.lgiu.org.uk](https://member.lgiu.org.uk)

The Commission for Architecture and the Built Environment (CABE) provides information, guidance and case studies on design topics including public space, sustainability and health.

[www.cabe.org.uk](http://www.cabe.org.uk)

BTCV is a national charity for environmental conservation volunteering. The Green Gym® scheme helps people take exercise outdoors and develop new skills, while participating in activities which improve the environment.

[www2.btcv.org.uk](http://www2.btcv.org.uk)

Natural England supports access to the environment in a number of ways including the Walking for Health programme. *The cost of doing nothing* (Nature England, 2010) is a powerpoint presentation resource for co-ordinators and health professionals who wish to promote WfH.

[www.naturalengland.org.uk](http://www.naturalengland.org.uk)

RSPB actively promotes the links between health and the environment, and has published a number of reports and accessible leaflets providing evidence and case studies.

[www.rspb.org.uk](http://www.rspb.org.uk)

Greenspace is a charity which works to improve parks and green spaces by raising awareness, involving communities and creating skilled professionals. It provides and signposts information and resources online.

[www.green-space.org.uk](http://www.green-space.org.uk)


*Sustainable social care: climate change* provides an overview of the key issues for adult social care professionals (Social Care Institute for Excellence, 2010).
References


This briefing draws on a number of sources, and we are especially grateful to our partner organisations the UK Sustainable Development Commission and the Improvement and Development Agency for their guidance and support. In particular, we draw on the SDC’s Healthy Futures 6 The natural environment, health and wellbeing (SDC, 2007).

SCIE’s At a glance summaries have been developed to help you understand as quickly and easily as possible the important messages on a particular topic. You can also use them as training resources in teams or with individuals.

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