



for birds
for people
for ever

Natural Health



'Nature and green space can be seen as a great outpatient department whose therapeutic value is yet to be fully realised.'

Dr. William Bird

Natural Fit and Natural Thinking

the evidence to date



Public health problems present chronic and expensive challenges to the UK: each year physical inactivity costs us over £8 billion, and the total cost of mental healthcare in England is £41.8 billion. Both these figures include substantial costs in the care sector (to the NHS, local authorities, privately funded services, family and friends) and in the economy, caused by people being unable to work.

The links between our natural environment and public health have long been recognised, and was a factor in the establishment of both urban parks and the National Parks. However, today's policy culture requires evidence to justify such connections. While research provides consistent clues to a positive link between nature and health, this is seldom reflected in health care or education policies, planning guidelines or economic strategies. Two reports for the RSPB by Dr William Bird, *Natural Fit* and *Natural Thinking*¹, analyse the evidence linking physical and mental health to the natural environment.

Physical activity

About 60% of the UK's population is physically inactive. Obesity, a major symptom of inactivity, is growing rapidly, affecting over 20% of the population, including 16% of children.

Natural Fit outlines the benefits for the NHS and society from physical activity. Regular moderate physical activity reduces the risk of heart disease, diabetes, strokes, cancers, disability, osteoporosis, depression, anxiety and sleep problems. It is also a vital component in preventing and reducing obesity.

Walking is the best solution to the public health problems of inactivity. Walking and enjoyment of natural green space is cheap, accessible to the majority of the population, and one of the few leisure activities that is increasing. With walking, the motivation to continue with exercise comes from the natural environment and social contact with walking companions. Drop-out rates for 'health walks' programmes are much lower than for people attending gyms, because exercise becomes a secondary motivation, surpassed by the attraction and enjoyment of contact with nature.

Mental health

The World Health Organisation estimates that depression and depression-related illness will become the greatest source of ill-health by 2020. Mental health disorders affect one in six people. Mental health and wellbeing are not just the absence of disease but a state in which a person is most fulfilled, can make sense of his or her surroundings and has purpose in life.

¹available at www.rspb.org.uk/policy/health



Natural Thinking shows in detail how natural green space can lift our spirits and reduce mental health problems:

- nature reduces stress within minutes of contact
- patients undergoing operations and tests in hospital need fewer painkillers if exposed to views of nature
- nature can reduce violent behaviour due to its restorative effect on the part of the brain that helps reduce irritability
- elderly people who have close access to a place where they can relax and enjoy nature show significantly greater satisfaction with where they live.

Some of the strongest findings relate to children's interaction with nature:

- contact with nature improves children's concentration and self-discipline, but children have less contact with nature now than at any time in the past
- playing in a natural environment improves children's social, mental and physical development
- the behavioural symptoms of children with attention deficit disorder (ADHD) are reduced when children play in a natural environment
- children use the natural environment to recover from stress and this helps to reduce mental health disorders.

Nature, through the role it plays in stimulating and encouraging physical activity, and through the direct impact it has on our emotional state, can help alleviate a range of mental health problems.



Medicines and nature

To date, less than 1% of rainforest plants have been examined for medicinal uses, but even this tiny percentage yields a quarter of all prescription drugs. In the US, half of prescribed drugs contain, or are derived from, compounds from nature. However, nature is under severe and increasing pressure around the world. The most rapid rates of biodiversity loss are occurring in developing countries, but this has direct consequences for the health of people all over the world, including in the UK. The loss of plant and animal species means the permanent loss of potentially valuable new medicines or medical information. Human health ultimately depends on the health of other species and the integrity of the global environment².

²RSPB (2005) *Wellbeing Through Wildlife*, RSPB.



This page, both by Andy Hay (rspb-images.com)

The RSPB and public health

The RSPB is Europe's largest wildlife charity, with over one million members, and it manages more than 100,000 hectares of land on 200 nature reserves. The RSPB facilitates access to the environment for people of all ages both physically, providing safe access to high-quality wildlife sites, and intellectually, enabling people to understand and engage with wildlife. In 2006, there were:

- at least 1.5 million visits to RSPB nature reserves; as well as conserving biodiversity, these provide a major recreational resource
- over 60,000 school pupils making educational visits to RSPB sites
- over 500,000 visits to Aren't birds brilliant! watchpoints
- more than 470,000 people, including 86,000 children, watching their gardens and local parks during our Big Garden Birdwatch weekend in January
- over 5,000 primary and junior pupils benefiting from nature-based education at 300 RSPB-supported Bird Friendly Schools
- 12,400 volunteers of all ages carrying out over 655,000 hours of work for the RSPB.

"Wildlife is good for us, it's a natural tonic that lifts our spirits, clears our minds and helps us get some exercise, too! So making space for nature doesn't just help birds, plants and animals – it's good for people."

Dr Mark Avery, Director of Conservation, RSPB



The RSPB recognises the importance of the partnership between natural environment NGOs (non-government organisations), private land managers (such as farmers), and the public sector in relation to environmental management. If access to nature is to play a stronger role in public health in the UK, this partnership needs to work in new ways to increase access to the natural environment. The RSPB believes this should be achieved in conjunction with improvements to the UK's environment and biodiversity, funded by the Government. For example, public payments to farmers should be targeted to help them create more natural habitats for wildlife and people. In this way, access need not harm the very resources people wish to enjoy, including wildlife.

Acting on the evidence

We seriously underestimate the health benefits of contact with nature. The way we manage people's health, and the natural environment, must be both co-ordinated and changed to take the available evidence into account. The NHS should include contact with nature and outdoor exercise in the tools it uses to treat and prevent health problems. The environment sector should facilitate this by providing access to nature in a way that supports health needs. Therefore, maintaining and restoring the quality of the natural environment, including its richness of wildlife, should be regarded as a long-term investment in our nation's health.



Sarah Oppenheimer



Lapwing by Chris Sargeant (rspb-images.com)

Volunteering your way to health

Recuperation and wildlife – case studies

Sustaining physical activity has proven health benefits.

David Crew

David Crew (38) suffers from both epilepsy and Asperger's syndrome (which is similar to autism) and came to the RSPB to start volunteering following a difficult period in his life. Unemployment and bouts of depression saw David in a pretty low state, and his illness meant he faced mixed reactions in the world of work and volunteering; it took all the efforts of his friends and family to get him back out into the world. David has been volunteering at RSPB Rye Meads nature reserve for over three years, and carries out a range of physically demanding tasks. He says: 'I like outdoor work but had spent several months in my house not really mixing with other people. I thought this would be a good opportunity to enjoy some physically demanding outdoor work.'

In fact, David credits volunteering for the RSPB at Rye Meads with building up his strength as well as his mind, saying he has never felt this fit. 'Tasks like digging holes are a real source of stress relief and act as a therapy – a way of letting off some steam. I can also feel myself getting fitter and stronger and this all adds to my confidence. I enjoy lending my time to worthy causes and find that doing so gets me out and about and back into society following a very dark spell. Volunteering at the RSPB has completely changed my outlook and given me a new focus, making me feeling better both mentally and physically.'



Andy Hay (rspb-images.com)
Mark Hamblin (rspb-images.com)





Nigel Dun

Nigel Dun suffered severe physical injuries in a horrific motorcycle accident, and subsequently had a mental collapse. He decided that volunteering one day a week on the reserve at the RSPB Lodge headquarters in Sandy, Bedfordshire, would be worthwhile for himself and the community. 'Some people who have suffered bad injuries either mentally or physically become disinterested and don't want to leave the house,' he explains. 'I really wanted to get involved with something like this, and it enables me to get out and about and work with plants, which I love.'

Nigel's injuries have never been an issue to those he works for at the RSPB and he says he has never felt restricted: 'I can forget about everything while I'm out working at the Lodge and no one makes me feel any different. I obviously informed the RSPB of my condition when I started out, but I was immediately accepted and my tasks are adapted accordingly. I feel I do a really useful job and am making a real difference to my local community.'



David Osborn (rspb-images.com)



Andy Day (rspb-images.com)

Health walks Wildlife for All

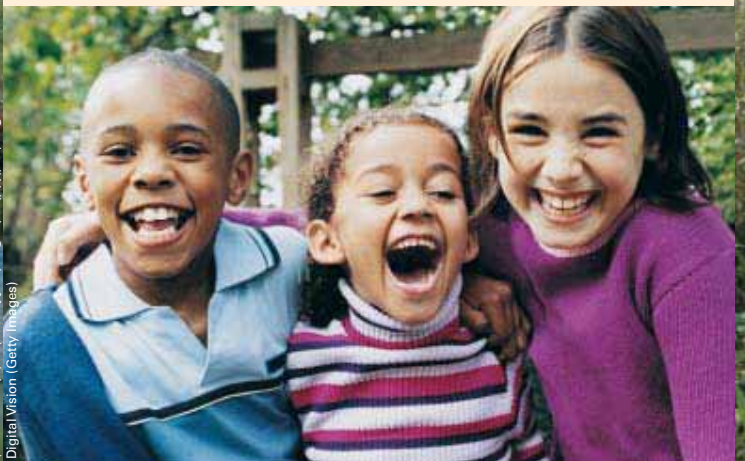


RSPB Sandwell Valley nature reserve provides a haven for people and wildlife a few miles from the middle of Birmingham. Regular health walks are organised at RSPB Sandwell Valley nature reserve and Forge Mill local nature reserve in Sandwell. A dedicated group of walkers meet at the RSPB visitor centre and cover a two-mile route around the reserves. Feedback from walkers shows that they feel safer walking as part of an organised and sociable group.

Wildlife for All, a partnership project between the RSPB and London's Royal Parks, aimed to draw new audiences into The Royal Parks so they could find out more about wildlife. These new audiences included families with pre-school children, teenagers, ethnic minorities, people with disabilities, urban dwellers and low-income households.

Throughout the three years of the project, the Wildlife for All team actively engaged with over 36,000 people through staffed wildlife watchpoints, targeted outreach work with community groups and formal education sessions. For example, the Black Environment Network (BEN) put project staff in touch with a Black and Minority Ethnic (BME) community group near each of The Royal Parks, and helped facilitate a full-day consultation exercise with representatives from a range of BME groups. In many cases, the groups that the project worked with are continuing to develop their relationship with their local Royal Park and continue the activities after the end of the project. The project, supported by the Heritage Lottery Fund, won the 2006 'Animals and the Environment' category at the Charity Awards.

Sandwell Valley by Carolyn Merritt (rspb-images.com)



With thanks

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Barn owl by Nigel Blake (rspb-images.com)



Dr William Bird (above) is a GP in Reading. He set up the first Health Walk scheme and Green Gym in the mid 90s and brought the Countryside Agency and British Heart Foundation together, resulting in Walking the Way to Health. He has worked on a variety of public health, physical activity and environmental access issues. He is currently Natural England's strategic health advisor.



Birch of Sands by Sue Tranter (rspb-images.com)



**'Humans need the wild world, and now we can prove it'.
Simon Barnes, Chief Sports Writer for the Times**

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The RSPB is the UK charity working to secure a healthy environment for birds and wildlife, helping to create a better world for us all. We belong to BirdLife International, the global partnership of bird conservation organisations.

As a charity, the RSPB depends on the goodwill and financial support of people like you. Please visit www.rspb.org.uk/supporting or call 01767 680551 to find out more.