Natural Spaces and Health: Mapping Accessible Natural Greenspace in Wales

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Short title: Natural Spaces and Health: Mapping Accessible Natural Greenspace in Wales, UK

Key Message: Public green spaces enhance both mental and physical health. Local authorities in Wales promote health by increasing and making natural spaces accessible.


What was the problem?

As a post-industrial country, Wales has been left with a legacy of ill-health which is causing widespread concern. Out of a population of 2.8 million, Wales has 100,000 economically inactive people. 23% of the population report some kind of limiting illness or disability, 56% of adults and 33% of children are overweight or obese (1). In economic terms, the cost of physical inactivity to the Welsh economy in 2005 was estimated to be over £650 million per year (approximately $345 million per year) (2a, b).

What was done to solve it? How were ecosystem services considered?

While improvements to green space increase biodiversity, they also greatly improve human health. Moderate physical exercise is known to be effective in promoting physical health. For example, research shows that regular exercise or just using green or natural space reduces the risk of heart disease and of hypertension (3). People who frequent parks experience less health problems and less stress symptoms, (Grahn, oral comm.) and those living in greener environments report fewer health complaints. There is also considerable evidence that interaction with nature bolsters mental health (6). For these reasons, green spaces for recreation and exercise are considered to provide important ecosystem services in Wales.

What was needed to solve the problem in terms of data, resources and capacity?

A detailed literature review was carried out to establish the value of natural space to human health and well-being, amongst other benefits (4). The review also pointed out the importance of well-designed, accessible natural spaces.

The Countryside Council for Wales (CCW) recommended that at least 2ha of accessible natural space per 1000 population (5). The following ratios are also recommended:

- no person should live more than 300m from the nearest area of natural space;
- 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.
Providing adequate quality green space in the right places first required a survey of all major
towns and cities in Wales to identify existing natural green spaces and their accessibility and
whether they were of high enough quality to encourage people to use them.

The Countryside Council for Wales developed an assessment methodology (toolkit) and
offered a fixed grant of £8,000 (GBP) to each of the 22 local authorities in Wales to survey the
green spaces in their main population centers.

What resulted from taking an ecosystem service perspective? Did the approach
influence public management or result in policy uptake?

The Welsh Assembly Government (WAG) set a series of policy targets to encourage green
space provision to promote human health. The Wales Environment Strategy 2006 – 2026 is a
long-term strategy recognizing that poor quality environments which lack parks and green
spaces can have a detrimental effect on quality of life, health and well-being. The strategy
aims for easy, equitable access to ample, quality, green space. The Strategy for Sport and
Physical Activity: Climbing Higher set out a commitment that, by 2023, no-one should live
more than a six minute walk (300m) from their nearest natural green space (2a). As a first
step to achieve the aims of the policy, most local authorities have conducted an initial
assessment of natural green spaces in their main towns and cities. They are now developing a
series of local policy responses to encourage, amongst other things, the provision of green
space during building developments as well as community engagement to survey and improve
green space. These interventions concentrate on changing policy and regulations to achieve
“greening” at little or no extra cost by refocusing resources. Policy changes will affect practice
shortly, resulting in increased “greening” of towns and cities.

What else was necessary for it be influential?

The key to the delivery of accessible natural green space in Wales was close co-operation
between the CCW and the WAG. CCW is an agency of WAG but links had to be made with
different departments in WAG and to politicians at the highest level to ensure elected
representatives had the right information on which to base their decisions. This approach
would not have succeeded unless emphasis had been placed on nature’s ability to promote
human health – as opposed to only emphasizing the benefits of biodiversity.

Central to the credibility of this approach was the development of both the theory, and the
standards of provision, for accessible natural green space by the Urban Forum of the
UNESCO UK Man and the Biosphere Committee. This body is independent of government, is
politically neutral and has highly respected practitioners and academics in its membership.

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References:

(1) Welsh Health Survey 2008 downloaded on 4 May 2010 from

(January 2005) ISBN 0 7504 3585 2

(2b) Food and Physical Activity Branch, Welsh Assembly Government 2009, Creating an
active Wales, Welsh Assembly Government, Cardiff.
(3) For further statistical details and references to peer-reviewed papers go to http://www.essex.ac.uk/bs/staff/pretty/green_ex.shtm (viewed 4 May 2010)

(4) Developing Standards for Accessible Natural Greenspace in Towns and Cities. CCW Bangor. 2002
