15 Leisure in the landscape: rural incomes and public benefits

Nigel Curry

The uplands are a popular destination the world over for those seeking to enjoy outdoor recreation. In the Asian massif they have been places of pilgrimage, of human endeavour (particularly mountain-climbing) and of adventure tourism. In the New World they have been places of wildness, engendering a national sense of belonging where access to them has often been based on traditions of the ‘old country’. In Europe, walking in the uplands had a certain social cachet. When the train brought transport and mobility to the masses, a stroll in the Alps had an exclusivity about it. In England, the uplands were the theatre where access battles were determined. The mass trespass of Kinder Scout in the Peak District was to have a significant influence over postwar access legislation and the introduction of national parks.

Whilst focusing on England and Wales, this chapter illustrates much that is of wider relevance to upland access. The mechanisms of access (section 2) have many parallels with land rights issues in different countries, and the nature of leisure patterns (section 3) has similarities with most developed countries. A number of values derive from this rural leisure participation that are also internationally relevant. For many rural areas, income from tourism can provide a mainstay to the rural economy, but this is not a panacea. There are costs associated with seeking to make tourism sustainable, and with its small scale (section 4). But not all values from rural leisure consumption are market ones. There can be benefits from the environment of upland areas (in all parts of the world) through maintaining its quality in order to attract the visitor (section 5). For consumers, too, much consumption of countryside recreation is free at the point of access and can provide health benefits – a focus for the final section of this chapter.

The nature of the access resource

The mechanisms through which we use upland areas for outdoor recreation vary the world over, and have been determined by a long history of cultural traditions, and land-use practices, laws and institutions (Williams, 2001). In some countries, such as England and Scotland, public rights of access to the upland resource are being extended; whilst in others, such as New Zealand and America, there are moves towards ‘privatisation’. Whatever access
mechanisms are adopted, the need to understand access rights is critical to the confident use of the uplands.

Certainly, the available access resource is growing in England and Wales. Between 1990 and the introduction of the Countryside and Rights of Way Act, 2000 (the CROW Act), it has been estimated that the net growth in the access resource was at least 450,000 hectares of land and some 20,000 kilometres of linear access, an increase of about 20 per cent (Curry, 2001). The CROW Act 2000 changed the available resource in England and Wales considerably. Its main provisions for rights of way and open country are in Box 15.1 below.

The passing of the CROW Act 2000 was, however, controversial. Even though the Act provided a somewhat limited ‘right to roam’ (Parker and Ravenscroft, 2001), it was seen by many as one element of a larger ‘urban attack’ (including the ban on fox hunting) on the rural way of life (Parker, 2007). In reviewing the implementation of the CROW Act, the National Audit Office (NAO) (2006) and the Welsh Audit Office (WAO) (2006) suggest that it was managed successfully, but both raise questions about the levels and types of use that these new acts have brought about. Against a budget of £28 million, implementing the provisions of the Act had cost £69 million by March 2006. The NAO (2006) concludes (p. 2): ‘. . . it is difficult to establish to what extent the outcome justified the costs incurred.’

**Community involvement**

In addition to provisions for open country and the rights-of-way system as access resources, part V of the CROW Act also introduced Local Access Forums (LAFs) to reinforce a community involvement ethos in provision – an ethos that has grown in most Western economies in the last twenty years.

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**Box 15.1. Main provisions of the CROWN Act 2000**

*Part I* provides access to open country (definedas mountain, moorland, downland and heathland) and to common land. Increase of access land by 6.5 per cent in England and 21 per cent in Wales. Available for public use by 31 October 2005. Provision is allowed only on foot except on certain rights of way, and certain closures, restrictions and exceptions are allowed.

*Section 16* allows landowners to dedicate any land for access purposes.

*Part II* modernises the public rights of way system with nearly fifty separate sections and clauses covering maintenance and obstruction, definition and re-definition, restrictions and changes, including ‘finishing’ the definitive map.
consistent with the ‘citizenship’ agenda. These LAFs are now established in England and Wales for most local highways authorities to provide independent advice on public access to land, for open-air recreation and for other purposes. An early review of their operation suggested that, whilst some were operating effectively, others had found it difficult to recruit members and clarify their objectives (Short et al., 2005).

This community involvement in access had had earlier successes. The Parish Paths Partnership had been designed in the mid-1990s to address the increasingly visible problems with the maintenance of, legal definition of, and publicity for the Statutory Rights of Way system. Other community schemes had been running at a county level, and community-based ‘greenways’ were introduced in the mid-1990s (Land Use Consultants, 1997); but the flagship initiative has been the development of Millennium Greens. These were introduced as areas of open space, developed, implemented and managed into the longer term by communities themselves. The scheme opened in October 1996, and by the time it closed to new proposals at the end of July 1998 some seventy-six MG agreements had been secured and nearly 800 further proposals were being actively assessed (Millennium Greens Newsletter, 1998). Such initiatives have ensured that community involvement has remained an important part of the national access portfolio.

Future developments in provision

For England and Wales, the WAO’s (2006) suggestion that the lessons from the CROW Act 2000 might usefully be applied to access to the coast chimed in England with Department for the Environment, Food and Rural Affairs (Defra) 2004 strategy to improve coastal access and with the Labour Party’s rural manifesto of 2005. In July of that year, ministers proposed that action to improve coastal access should be an early ‘flagship’ initiative for Natural England, and by 2007 the intention to secure access along the length of the English coastline, make it more accessible and balance the needs of wildlife, landscape and enjoyment was announced (Natural England, 2007a).

With the restructuring of the recreation portfolio in government in 2006 from the Countryside Agency to Natural England, the production of a national outdoor recreation strategy was underway by the beginning of 2007. This is to have a strong orientation towards healthy lifestyles, and promoting and marketing outdoor recreation, particularly to the young and the disabled. But does this reflect what people want?

Shifts in rural leisure patterns

National leisure patterns

One of the principal concerns of the NAO (2006) and the WAO (2006) in monitoring the implementation of the CROW Act 2000 was the extent to
which this net new access provision was likely to be used. Their concerns are well founded. Any use of open country is simply likely to be a diversion from elsewhere because overall the consumption of outdoor recreation in Britain has been falling since about 1977.

Using the National Surveys of Countryside Recreation, the House of Commons Environment Committee (1995) noted ‘with some surprise’ that there had been no growth in countryside recreation trips at all since the surveys began in 1977. The successor UK Day Visits Survey showed a decline in countryside visits from 1994 to 1998 (Curry and Ravenscroft, 2001), and the 2002–3 Great Britain Survey noted that ‘between 1998 and 2002/03, all day trips to the countryside declined by 12%’ (Great Britain Day Visits Survey, 2004). Fewer than 25 per cent of all day visits were to the countryside.

Whilst some of this decline, particularly more recently, could have been influenced by foot-and-mouth disease (which is considered in the following section), the 2005 England Leisure Visits Survey suggests not. All leisure visits in this year were down 33 per cent on 2002–3, and visits to the countryside were down by a huge 45 per cent² (Natural England, 2006). Over 40 per cent of the adult population never visited the countryside at all during the year. The structural decline in rural leisure consumption, according to the government’s own surveys, continues apace. And, as for the effects of the CROW Act 2000, only 0.05 per cent of leisure visits was to open country; but, even then, only 34 per cent of the people who made these visits were aware that they were on open country (Natural England, 2006). All this has led Dr Helen Phillips, chief executive of Natural England, to note that ‘People are missing out on the wide range of benefits that the natural environment offers, particularly to their health and wellbeing’ (Natural England, 2007c).

The reasons for this lack of consumption are consistent over time and they are largely to do with people’s preferences rather than with constraints. The UK Day Visit Surveys for both 1996 and 1998 (Social and Community Planning Research, 1999) indicate that around 20 per cent of non-visitors have no particular reason for non-participation; they simply have not gone. About 18 per cent are too busy to go, and 18 per cent simply have no interest. These patterns are consistent with the reasons for non-consumption in 2005, shown in full in Table 15.1. Here the first four categories (73 per cent of respondents) show that non-visits are due to a lack of interest or of time (although this does include an undefined ‘other’ category).

**Reasons for current patterns**

Why are these consumption patterns as they are? First, a range of ‘intervening home-based leisure opportunities’ (the widescreen television, digital satellite and DVD, the CD player, the computer and the Internet) have created a huge increase in leisure choices. Increasing proportions of leisure time are spent at home in a sedentary way. This lies behind the more recent policy impetus to use outdoor recreation to make the nation healthier – an issue
considered further in the final part of this chapter. Second, as working lives have become increasingly busy, leisure-time budgets have been divided into smaller ‘bites’. Outdoor leisure consumption has become shorter, more intensive, more specialised and, inevitably, more local (Lowe et al., 1995).

Third, Clark et al. (1994) suggest that the increases in personal choice noted in the UK Day Visits Survey result from an information-based society and fuel a market orientation in leisure consumption. Thus, people are attracted to private market goods such as golf courses, sports facilities and holiday village resorts because of their status as well as their enjoyment. They provide exclusivity. This is exacerbated as different social groups express their identity through leisure activity differently, as is explored in the Suckall et al. chapter in this volume. In these contexts, commoditised outdoor recreation becomes less space extensive. The ‘outdoor’ significance becomes incidental in the process of enjoyment. Activity becomes devoid of its social, cultural and landscape context, being replaced by its consumptive context.

The decline in outdoor leisure consumption over the past thirty years is therefore overwhelmingly caused by consumer preferences and leisure lifestyle changes, rather than by any particularly strong constraints on partici-

### Table 15.1 Main reason for not visiting the countryside in England in 2005

(source: data analysed from Natural England, 2006)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No particular reason</td>
<td>4,554</td>
<td>29</td>
</tr>
<tr>
<td>Always too busy/lack of time</td>
<td>3,213</td>
<td>20</td>
</tr>
<tr>
<td>Other</td>
<td>2,413</td>
<td>16</td>
</tr>
<tr>
<td>Not interested</td>
<td>1,229</td>
<td>8</td>
</tr>
<tr>
<td>Physical disability</td>
<td>717</td>
<td>5</td>
</tr>
<tr>
<td>Other health reason</td>
<td>696</td>
<td>4</td>
</tr>
<tr>
<td>Not enough money/can’t afford</td>
<td>585</td>
<td>4</td>
</tr>
<tr>
<td>Lack of suitable means of transport</td>
<td>552</td>
<td>4</td>
</tr>
<tr>
<td>Prefer to go to other places outside of England</td>
<td>466</td>
<td>3</td>
</tr>
<tr>
<td>No-one to go with</td>
<td>223</td>
<td>1</td>
</tr>
<tr>
<td>Too difficult with elderly</td>
<td>157</td>
<td>1</td>
</tr>
<tr>
<td>Don’t know</td>
<td>154</td>
<td>1</td>
</tr>
<tr>
<td>Preferred to spend money on something else</td>
<td>125</td>
<td>1</td>
</tr>
<tr>
<td>Too difficult with children</td>
<td>98</td>
<td>1</td>
</tr>
<tr>
<td>Dislike traveling</td>
<td>95</td>
<td>1</td>
</tr>
<tr>
<td>Lack of information on possible destinations</td>
<td>90</td>
<td>1</td>
</tr>
<tr>
<td>Prefer to save my money</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>No-one to look after matters AT HOME while I am away</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>Access to countryside prevented or discouraged by land owners/managers</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Feel nervous or uneasy about what might happen including personal safety, getting lost</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Lack of information on where access is permitted to countryside visits</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>No-one to look after matters AT WORK while I am away</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

15,532 100
pation. Because of this, significantly, outdoor leisure consumption will not be changed through tinkering with the supply side. Most worryingly, perhaps, is that, in the face of this long-term structural decline in consumption, public provision continues to increase apace and is set to do so into the future, as has been noted in the first part of this chapter.

Rural tourism
Arguments about whether or not rural tourism (and rural recreation) is of any significant economic value to individual localities the world over are evenly balanced. It has been widely promoted as a way of addressing the social and economic challenges of rural areas, particularly peripheral ones (Hegarty and Przezborska, 2005). It offers the potential of being small scale, thus allowing easy entry into the sector, and it can also exploit the environmental, cultural and historic capital of rural areas (Wilson et al., 2001). It is labour intensive (and therefore job-creating) and does not require particularly high skills levels (and is therefore accessible to many).

One of the important economic effects of rural tourism is that it is effectively ‘exporting’ local goods, services and environments, bringing income from outside the region (Silva et al., 2007). This in turn has indirect or multiplier effects through which it helps to maintain the other businesses in rural areas: shops, garages and transport. In this way tourism, particularly in remoter regions, transfers wealth from the richer urbanised areas to the poorer peripheral regions (Telfer, 2002). From this, rural tourism benefits accrue. Some salient characteristics of these benefits in relation to Britain are presented in Box 15.2.

### Box 15.2. Some economic benefits from rural tourism in Britain

(Internet sources)

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>Britain, recreation and tourism rural spend</td>
<td>Circa £14 billion</td>
</tr>
<tr>
<td>2000</td>
<td>Britain, recreation and tourism rural spend</td>
<td>Circa £12 billion</td>
</tr>
<tr>
<td>2005</td>
<td>England-only (after foot-and-mouth) recreation and tourism rural spend</td>
<td>Circa £9.4 billion</td>
</tr>
<tr>
<td>1998</td>
<td>North East of England, recreation and tourism rural spend</td>
<td>Circa £226 million</td>
</tr>
<tr>
<td>2000</td>
<td>South East Region, recreation and tourism rural spend</td>
<td>Circa £1 billion</td>
</tr>
</tbody>
</table>

Other examples:

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>Whale tourism, Scotland</td>
<td>Value to economy £7.8 million</td>
</tr>
<tr>
<td>2000</td>
<td>Walkers and cyclists in Scotland</td>
<td>Value to economy £438 million</td>
</tr>
<tr>
<td>2005</td>
<td>Walkers in Wales</td>
<td>Value to economy £550 million</td>
</tr>
</tbody>
</table>
Economic limitations

But what these figures mean in the context of the economic potential of rural areas more generally is not clear. Some argue that rural tourism as an economic engine has its limitations. Getz and Carlsen (2005), for example, note the small size of rural tourism businesses and limits to the incomes that can be derived from them. In most areas, too, there is little potential for growth. Wages are inherently low, and there is little career structure. In some areas, too, labour has to be imported. The drive to earn revenue can also often conflict with principles of sustainable tourism (Sharpley, 2007). As businesses, rural tourism enterprises often find it difficult to secure finance, recruit appropriate staff, access training and be competitive. The sector is fragmented, with few large organisations, and so it has a dissipated political voice (Morison and Thomas, 2004). Despite the multiplier effects noted above, the income ‘leakage’ from rural areas is high (because there are limited services that support rural tourism in these areas), there is market volatility, a limited number of entrepreneurs and an inherent conservatism amongst investors in this area (Getz and Carlsen, 2005).

These factors have led Roberts and Hall (2001) to suggest that tourism is not appropriate for all rural areas. In some, opportunity costs and comparative advantages make it an unrealistic proposition. It offers, perhaps, the most potential in remote areas where there are few alternatives (Skuras et al., 2006). But, even in these areas, rural tourism is vulnerable to economic cycles, the weather and, notoriously in Britain at the turn of the millennium, disease.

Foot-and-mouth disease

Rural tourism in many parts of upland Britain was devastated by foot-and-mouth disease in 2001. This is a highly infectious disease of cloven-hoofed animals but carries no public health risks, and 95 per cent of infected animals would recover within two weeks without treatment (Scottish Parliament, 2002). Despite this, it is European Union (EU) policy to keep member states infection-free, through slaughter (European Commission, 1985).

The disease was first confirmed on 20 February in Northumberland, and spread into the Scottish Borders, Dumfries and Galloway and as far south as Devon and Cornwall by March. For purposes of containment, footpaths were closed in all infected areas until the end of June. Exclusion zones (restricted-area designations) of a minimum of 10 km around infected premises also were introduced. Many tourist attractions were closed as a result, and events were cancelled. But the method of slaughter also created a ubiquitous picture of burning pyres of animals and mass burial grounds, which was a disastrous image for rural tourism, particularly since it attracted global publicity. In the first half of 2001, nearly 6.5 million animals were slaughtered. The economic consequences were considerable, and tourism rather than agriculture bore the brunt of the disease (Donaldson et al., 2006), as Box 15.3 indicates.
Box 15.3. Foot-and-mouth: some economic consequences in Britain

Compensation to farmers for livestock loss: £1.34 billion
Compensation to all other businesses affected: £39 million
Losses to the tourism sector in 2001: up to £3.2 billion
Overall losses to the rural economy: up to £8 billion

Ecosystem goods and services and sustainable tourism

As outdoor recreation consumption and rural tourism incomes in Britain both face an uncertain future, increasing attention is being given to the non-market values of rural leisure, as Hanley and Colombo’s chapter in this volume illustrates. Globally, there is particular interest in what the ecosystem values and costs associated with rural leisure consumption might be. Whilst recreation, access and tourism provide market values and monetary flows into rural areas, their overall worth is much greater than this. There is a wide range of benefits that arise from these activities that are not paid for through the market. Such benefits include use values, option values and bequest values (Edwards and Abivardi, 1998). Use values include the use of the countryside that is not paid for at the point of consumption (walking on the rights-of-way system, for example) and also values that arise from things such as flood control, which can make recreation consumption easier and also can protect ecological value.

Option values lie in the value to people of knowing that a certain tract of countryside exists should they wish to use it at some time in the future (this is sometimes termed non-use value). However, option values can also lie in the possible future medical values of species diversity – a diversity that might have been maintained as a result of recreational use. Bequest values are the values of the recreational resource, if maintained, to future generations.

The Economics for the Environment Consultancy (2005) report on ecosystem goods and services defines six types of ecosystem services. Of particular interest for non-market recreation and tourism values are those they term information and life-fulfilling ecosystem services – those that provide aesthetic, cultural, educational and spiritual values. These enhance well-being in a variety of ways through recreation. They provide opportunities for exercise, the subject of the final section of this chapter, offer a backcloth for artistic and scientific endeavour, and provide one of the justifications for the role of recreation in the development of national parks (Donelley, 1986).

For developing countries in particular, the appropriate husbandry of ecosystem goods and services can create wealth through tourism, although the distribution of this wealth has to be carefully managed. Studies have enumerated the ecosystem values for tourism of wetlands (WWF, 2004), forests (Vedeld et al., 2004) and conservation (Salafsky and Wollenberg, 2000).
Walking and health

Many consider that health benefits are the most important non-market benefits from outdoor recreation. Alongside the need to increase rural tourism incomes, health provides a principal justification of state outdoor recreation policy (Parker, 2007). The health benefits of walking are beyond dispute. What is less clear, however, is whether access to the countryside is the most appropriate peg upon which to hang such a health policy.

Public recreation and access policies have had a series of successive justifications since the National Parks and Access to the Countryside Act, 1949, of which health is just the most recent. The fear of a 'recreation explosion' so handsomely articulated by Michael Dower (1965) justified recreation policy at all levels for nearly twenty-five years as being one of containment, necessary to 'control' the 'urban hordes' in the countryside lest they destroyed the very thing they had come to see (Curry, 1994). This justification began to ebb only in the 1990s when it became accepted in policy circles that the recreation explosion never actually happened, as has been noted in the second part of this chapter.

By the early 1990s, the justification for recreation and access provision was shifting more towards the economic value of countryside recreation, driven by agricultural policies seeking to sustain income for farmers. A host of new agri-environment income supplements were paid for access to farm land, inheritance tax exemptions were exploited, and focus was given at the local level to the economic potential of rural tourism, as has been noted in the third section of this chapter.

Public countryside recreation policies have been increasingly justified on the grounds that they promote healthy lifestyles since the late 1990s. Certainly they do, but are they the most effective means of targeting the health message at those who need it most? The evidence in the second part of this chapter suggests that countryside recreation participation stubbornly remains dominated by the more educated higher-income sectors of the population. Principal health problems, particularly relating to a lack of exercise, however, predominate amongst lower-income groups, the less well educated and the more vulnerable members of society (World Health Organisation [WHO], 2003) – precisely those who indulge in countryside recreation least. Targeting the exercise interests of these more vulnerable groups might be more effective at securing health benefits than investing in the dominantly middle-class pursuits of ‘quiet enjoyment’ in the countryside. The equity effects of such a policy justification are negative.

The Millennium Greens initiative illustrates how countryside recreation policy can actually limit health benefit potential (Goodenough, 2007). Under this initiative, communities were invited to apply for funding to set up local ‘leisure spaces’ by the then Countryside Agency, but the Greens had to conform to a set of qualifying criteria reflecting all of the ‘tranquillity’ notions of countryside recreation enshrined in the 1949 Act – quiet places,
Leisure in the landscape

wild-flower meadows, and a place to sit and relax. More affluent rural areas did well under this scheme: what was required was what they wanted, and they had the knowledge, skills and cultural understanding to make successful funding applications.

The larger, more run-down, former council estate areas of the metropolitan fringe did rather less well. Aspirations for space for more ‘rough and tumble’ activity – mountain-biking, skateboarding and the like – were not really part of this tranquillity ethos. It was wild flowers or nothing. An opportunity to provide exercise opportunities for the disaffected youth of these areas in particular was largely passed up.

Health benefits

With this cautionary note on the importance of equity considerations in recreation and access policy, what are the health benefits of walking in the countryside? Longitudinal epidemiological studies have demonstrated a clear link between physical inactivity and higher levels of chronic diseases and premature mortality. Relatively small amounts of physical activity, equivalent to walking briskly for thirty minutes each day, can offer protection against cardiovascular disease, obesity, type 2 diabetes, musculoskeletal conditions and cancer (Department of Health, 2004).

More specific benefits in relation to green environmental spaces have been identified in relation to mental health. Exercising in green spaces was found by Pretty et al. (2005) to improve self-esteem, although this was not influenced by the intensity of exercise. Moods also became more positive with exercise, and generally the natural environment was found to have a positive effect on mental health both therapeutically and recuperatively. The WHO (2003) estimates that depression and related illnesses will become the largest source of ill health by 2020. Coping mechanisms in relation to stress (smoking, over-eating, excess alcohol, drugs) have their own health-related consequences. The benefits of green exercise therefore are likely to be highly significant.

Policy

In terms of policy, the Walking the Way to Health Initiative (WHI) was introduced, along with a number of other referral schemes, during the late 1990s (Natural England, 2007b). It was to promote local exercise, particularly amongst the more sedentary. The British Heart Foundation and Natural England still work together (with big Lottery funding) under this scheme to offer information and support, and have helped to create a network of over 350 local ‘health walk’ schemes. The British Trust for Conservation Volunteers has developed the ‘Green Gym’ (environmental volunteerism plus workouts); and a number of drug rehabilitation schemes, too, have used active countryside recreation instrumentally (Curry et al., 2001).
A number of individual, particularly metropolitan, areas have developed ‘health walk’ schemes. Several cities have produced CDs with health walk maps as well as the designation of particular routes on the ground. Other ‘supply side’ initiatives such as green lanes and community forest walks have provided encouragement to healthy walking.

Building on these schemes, Natural England has more recently introduced a ‘Green Exercise’ programme to encourage physical activity and improve mental health. Importantly, this represents moves away from the ‘quiet enjoyment of the countryside’ as a backcloth to exercise, explicitly focusing on local and urban areas to target hard-to-reach groups and deprived areas. Green Exercise includes walking, cycling and conservation activities, but also extends to any activity that takes place in the natural environment and is designed to increase the amount of physical activity undertaken by individuals.

Natural England and the Department of Health are also working together on the National Step-O-Meter Programme (NSP), which is a ‘Choosing Health’ White Paper project. It aims to make pedometer use accessible, affordable and effective in clinical practice, particularly to sedentary, ‘at risk’ or ‘hard to reach’ groups (Jarrett et al., 2004).

However, the extent to which supply-side policies (making available the physical space for exercise and the physical technology to monitor it) will influence people’s exercise patterns, relative to explicitly addressing the causes of inactivity (which are unlikely to be primarily driven by lack of available space or technology), still remains to be seen. These causes are likely to be both material (barriers to participation) and attitudinal. Supply-side policies for health are probably best-viewed as an adjunct to changing lifestyles more generally.

Notes
1 Other arrangements have subsequently been made for Scotland through part 1 of the 2003 Land Reform (Scotland) Act (see Sellar, 2006).
2 Natural England (2006) suggests that caution must be expressed in these figures as the methods of data collection between the two surveys differed slightly.

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