

NORTH WALES WINDFARM OVERHEAD LINES EXAMINATION DEADLINE 3 SUBMISSION – DENBIGHSHIRE COUNTY COUNCIL

ATTACHMENT 2 OF 4

IN RELATION TO SOCIO - ECONOMIC IMPACTS HEARING, 1ST OCTOBER

- Summary of opening remarks from Councillor Joseph Welch

- Other matters referred to by Councillor Welch :

* details of the sections of the SPMAnweb Appendix referred to in comments on the interpretation of surveys / use of % figures

* details of the size / volume comparisons for wooden poles

* Copy of article relating to Wales RallyGB

*Ramblers' Association report on 'The Economic value of walking in Rural Wales' , March 2000

Ian Weaver

From: Joseph Welch
Sent: 09 October 2015 08:27
To: Ian Weaver
Subject: RE: Homework...

Opening remarks:

Whilst it is very difficult to put an exact figure on how much tourism will be lost by the pylon route ripping through the countryside there is one thing that is certain. It will have a negative impact. Tourists do not come to the area for the shops, the pubs, the activities because we don't really have any. We have one thing and that is the beautiful view and the peace and tranquility of the countryside. This is why people come here and walk around the villages of Saron, Peniel and so on. Tourists mainly come from just across the border and travel for weekends to 'get away' from city life. This means escaping the industrialisation and noise of the city in return for the peace and beauty of North Wales. The pylon route will have serious impacts on this small but important tourist trade and over the life time of the pylons being there will have a significant effect.

Many bookings are made through word of mouth and so impossible to put an exact value on the loss. If using some very basic figures we say that 10 self catering cottages along the route lose one booking a year at an average of £500 per week/ booking. Whilst this may seem insignificant at £5000 this can be scaled up using the multiplier effect whereby money is then re spent within the community. If the multiplier is 2 (a reasonable assumption based on the article on tourism which is linked) then this then equates to £10000 for the first year. Over a 40 year life span of the lines this is £400,000 which is a lot of money to be lost from the economy and this does not factor in inflation. It is extremely feasible that the loss will be more than this. A 1 or 2 percent reduction in tourism in rural Denbighshire will equate to a vast sum over the years and not something to merely dismissed as Scottish Power want to do with their poor quality surveys and inappropriate language in explaining the results.

Joe

Councillor Joseph Welch
Llanrhaeadr-Yng-Nghinmeirch

COUNCILLOR JOSEPH WELCH

- DETAILS OF SECTIONS OF SP MANWEB APPENDIX REFERRED TO IN COMMENTS ON INTERPRETATION OF SURVEYS, AND USE OF % FIGURES

11.6.7 – SP say it is sufficiently credible. 15 out of 41 is 37% and they say 40% is ok?? A percentage only tells half the picture. If your sample was 1 and they respond then you have 100% which is way over 40% so is this credible? And all 15 did not answer all the questions. My best estimate on the percentages is that only 12 answered some of them.

In school when doing coursework the sample size was always 30 minimum!

11.6.20 – poorly worded. Fig 11.9 – I think 14 have answered this question 4, 4, and 6 make sense so the 28% and 29% represent the same number.

11.6.28 – the vast majority is not two thirds of respondents.

11.6.30 - The one who said it 'could have positive impacts' has been categorised as 'High Positive Impact'

11.6.32 – With these percentages it is only possible for 13 respondents 8% = 1 (2 of this) 23% = 3 and 61% = 8 so total of 13 with 8 saying no impact and 5 saying some. Then on the next part 11.6.33, a minimum of 6 respondents answered the question about short term or long term.

Information from Councillor Joe Welch from subject specific hearing on tourism

p.41 from Document 6.1 on Socio-economics 11.6.56

A BT pole may be up to 9m high (totalpoles.co.uk) the diameter varies up to 300mm.

From p.24

Design and construction 7.1

2.2.16

The poles SP Manweb are using are between 11.5m and 16.4m with 2.5m hidden underground so between 9m and 14.9m. *The diameter of these poles are generally no larger than 470mm*

This only takes into account the wood and not the 2.3m high lattice on top of the wooden pole.

So volume of 1 pole for BT taking the largest figures is $\pi \times 0.15^2 \times 9 = 0.6362\text{m}^3$ (to 4sf)

Volume of 2 SPManweb poles using a figure in between 9 and 14.9 of 11.95 is

$\pi \times 0.235^2 \times 11.95 \times 2 = 4.147\text{m}^3$ (to 4sf)

$4.147 \div 0.6362 = 6.518$ times more wood (at least)

Got a story? Call us on 01352 707768

COUNCILLOR
JOSEPH WELCH
NEWSPAPER
ARTICLE RE:
WALES RALLY GB

Spectators top of agenda at annual rally

CHANGES to the Wales Rally GB route this year will focus around spectators safely getting the best view of the action, bosses have said.

Ben Taylor, Wales Rally GB managing director, was joined by route co-ordinator Andrew Kellitt and safety co-ordinator Sue Sanders for a fact-finding tour around the forest tracks likely to feature in the 2015 event.

Some of the familiar special stages may only need minor revisions. But others could be replaced altogether, either due to wind farm

developments – the forestry activity of event partner Natural Resources Wales – or simply to ensure a workable three-day timetable for competitors and fans.

Mr Taylor added: "It's all about giving everyone involved the best possible experience. From the competitors' perspective the aim is to include exciting new challenges alongside the classic Welsh forest stages that make this event so amazing."

"This year, however, we are putting much greater

emphasis on giving the spectators a great experience and managing their safety, particularly in the open environment of the forests.

"Going through the stages was really helpful and we are starting to put together some exciting plans for November."

The international event will again have a service park based near the Toyota plant at Deeside Industrial Park.

The final route will not be revealed until the end of next month, but it is expected that a special stage at Chirk Castle will again be a highlight.

COUNCILLOR JOSEPH WELCH
• RAMBLERS' ASSOCIATION REPORT ON
'THE ECONOMIC VALUE OF WALKING IN
RURAL WALES'
MARCH 2000

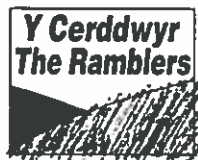
THE ECONOMIC VALUE OF WALKING IN RURAL WALES

by

Peter Midmore
Professor of Rural Studies
University of Wales, Aberystwyth



*An independent report produced for
the Ramblers' Association in Wales*



*(also as a Working Paper
Welsh Institute of Rural Studies)*

March 2000

Ramblers' Association, Tŷ'r Cerddwyr, High Street, Gresford, Wrexham, LL12 8PT Tel. 01978 855148
Registered Charity 306089

The Economic Value of Walking in Rural Wales

Peter Midmore*

Executive Summary

- Walking for leisure in Wales can promote important rural development functions: it disperses spending away from major road networks, and can be shown to lead to enhanced levels of retained income through higher multiplier effects. This paper investigates the value of leisure walking-related expenditure in Wales, paying particular attention to the rural consequences of the activity.
- The analysis has been stimulated by studies of the economics of open-air recreation reported by Scottish Natural Heritage, which found that walking-related expenditure in Scotland of £257 million in 1998 generated (directly and indirectly) some 9,400 full-time job equivalents; if mountaineering is taken into account the totals rise to expenditures of £361 million and 13,350 jobs.
- A simple approach of applying the same proportions of tourism expenditure and employment to Wales yields estimated totals of £132 million of walking related spending, generating 4,800 jobs both directly and in upstream and downstream sectors. However, this could be an underestimate, because tourism in Wales has a contrasting economic profile: there are differences in overseas and business visits, average length of stay, seasonality, accommodation types, and importance of walking to visitors.
- Taking these differences into account, and focusing on *rural* impacts alone, a conservative estimate of the current impact of walking in Wales shows it to be responsible for generating incomes of £55 million and 3,000 jobs, if both direct and indirect impacts are included. If mountaineering activities were also taken into account, a further £22 million and 1,250 jobs would be added. These figures represent around 2 per cent of rural GDP, and about 1 per cent of rural jobs; in comparison, agriculture currently contributes 4 per cent to rural GDP (of which about half is accounted for by direct public subsidy) and 7 per cent of rural jobs.
- Creating a job via the mechanism of supporting and improving walking opportunities in the Welsh countryside may be estimated to involve public cost of £433; in contrast, the direct and indirect public cost of supporting a job in agriculture is almost ten times higher, at £4,279.
- The potential of walking as a means for rural economic regeneration is currently under-exploited, and could contribute significantly to redistribution and amelioration of tourism's detrimental impacts in the countryside. More and better quality rights to use rural amenities, through the provisions of the Countryside and Rights of Way Bill for open access land, and greater efforts to improve the existing rights of way network, would offer significant income and job creation potential. This exploratory study has produced cautious indications of the importance of walking for the rural economy of Wales; nevertheless, its full potential remains to be explored.

* Peter Midmore is Professor of Rural Studies at the University of Wales, Aberystwyth, Llanbadarn Campus, Aberystwyth, Ceredigion SY23 3AL

Introduction

This short paper attempts to determine, if not the precise value, at least the scope of the economic benefit of walking for pleasure in Wales. The National Assembly for Wales' favourable vote in principle for the proposed Countryside and Rights of Way Bill (with its provisions for access for walkers to open countryside) provides the stimulus for this evaluation. Despite this positive response from the Assembly, attempts to develop walking-based tourism have in the past received a lukewarm reception. For instance, the Government target to open up all public rights of Way by 2000 has foundered from lack of local authority commitment and resources, whilst the open access proposals have themselves met with a negative response in some quarters.

Such negative attitudes neglect important evidence that walking-based tourism and leisure, far from being a drain on resources, can provide much needed alternative revenues to rural areas under economic pressure. In addition, unlike many other forms of rural tourism, of its nature it involves only dispersed, low environmental impact activity undertaken by an informed and sensitive user group. Walking tourists also tend to have greater relative economic impact, in the sense that more of their spending remains within local economies for longer, thus generating higher economic impact. The seasonal pattern of such tourism has also been shown to be more even than that of traditional beach-based holidays. In addition, such activities also provide a window into the quality of the environment, and might be combined effectively with initiatives to promote these attributes in the food and other physical products derived from it.

It is consequently surprising that relatively little is known about the specific implications of expansion of countryside access in this respect. Tourism and leisure together, it is widely held, constitute the largest and most rapidly growing global industry, with international arrivals over the past 10 years increasing at an average rate of 4.5 per cent, and receipts representing almost one third of the value of world trade in the service sector (World Tourism Organisation, 1999). It accounts directly and indirectly for almost 10 per cent of the Welsh Workforce (Wales Tourist Board, 1999): moreover, through constant diversification, formerly niche markets, such as cultural and eco-tourism, are emerging into the mainstream. This is reflected in growth of outdoor activities for health and enjoyment, especially among the relatively older fraction of the population. The rapidly increasing number and comparatively high spending power of this fraction could provide substantial prospects for diversification of farm and other rural businesses, provided that their needs can be anticipated and met. In South Pembrokeshire, the SPARC local community economic development project demonstrates the possibilities achievable. It has concentrated its effort on identifying and promoting attractive and satisfying walking opportunities, linking with transport networks, local retail, accommodation and catering business, and also providing significant benefits to the host communities themselves (see, e.g., Midmore *et al.*, 1994).

To stimulate interest in this neglected dimension of the consequences of broadening access to the Welsh countryside, this paper sets out to do two things. In the following section, it reviews evidence of the economic and other impacts of walking and related activities in rural areas outside Wales. This evidence is used, in the ensuing section, to determine the scope of economic activities currently occurring in rural Wales, and then to outline their future potential.

Evidence of the economic impact of soft rural tourism

Soft rural tourism may be defined (see for example, Bramwell, 1994) as being embedded within the local economy, making use of local products as inputs, employing local people, and avoiding the imposition of excessive loads on environmental or cultural systems. Whilst,

to some extent, the increasing use of the countryside for tourism is at odds with the social and environmental qualities initially derived from various forms of commodity production, walking for leisure involves less conflict than almost any other form of activity. It is also considerably greater in economic impact than is commonly thought.

A large number of studies of walking on National Trails have now been completed, all of which have followed a consistent questionnaire approach (for a summary, see Countryside Commission, 1997). Two of these are of direct relevance to Wales: those relating to the Offa's Dyke Path (Offa's Dyke Management Service, 1996) and to the Pembrokeshire Coast Path (Pembrokeshire Coast National Park, 1998); there is also a study of the South West Coast Path (Countryside Commission, 1995), and a more generalised study of walking in Scotland (System Three Scotland, 1996). Each describes the characteristics of walkers, and in particular provides details of the average level of daily expenditure by short distance walkers (summarised in Table 1).

Table 1: National Trail and Other User Surveys: Expenditure Results

Study	Survey date	Accommodation expenditure (£)	Non-accommodation expenditure (£)	Total expenditure (£)
South West Coast Path	1994	11.14	5.37	16.51
Scotland (general walkers)	1995	7.10	2.50	9.60
Offa's Dyke	1994/95	8.31	3.30	11.61
Pembrokeshire Coast Path	1996/97	9.94	5.86	15.80

Though the levels of expenditure per head are modest (reflecting a tendency for walkers to use low cost, simple accommodation), nonetheless, the total numbers of walkers is such that the aggregate expenditures are considerable. For example, short distance walkers on the Pembrokeshire Coast Path generated a total expenditure, in the twelve-month survey period, of £11.02 million; together with the expenditure of long distance users and local people, £57 was spent locally for each £1 paid to maintain the National Trail.

Whereas local expenditure is comparatively easy to measure, its effect on the local economy needs to be translated into income retained, and employment generated. A proportion of spending leaks out of the local economy, as goods and services are brought in from outside: multiplier analysis identifies the degree to which such leakages occur, and can identify the amount of local income and numbers of local jobs that depend, directly and indirectly, on the initial expenditure. If walker expenditures are prone to less leakage from the local area than those from other forms of tourism activity, they may provide potentially greater dispersion of economic impact.

Tourism income and employment multipliers have long been a focus of academic study. Some of the earliest national tourist income multipliers reported (Richards, 1972) are for Ireland (1.8) and the United Kingdom (1.7); Hurley *et al.* (1994) provide a more recent tourism employment multiplier for Ireland (1.58). In the United States, a recent study of tourism impact in Vermont in 1997 (Lin *et al.*, 1999), where development emphasises landscape, environment and the attraction of rurally based agricultural communities, identified total income generation of \$550,000, and 38 full-time equivalent jobs, per \$1 million of tourism expenditure. In Scotland, a study of the economics of countryside access in 1990 (rural and land-based tourist activities, sport and direct access) identified in total employment equivalent to 15,000 full-time jobs, and a level of GDP contribution broadly

corresponding to one third of the level of agricultural output (Crabtree *et al.*, 1991). More recently, and more specifically, it has been estimated (SNH, 1998) that hiking and walking (excluding mountaineering and similar activities) generated an expenditure of £257 million in 1998 in Scotland (some 15 percent of total tourism turnover). Taking multiplier impacts (including public sector employment) into account, this expenditure was responsible for 9,400 full-time job equivalents. A more specialised study of mountaineering (Highlands and Islands Enterprise, 1996) showed that the total effect of hill walking, mountaineering and associated activities generated expenditure of £107 million in the topographical northern mountain region of Scotland, resulting in income generation of £53 million. The SNH study took these mountaineering expenditures into account to estimate a combined expenditure of £361 million, and generation of 13,350 full time equivalent jobs.

However, such aggregate studies estimate the impact for the entire regional economy, including urban as well as rural impacts. If the number of specifically *rural* jobs that will be created is required, a lower figure must be used. Although some leakage is inevitable however, there is evidence that the extent of such leakage from expenditure on "soft" tourism is less than from expenditure on "hard" tourism. For instance, a local study of Badenoch and Strathspey in rural Scotland, one of a series of similar studies conducted throughout Europe, provides this evidence of the greater potential of "soft" in contrast to "hard" tourism (Slee *et al.*, 1997). Local income and employment multipliers (in the district under study and its extended local market area) were both higher (and therefore the benefit of activity less prone to leakage from the rural economy) for small-scale accommodation providers, such as farm guesthouses, youth hostels and camping sites than for large-scale tourism businesses such as hotels, holiday villages and timeshare developments. Each unit of spending in the former had a 39 per cent greater income-generating impact, and a 41 per cent greater employment impact.

Comparisons between the absolute and relative magnitudes of tourism multipliers, between areas and at different levels of the spatial hierarchy, are often risky, because both methodologies, and the structure of assumptions, can vary. However, it is clear, from a uniform study of 9 small Norwegian towns (Huse *et al.*, 1998) that tourism employment multiplier effects do vary from locality to locality. Employment multipliers across the 9 towns ranged from 1.4 to 2.4, having a mean of 1.9; the number of jobs created by tourist expenditures of \$US 1million ranged from 12 to 45, with a mean of 26. The more northerly, rural and less structurally integrated municipal economies showed evidence of lower employment multiplier effects. Huse *et al.* concluded that the magnitude of multiplier effects depends on the nature and age of the tourism industry, and the size of the local economy. Other investigations having a bearing on this analysis include Wanhill's (1996, 2000) has scrutiny of the relative effectiveness of small to medium enterprises in rural employment creation, and McManus *et al.*'s (1995) analysis of the impact of rural short breaks, in which countryside access is a prominent feature.

These studies, from different perspectives, indicate that tourism and leisure activities can contribute significantly to a rural economic regeneration. Taking into account the low environmental impact potential, and contribution towards dispersed small-scale economic impact, walking-based recreation and tourism can make an effective contribution towards rural economic sustainability. Therefore, on the basis of this review of evidence from other studies of "soft" rural tourism, the subsequent section examines the possible extent of the value of walking to the Welsh rural economy.

Walking expenditure and related employment in Wales

Applying the Scottish fraction of walking-related tourism and leisure in total tourism expenditure, identified above, provides the simplest possible approach to valuation of similar

activities in Wales. This would result in an estimate of walking-related tourism expenditure of £132 million, and 4,800 full-time job equivalents. If mountaineering were also included expenditure would rise to £185 million, and 6,800 full-time job equivalents.

However, the profile of the tourism industry varies between the two countries: there are higher proportions of overseas visits and business travel in Scotland; partly as a result, tourists stay for longer and spend more there; seasonality is less pronounced, and traditional seaside holidays are less common; more, however, stay in hotels, whereas in Wales a higher proportion use self-catering accommodation, especially static caravans; and more domestic visitors to Wales list walking as one of their activities. Key indicators of these differences are provided in Table 2, below.

Table 2: Comparative Tourism Statistics, Scotland and Wales, 1998

	Scotland	Wales
Total tourism expenditure, 1998 (£m)	2476	1306
Overseas visits: (% of nights)	31	14
(% of expenditure)	38	16
Business trips: (% of nights)	28	15
(% of expenditure)	34	17
Average duration of trip (nights)	5.3	4.1
Average expenditure (£)	39.18	29.61
Slack season (% winter nights)	47	34
Type of accommodation: hotel (% visits)	19	16*
self-catering (% visits)	21	35*
of which: caravan (% visits)	3	24*
Tourists listing walking as an activity (% visits)	19*	22*
* domestic tourists only		

Sources: United Kingdom Tourism Survey; International Passenger Survey

Assumptions can be made on the basis of this information. If it is supposed that underlying walking patterns for Welsh and Scottish tourists are similar, adjustments would be needed as follows. In Scotland the business visitors are not normally involved in walking for leisure. The higher expenditure of overseas visitors and their propensity to do more walking reduces related impacts in Wales, as does the greater openness of the Welsh economy; on the other hand, the greater seasonality and enthusiasm of domestic visitors for walking have the opposite impact. On this basis it is estimated that walking expenditure in Wales is £170 million – significantly higher than the estimate made on grounds of a similar proportion existing with respect to Scotland. The number of jobs that such expenditure might create, in total in Wales, could reach 5,000 full time equivalents. If mountaineering activities were also taken into account, the respective impacts would be £240 million and 7,000 full time equivalents.

As indicated previously, however, if it were required to estimate the level of employment created by walking activities in the rural parts of Wales only, the figure would be rather less, because of the leakage involved in the supply of goods and services from more urban areas in Wales. The lowest employment multipliers calculated for rural towns by the Norwegian study, if applied to Wales, would suggest that walking tourism and leisure contribute £55 million to rural Gross Domestic Product, and generate approximately 3,000 full time equivalent jobs again, taking mountaineering activities into account, these estimates would rise to £77 million and 4,250 jobs). Such estimates are broadly compatible with both the Vermont tourism study, and a recent evaluation of the economic impact of the Sea Empress oil spill on Pembrokeshire tourism (Bryan *et al.*, 1996): provided that the majority of the

activity took place in the more rural areas of Wales, these estimates would represent nearly 2 per cent of total GDP, and just under 1 per cent of rural employment. Agriculture, in contrast, accounts for around 4 per cent of GDP in the rural part of Wales, including public subsidies, and 7 per cent of full-time equivalent jobs (based on the analysis of Hughes *et al.*, 1996).¹

These estimates are designed to be conservative, but a more accurate assessment involving extensive and careful study of the role that walking for leisure plays in the rural economy of Wales might well identify substantially greater effects. Nevertheless, they indicate that the importance of walking for rural economic regeneration is not trivial, especially since the bias in estimation has been cautious: furthermore, they bolster the case for greater access on foot to the Welsh countryside, as a means of expansion of its existing impacts.

Analysis and conclusion

At present, only a small proportion of tourist visitors to rural Wales would identify walking as the sole, or even most important, attraction, although it clearly constitutes an important facet of their overall experience.² This is reflected in the fact that, like all tourist expenditure, a large proportion of the income and job equivalents are supported in services and activities for the resident population. By its nature, walking is a dispersed activity, penetrating into deeper, more sparsely populated rural areas, where leakages are less serious; additionally, it is less concentrated in the traditionally short summer season, and as a result it may be expected to have a correspondingly greater proportionate effect.

The potential for expansion of walking-related expenditure may be demonstrated from NOP evidence: both domestic tourists and overseas visitors are more likely to visit Wales if access is improved. The policy implications are for the promotion of greater walking friendliness in Wales. This short paper suggests that the interdependencies between walking and the rural economy could be the basis of a highly effective and efficient means of rural regeneration, offsetting the tendency to centralise employment and services into ever fewer central market towns. Government policies that would support growth in growth of this favourable activity include the current proposal to provide access on foot to open countryside; continued effort to open and improve existing rights of way; and the creation of additional national and local trails.

The costs of supporting greater access to the countryside are relatively small. The Pembrokeshire Coast Path User Survey implicitly identifies the public expenditure required to create a full-time equivalent job as £433, annually. That may overestimate public cost because of the high profile of the National Trail. In contrast, agricultural subsidies cost the taxpayer £254 million in total in 1998 (National Assembly for Wales, 2000), which corresponds to £6,045 for each full-time equivalent job supported directly on farms: taking multiplier effects into account, the cost, at £4,279 per full-time equivalent, is still almost 10 times greater, and certainly underestimates public costs because the main burden of agricultural support falls on consumers rather than taxpayers, due to the difference between domestic and world food prices.

¹ The discrepancy between income and employment is due to the significant current depression in the agricultural economy of Wales: in more 'normal' circumstances, the contribution of agriculture to rural GDP in Wales would be larger.

² Unpublished survey information from the Wales Tourist Board suggests that 5 per cent of holidays in Wales are specifically for walking; a further 22 per cent include walking as a significant factor.

Efforts need to be made, through tourism marketing and infrastructure development, to disperse walking away from the high profile National Trails, such as the Offa's Dyke Path and the Pembrokeshire Coast Path, and the National Park areas of Snowdonia and the Brecon Beacons. Equally, efforts to promote the general quality of the landscape need to take into account the walking interest. For example, wind farm development – at least from anecdotal accounts – initially attracted some walking visitors into the countryside, although widespread saturation of the landscape for wind generation of electricity could have the opposite effect. On the other hand, in South Wales, Scott (1998) found, in conjunction with the fact that walking is the most popular form of recreational activity, wildlife watching is an important linked recreational experience: efforts to conserve wildlife habitats and overall biodiversity would normally be complementary to walking activity, providing an enriched experience.

Many studies of agricultural diversification (see, for example, Bateman and Ray, 1994) have indicated that successful opportunities are strictly limited by location, effectively corresponding to proximity to major roads. More and better quality access to the countryside could open up prospects for significant additional income for farms and other rural businesses. In fact, the accommodation stock in many rural areas of Wales is well developed, but what is lacking is for something for visitors to do. Given the competitive nature of tourism between regions of the UK, development of walking opportunities could provide substantial additional income, which would maximise the value of such investments. The full potential of employment that can be created by open access to the countryside, however, remains to be explored.

References

- Bateman, D. and Ray, C. (1994). Farm pluriactivity and rural policy: some evidence from Wales, *Journal of Rural Studies*, 10(1), 1-13.
- Bramwell, B. (1994). Rural tourism and sustainable rural tourism, *Journal of Sustainable Tourism*, 2(1/2), 1-6
- Bryan *et al.* (1996). *The economic consequences of the Sea Empress oil spillage*, report to the WDA, Pembrokeshire County Council, WTB and West Wales TEC, Aberystwyth and Cardiff: Cardiff Business School and Welsh Institute of Rural Studies (The University of Wales).
- Centre for Leisure Research (1996). *1994 National parks visitor survey: aggregate report*, Vol. 13, Edinburgh: Centre for Leisure Research (Heriot-Watt University).
- Countryside Commission (1995). *Report of the South West Coast Path user survey 1994*, Cheltenham: Countryside Commission.
- Countryside Commission (1997). *The National Trails user survey summary*, Cheltenham: Countryside Commission.
- Crabtree, B., Appleton, Z., Thomson, K., Slee, B., Chalmer, N. and Copus, A. (1992). *The economics of countryside access in Scotland*, SAC Economics Report No. 37, Aberdeen: Scottish Agricultural College, Agricultural and Rural Economics Department.
- Hughes, G.O., Midmore, P. and Sherwood, A-M. (1996), *Welsh agriculture into the new millennium: CAP prospects and farming trends in rural Wales*, report for DBRW and WDA, Aberystwyth: Welsh Institute of Rural Studies (The University of Wales).
- Hurley, A., Archer, B. and Fletcher, J. (1994). The economic-impact of European Community grants for tourism in the Republic of Ireland, *Tourism Management*, 15(3), 203-211.
- Huse, M., Gustavsen, T. and Almedal, S. (1998). Tourism impact comparisons among Norwegian towns, *Annals of Tourism Research*, 25(3), 721-738.
- Lin, T., Halbrendt, C., Liang, C-L. and Wood, N. (1999). The impact of the tourism sector on the Vermont economy: input-output analysis, paper presented to the American Agricultural Economics Association, Nashville, 8-11 August 1999.
- McManus, P., Sweeney, A.E. and Geen, A.G. (1995). Country village weekend breaks: experience in Wales, *Tourism Management*, 16(2), 139-142.
- Midmore, P., Ray, C. and Tregear, A. (1994). *The South Pembrokeshire LEADER project: an evaluation*, Aberystwyth: Department of Agricultural Sciences, (The University of Wales).

- Offa's Dyke Management Service (1996). *Offa's Dyke Path: National Trail user survey 1994-1995*, report for CCW, Knighton: Offa's Dyke Management Service.
- Pembrokeshire Coast National Park (1998). *National Trail User Survey 1996/97*, Haverfordwest: PCNP.
- Richards, G. (1972). *Tourism and the economy: an examination of methods for evaluating the contribution and effects of tourism in the economy*, unpublished PhD thesis, University of Surrey.
- Scott, A. (1998). *South Wales Recreation Resources Initiative: household survey report 1994/5*, Report to the Countryside Council for Wales, Cardiff: Pavan Mifflin Associates.
- Scottish Natural Heritage (1998). *Jobs and the natural heritage: the natural heritage in rural development*, Edinburgh: SNH.
- Scottish Tourist Board (1999). *Scottish tourism facts and figures*, Edinburgh: STB.
- Slee, B., Farr, H. and Snowden, P. (1997). The economic impact of alternative types of rural tourism, *Journal of Agricultural Economics*, 48(2), 179-192.
- System Three Scotland (1996). *Walking in the countryside in Scotland*, Scottish Natural Heritage Research, Survey and Monitoring Report No. 11, Edinburgh: SNH.
- Wales Tourist Board (1999). *Tourism Employment in Wales, Factsheet*, Cardiff: WTB.
- Wanhill, S. (1996). Local enterprise and development in tourism, *Tourism Management*, 17(1), 35-42.
- Wanhill, S. (2000). Small and medium tourism enterprises, *Annals of Tourism Research*, 27(1), 132-147.
- World Tourism Organisation (1999). *Tourism highlights 1999*, Madrid: World Tourism Organisation.