Outdoor Recreation, Outdoor Education and the Economy of Scotland

By Peter Higgins

Abstract

From a tourism perspective Scotland's greatest natural resource is it's scenery. Recent studies have indicated that the contribution of outdoor recreation (which depend on this asset) to the Scottish economy have traditionally been underestimated. Published work from a range of sources are reviewed together with case studies of the additional contribution of Outdoor Education Centres, and other forms of provision. The main findings are as follows:

1. Outdoor recreation generates perhaps at least £600 - £800m of Scotland's tourist income, much of which is in rural areas and also extends the traditional tourist season;
2. Outdoor Education Centres are significant employers in certain rural areas;
3. Evidence from one area of Scotland (Lothian Region) suggests that the pattern of outdoor education provision has changed significantly in recent years;
4. 'Therapeutic' outdoor activity programmes seem effective in reducing youth crime and the cost-saving to the tax-payer is substantial.

The economic considerations I have sought to highlight here, together with the significant benefits to individual, community and planetary health claimed for outdoor education should encourage a less apologetic stance in the promotion of outdoor education and outdoor recreation. This article is a synopsis of a more detailed paper to be published in the Journal of Adventure Education and Outdoor Leadership (Higgins, in press).

Introduction

Studies have shown that the scenery of Scotland is a major factor in attracting tourism from both inside and outside Scotland. For example, in a recent publication this was given the highest rating by between 68% (Scots) and 90% (American) of all visitors surveyed (Scottish Tourist Board, 1997a). In recent years there has also been an unprecedented boom in the number of those who use the outdoors for recreation. For example, Crofts (1994) reports an increase in the number of ' Munroists' (those who have reached the summits of all 279 of the mountains over 3000 feet in Scotland) from less than 10 a year in 1960 to around 140 a year in 1990.

This article offers several case studies and reviews data which may illuminate the *economic* impact of outdoor recreation and outdoor education. I will argue later that this represents an important contribution to the economy, which is of particular value to many rural areas. It is not the intention of this article to consider the broad educational (eg Higgins, 1997) and health (eg Tuxworth, 1996) benefits to the individual which are often attributed to outdoor education.

To give a full picture provision in the formal, informal, commercial and charitable sectors should be considered together with detailed analysis of spending patterns. A study on this scale is impractical and so to provide focus I have elected to consider the following topics:

1. the economic impact of outdoor recreation;
2. the financial impact of residential Outdoor Education Centres on local communities;
3. the changing pattern of outdoor educational provision;
4. the perceived financial benefits of the use of the outdoors for intervention or therapy.

Practicality dictates that this study is primarily limited to Scotland. However, the principles and methodologies may well be appropriate for other areas of the UK and may have an international relevance.

It should be acknowledged that there are a variety of economic costs which could be ascribed to the use of the outdoors for recreation or education (eg footpath repair). Whether such costs should be considered alongside the 'benefits' I have elected to focus on could be debated. However, such issues are beyond the scope of the present paper.

In order to ensure confidentiality regarding sensitive budgetary information the names of Outdoor Centres and providers consulted in this study will be withheld and a code system used in preference.

Horizons. 7. 24-29.

The Growth and Impact of Outdoor Recreation

Studies considered below indicate that recreational use of the outdoors represents a major source of revenue within the UK economy and is a vital component of the Scottish rural economy. The following analysis, in the context of this article, is designed to raise issues rather than provide a clear 'answer'.

For example there has been little work on the relative economic value of outdoor recreation in comparison with the hunting of deer, grouse, pheasants and fish which takes place on the majority of 'sporting estates' in Scotland. There are around 340 of these (each larger than 5000 acres) in the Highlands and Islands, which together constitute over 28% of the area of Scotland (Wightman, 1996:162). Wightman (1996) published the following table (1989 data) which demonstrates the scale of impact of outdoor activities in relation to other more 'traditional' pursuits.

Estimated Annual revenue generated by types of countryside recreation by visitors to Scotland in 1989. Scottish Tourist Board 1989 Visitor Survey. Unpublished.

	£ Million
Hiking	272
Watersports	210
Field Nature Study	76
Mountaineering	55
Salmon Fishing	3
Trout and Coarse fishing	37
Sea fishing	25
Shooting	20
Horse riding	17
Skiing	11
Gliding	5

Whilst the basis for the 1989 Scottish Tourist Board work is not clear and the figures given are 9 years old (and must therefore be treated with caution), there is clearly an issue worth exploration. There has undoubtedly been substantial growth in expenditure in all activities in that time as the following example may indicate.

In 1995 and 1996 Highlands and Islands Enterprise commissioned research and a report from Jones Economics, Landwise Scotland and Scotinform. They conducted various forms of research to assess the economic impact of mountaineering-related activity (defined as 'hillwalking above 2500 feet; technical climbing on rock, snow or ice; ski mountaineering; and high level cross country ski-touring') in the HIE area. As the estimates were effectively cross-referenced by these analyses the figures stated in the report are probably very robust. They estimate that in 1996 within the HIE area alone, mountaineering related expenditure had risen to almost £149 million. The report makes the point that this form of income is particularly valuable as much of it occurs in 'remote' areas and at times outwith the tourist season. The figures record over 500,000 mountaineering visits to the Highlands each year, with individuals spending an average of 11 days in the area. The level of expenditure stated above generates £34 million of income per annum and results in almost 4000 jobs in the HIE area (HIE, 1996).

Other reports have been commissioned to establish impact on parts of the HIE area. For example the Ross and Cromarty Upland Footpath Survey (Hunt and Dearden, 1996) provides a detailed analysis of the motivation, home area, expenditure etc of walkers and mountaineers in this area. Another recent report commissioned by Scottish Natural Heritage considered the economic impact of the West Highland Way. Annually around 50,000 people use the route, bringing £3.5 million into the economy and supporting 120 (fte) jobs. Of particular significance is the fact that 25% of these visitors are from overseas (SNH, 1996).

In 1996 expenditure on all forms of tourism in Scotland totalled £2,400 million and the industry sustained around 177,000 jobs (Scottish Tourist Board, 1997b,c). The expenditure on mountaineering alone in the HIE area (not the whole of Scotland) is clearly a substantial proportion of this figure. It is tempting to add sums together at this point to estimate the impact of outdoor activities as a percentage of total tourist income. However, whilst most sets of figures will be consistent within themselves, caution should be exercised when making comparisons as so many of the figures quoted in the various reports are derived using different methods.

The Scottish Tourist Board publish factsheets relating to various forms of activity holiday. The 1995 factsheet (3 year average) estimates the proportion of expenditure resulting from walking holidays (as the main purpose or part of the trip) as 24% of total income (STB,1995a). The comparable factsheet for watersports estimates this as 7% of total income (STB, 1995b). The two forms of activity appear to be one of the factors stimulating perhaps between a quarter and a third of tourist expenditure. These figures are substantial and consistent with the HIE (1996) report in terms of scale.

Whilst it would be unwise to extrapolate too far from these figures, it seems likely that the total expenditure in the HIE area from hiking, watersports, field nature study and mountaineering (the top 4 in the table above) must be currently in the region of at least £600 to 800 million. (The lower figure is simply the sum of the 1989 amounts). Support for this estimate comes from from a recent (1998) Scottish Natural Heritage publication (based on 1992 data) which estimates the contribution of open air recreation to the Scottish economy as about £730 million, supporting 29,000 (fte) jobs (SNH, 1998:2). A further 1700 (fte) jobs are related to environmental education and tourism associated with the natural heritage (SNH, 1998:15).

Outdoor activities and other forms of 'open air recreation' must constitute a major proportion of the Scottish tourist industry. Perhaps not surprisingly there appears to be an increasing number of candidates seeking the National Governing Body awards which qualify them to lead and instruct others (Principal of Glenmore Lodge, Scottish Sports Council National Mountaineering Centre, pers comm, 1997).

Economic Impact of Residential Outdoor Education Centres

In the 1960s and '70s many Local Authorities in the UK built new Outdoor Centres or converted old mansions to provide residential outdoor education experiences. At that time the prevailing view was that centres should be away from cities and in rural or mountainous areas. The present distribution of centres owes much to this period.

Consequently many of the communities within which such centres are located have benefited socially, economically and in employment terms. The following case study relates to one such area in Scotland where in 1996 (this is the last

period for which a full year's data was available) a small town (population approximately 9,000) had 3 Local Authority Outdoor Centres within a 15 mile range. The area was chosen because I had good relations with the Centre Principals and had their agreement that they would provide me with budgetary information. Caution should be exercised in generalising these results as they do not necessarily correlate with ' charitable trust' or 'commercial' Centres. In order to retain confidentiality the Centres will simply be referred to as A.B and C.

Results

Centre A Turnover (1995/6) = £605,000	Direct Employment (fte) = 24
Centre B Turnover (1995/6) = £681,000	Direct Employment (fte) = 35.5
Centre C Turnover (1995/6) = £551,000	Direct Employment (fte) = 19

Applying the multipliers above provides the following estimates:

Centre A Indirect Employment = 3	Induced Employment = 2.7
Centre B Indirect Employment = 3.4	Induced Employment = 3
Centre C Indirect Employment = 2.8	Induced Employment = 2.4

Methodology

A substantial proportion of the primary data was collected during interviews with the principals and managers of Outdoor Centres or agencies. Other materials were brought together through literature reviews and telephone interviews.

In order to calculate the effect of a certain size of budget on the local economy and hence the jobs generated 'economic multipliers' were used. The assumption here is that for each person employed in a given area there will be local expenditure which will generate further employment. Those involved in this form of service industry will also spend money locally and will in turn generate jobs. Clearly it will take a certain number of jobs at the primary level to create one at the second level and a number of these to generate one at the third level. There will of course be regional and seasonal variations to apply to these 'multipliers'. The terms used in the report for the jobs created at the primary level are 'direct', second.. 'indirect', and third.. 'induced'.

In an attempt to provide multipliers of general use throughout Scotland the Scottish Tourist Board (STB) commissioned a survey in 1991/1992 which was carried out by the Surrey Research Group (STB, 1992). A full explanation of the methodology and selection of appropriate multipliers is provided elsewhere (Higgins, in press). However, in essence, the STB project provides a simple mechanism which can be used to calculate employment on the basis of the turnover of the facility. However, as a result of the co-operation of the Principals we know the number of staff employed by the Outdoor Centres in question. Hence only the multipliers for the indirect and induced employment are needed and these are drawn from the report (STB, 1992). These are:

Indirect Employment Multiplier	0.005
Induced Employment Multiplier	0.0044

Thus, if the turnover of the Centre is say £600,000 per annum, the jobs resulting will be:
Indirect 600,000 x 0.005 = 3
Induced 600,000 x 0.0044 = 2.7

These should be added to the total full time equivalent (fte) jobs which exist as a direct result of employment at the Centre to provide an estimate of the total employment impact.

The total full time equivalent (fte) employment resulting from these Centres is therefore in the region of 96 individuals. To emphasise the impact this form of provision has it may be worth considering the potential impact of the closure of all three Centres. The local Job Centre provided me with the present number of those registered as unemployed in the area, a total of 443. Therefore if the three centres were all closed and all staff sought re-employment in the area, the unemployment total would increase significantly (perhaps up to 20%).

It should be noted that this analysis estimates only the impact in a given area local to the Centre. There will of course be further income generated as a result of expenditure by those on residential courses. As this will generally be small this factor has not been considered here. However, the STB (1992) report does provide multipliers for such factors and indeed the impact on the wider Scottish economy.

One additional consideration is the long term benefits to a rural area arising as a result of the throughput of young people and adults through the Centres. The estimated number visiting this area, probably for the first time, because they were on a course at one of the Centres is in the region of 7000 to 8000 per annum (Centre Principals, 1997, pers comm). If even a small proportion of these develop an affection for the area and return later as an adult, perhaps on a day trip or holiday, the economic spin-off will be significant.

Outdoor Education - A Changing Pattern of Provision

In 1983 the Countryside Commission for Scotland published the results of a survey (conducted in 1982) reporting the existence of some 163 Residential Centres providing for outdoor activities of a recreational or educational kind. It was the view of the authors that the Centres represented 'a resource of considerable value to both the education and leisure markets'. In the conclusions section the authors presage the financial pressures which have led to a decline in provision in recent years, noting that 'in the public sector, outdoor education may be looked upon as one of the first extras to be cut, partly due to the high costs of transport and building maintenance'. They also make a number of suggestions of ways in which this challenge could be met and emphasise the importance of this form of educational provision (Countryside Commission for Scotland, 1983). Little published evidence exists of the changing pattern of provision within the Regions of Scotland other than that presented for Lothian Region, and to a lesser extent Strathclyde Region (Halls, 1997a,b).

In 1978 and 1979 Lothian Region and Dunfermline College, Edinburgh collaborated in a substantial research project to review the status of outdoor education within Lothian Region (Cheesmond, 1979). This was a forward looking report which also considered of ways in which Lothian Region might sustain and develop its provision. This review of provision can be summarised as follows and is compared with the current situation:

1978 - 1979 (Cheesmond, 1979)

- All Secondary Schools had some programme of outdoor education, either formal or informal.
- Almost all Secondary Schools (45) employed promoted staff responsible for outdoor education, and these were assisted by many others.
- There were a high number of other staff (estimated 500 to 600) who assisted in outdoor education provision, ranging from only one of two in some schools to over 50% in others. The majority of these were volunteers.
- Four Outdoor Education Centres were operational, each fully staffed.
- Several additional resource bases were provided.
- Primary School provision was very limited.

Current Provision - 1998 (Chalmers Smith, Chair of Lothian Association of Outdoor Education Staff, pers comm, 1998)

- Under Local Government Reorganisation legislation enacted in 1996, Lothian Region was split into 4 new Councils.
- Very few Secondary Schools have a programme of outdoor education, either formal or informal.
- Few Secondary Schools (6) employ any staff responsible for outdoor education, and several of these have only a part responsibility for the subject. The total number of school based staff (includes special schools) amounts to about 7 fte (full time equivalent).
- Relatively few other staff now assist in outdoor education provision.
- Two Outdoor Education Centres are operational, each with a much reduced staff complement.
- One additional resource base has been provided.
- Prior to Local Government Reorganisation a 'Disadvantaged Pupils Fund' existed to help with the cost of residential courses. Only 2 of the 4 new Councils provide this support.
- Primary School involvement is somewhat more extensive, but this is rarely reflected in staff appointments and designated responsibilities.

Outdoor education has often been perceived as expensive, but in times of less financial pressure the educational arguments and long term benefits have generally prevailed. In recent years a number of factors have led to a decline in formal outdoor education provision in the UK. The reasons for this are explored elsewhere (Higgins, in press) but it is clear that the financial arguments have taken Centre managers into new territory from which they have been ill prepared to argue.

Whilst there has been no recent survey of residential provision following these changes, there does appear to be a substantial reduction. As part of a survey conducted in 1998, Nicol (1999) established that there were now nine remaining local authority residential Outdoor Education Centres compared to fifteen identified by the Scottish Advisory Panel for Outdoor Education in 1966. The Adventure Activities Licensing Authority who inspect providers to ensure safe practice under the Young Persons' Safety (Activity Centres) Act, estimate that there are now around 50 Centres working within its scope (Activity Centres Inspectors, Newtonmore, pers comm, 1998).

Whilst it should be noted that outdoor education has not been the only casualty (music, art, drama and curriculum support have also suffered) the fact that much of the activity noted above is associated with Outdoor Centres in rural areas of Scotland adds economic significance. Clearly with shrinking resources there will be a reduction in this type of economic contribution. The natural expectation is that the commercial and charitable sectors will gain and bookings will still be made by schools and others. Whilst this may be the case in the short term, the long term prospects for continued enthusiasm in the schools may well reduce if the situation in the rest of Scotland mirrors that in the former Lothian Region where so few now have a member of staff with a responsibility for outdoor education.

The Use of the Outdoors for Intervention or Therapy

There are a number of organisations which use the outdoors and in particular outdoor activities for this purpose. Indeed it is the focus of a major branch of the 'sector' as important academic research, texts and conferences testify. Whilst there is a clear perception that physical activity in general, and outdoor adventure activities in particular are valuable, a recent survey of such programmes for those under probation supervision points to the lack of evidence that outdoor activities are of greater value than other demanding physical activity programmes (Taylor et al, 1999). However, such adventure activities, often used as part of an integrated programme, seem to be popular and successful and much of the work carried out in this field is justified on the basis of economic argument. In this section I have used two examples to illustrate the case.

One particular agency in Scotland (Agency D) deals with high tariff offenders who are on the point of being sentenced to a (further) term of imprisonment. By the time these individuals come to the Agency they will have cost society in the region of £50,000 each solely as a result of court costs, prison etc. (Agency Manager, 1997, pers comm). These costs accrue after only a short (2 to 3 year) offending career. The agency in question takes these individuals in small groups at high staff: student ratios for long courses (10 weeks duration). The argument made is that if a proportion of those coming through the programme do not re-offend, or even reduce their offending rate, the costs of the programme will be covered and wider society will benefit as a result of the reduced damage and losses as a result of thefts etc.

The programme in question has been running for 3 years now and the level of success so far is 50%. Some of these completed the course 3 years ago and have not re-offended since then, others have only recently completed the course. However, if a 50% success rate is sustained for an average of 3 years the total cost saving to the Criminal Justice System would be £ 2,500,000 (50 successes). This figure alone would justify the existence of the scheme which costs around £600,000 per annum to run, as it would represent a saving over 3 years of £ 2,500,000 - 1,800,000 = £700,000. This would be a direct saving and takes no account of the reduction in damage and loss of personal property.

This damage or loss factor is even more substantial. The average cost of each youth crime is approximately £2100 of which £1700 would be saved in the short term for each crime prevented (Prince's Trust, 1997). The average number of crimes committed by those referred to Agency D is 114 per individual. So by this stage he or she has cost the nation around 117 x £ 2100 in addition to the legal costs of £50,000. This generates the astonishing figure of around £295,000 per offender!

In addition to these benefits it is worth noting that the agency reviewed in this example is located in a rural area and is responsible for the maintenance of around 30 direct and indirect (fte) jobs in the area.

Support for such economic arguments comes from another agency, 'Fairbridge',which works with young people in this field and has bases throughout the UK. Whilst there are no figures available for Scotland there is evidence from the Probation Service in England that Fairbridge programmes (which are outdoor adventure based) have a notable success rate. According to Whitfield, the Chief Probation officer for Kent, ' 82% of young men released from young offender institutions are back in trouble within a year', whereas in a recent study those who have followed the Fairbridge / Special Activity Group the reoffending rate reduced to 41% over 5 years. Whitfield (1997) asserts that this 'represents spectacularly good value for the modest costs involved'.

Whilst no-one asserts that this type of intervention or therapy is a panacea it does seem appropriate for a proportion of those who offend. I hesitate to apply any multipliers regarding the total number of offenders, but by any standards the total impact seems substantial.

Concluding Comments

It should first be noted that this study is selective and that the primary value of the work may well be in making the general assertion that the economic contribution of outdoor recreation and outdoor education is substantial. Whilst it was also my intention to raise awareness of relevant methodologies, caution should be exercised in applying these or the results presented to other situations.

In conducting this study I have been struck by the simple observation that a high proportion of the activity noted above takes place in rural areas which often have few other forms of employment. This may seem obvious but the positive impact is worthy of note and has also been referred to by SNH (1998). The closure of an Outdoor Centre in an area with a diverse and substantial range of other industries may be insignificant. However, if the Centre is located in a small village which is not industrially robust the consequences may be substantial.

The majority of tourist income is seasonal in nature, however some of the outdoor activities which generate such a substantial proportion of the income of the Highland economy do so either throughout the year (eg mountaineering) or in the winter (eg skiing). The impact of such activities in maintaining year-round tourism jobs should not be underestimated as it reduces the seasonal nature (3 months - July to September) of the more traditional forms of tourist employment. Similarly a substantial proportion of the money spent by countryside users of this type is in 'low intensity' industry such as Bed and Breakfasts, garages, cafes and small hotels. The income therefore goes directly into the local economy (eg Hunt and Dearden, 1996).

I hesitate to make a guess as to the overall impact of the outdoor sector across the UK but the turnover must be of the order of £billions. It should be borne in mind that a proportion of this is income from abroad (in Scotland this figure for all forms of tourist income is 39%) (Scottish Tourist Board, 1997c). The proportion for outdoor related activities will not be so high but will still be significant due to the popularity of walking and other outdoor activities amongst visitors from overseas.

Some indication of the size of the sector may be gained from a recent survey conducted by SPRITO (Sport and Recreation Industry Training Organisation). Initial indications are that around 50,000 individuals are presently in paid employment in the UK in Outdoor Education Centres of one form or another. There are also a high number working in Centres on an unpaid basis and a high and increasing number of non-Centre based providers (Pilkington, 1998, pers comm). An overall estimate for the sector of around 80 - 100,000 does not seem unreasonable.

I am inclined to reflect on the financial beneficiaries of this expenditure. As well as rural communities equipment manufacturers come to mind. According to Mintel (1996) the annual scale of goods sales for 'sporting activities in the great outdoors' is substantial at £620 million (22% of all sports goods sales). There are undoubtedly a number of other individuals and organisations who are doing well from this sector (but who seem to put little back in). However, support for formal outdoor education provision is in decline and the economic contribution of the sector as a whole seems poorly recognised.

As we enter the millennium many relevant changes relevant to the the broader debate on land management are taking place in Scotland. National Parks are provided for in existing legislation, and Loch Lomond and the Trossachs will be the first to be established. Also traditional use of 'hunting estates' is changing (eg salmon stocks are now so low that the Scottish Executive announced a major consultation in December 1999, and one correspondent (Arthur, 1998) suggests that angling may be banned or limited) whilst recreational interest in the outdoors is increasing. A Scottish Parliament will have to form a view and policy on how our 'wild' land and countryside is managed. Social and economic dimensions must be considered in this process, as should the possible role that national provision of outdoor educational opportunities over the past 25 years may have played in the promotion of this substantial industry. To ensure well informed debate and decision making these issues are in need of urgent attention.

Acknowledgements

For reasons of confidentiality stated earlier I feel unable to name any of the Centre Principals and Agency Managers who provided budgets and other materials. I am, however, none the less grateful for the information and the generous spirit which characterised all these discussions. I have relied upon friendships and trust without which this article could not have been possible.

References

ARTHUR, C. (1998) *Salmon Fishing Likely to be Banned.* 10 July 1998, Scotsman Newspaper: Edinburgh, pp.1.

CHEESMOND, J. (1979) *Outdoor Education Research Project.* Lothian Region and Dunfermline College of Education: Edinburgh, 189p.

CROFTS, R. (1995) *The Environment - Who Cares?* SNH: Perth, 39p.

COUNTRYSIDE COMMISSION FOR SCOTLAND. (1983) *Outdoor Education Centres in Scotland: A report on the situation in 1982 and developments since 1970.* CCS: Perth, 21p.

HALLS, N. (1997a) *The Development of Outdoor Education in Strathclyde Region (Part 1).* Scottish Journal of Physical Education 25 (1), 36-38.

HALLS, N. (1997b) *The Development of Outdoor Education in Strathclyde Region (Part 2).* Scottish Journal of Physical Education 25 (2), 12-28.

HUNT, J. and DEARDEN, M. (1996) *Ross and Cromarty Upland Footpath Survey: Annual Patterns of Use and Spending.* SNH: Perth, 34p.

HIGGINS, P. (1997) *Why Educate Out of Doors? in A Guide for Outdoor Educators in Scotland* (edited by P. Higgins, C. Loynes, and N. Crowther), SNH: Perth and Adventure Education: Penrith, pp. 9-14.

HIGGINS, P. (in press) *The Contribution of Outdoor Recreation and Outdoor Education to the Economy of Scotland: Case Studies and Preliminary Findings.* Journal of Adventure Education and Outdoor Leadership, 18 (Spring, 2000).

HIGHLANDS AND ISLANDS ENTERPRISE. (1996) *The Economic Impacts of Hillwalking, Mountaineering and Associated Activities in the Highlands and Islands of Scotland.* Scottish Enterprise: Inverness, 22p.

MINTEL (1996) *Sporting Activities in the Great Outdoors.* Mintel International Group: London, 50p.

MNT CONSULTANTS (1994) *A Review of Environmental Education Within Outdoor Centres.* A report commissioned by Scottish Natural Heritage, Perth, February 1995, 63p.

NICOL, R (1999) *A Survey of Scottish Outdoor Centres.* Horizons (6) 14-16.

PRINCE'S TRUST (1997) *Young People and Crime in Scotland.* Prince's Trust: Glasgow, 64p.

SCOTTISH ENTERPRISE (1994) *A Study of Activity Holidays - Findings and Recommendations.* Scottish Enterprise: Glasgow, 23p.

SCOTTISH NATURAL HERITAGE (1998) *Jobs and the Natural Heritage: The Natural Heritage in Rural Development.* SNH: Perth, 23p.

SCOTTISH TOURIST BOARD (1995a) *British Tourism: Walking Holidays in Scotland, 1995.* Scottish Tourist Board: Edinburgh, 8p.

SCOTTISH TOURIST BOARD (1995b) *British Tourism: Water Sports Holidays in Scotland, 1995. Scottish* Tourist Board: Edinburgh, 5p.

SCOTTISH TOURIST BOARD (1997a) *Tourism in Scotland 1996.* Scottish Tourist Board: Edinburgh, 2p.

SCOTTISH TOURIST BOARD (1997b) *Scottish Tourist Board Annual Report, 1997.* Scottish Tourist Board: Edinburgh, 40p.

SCOTTISH TOURIST BOARD (1997c) *Scottish Tourism: Strategic Plan Progress Report.* Scottish Tourist Board: Edinburgh, 37p.

SCOTTISH TOURIST BOARD & SURREY RESEARCH GROUP (1992) *Scottish Tourism Multiplier Study (Volume 1).* Scottish Tourist Board: Edinburgh, 124p.

TAYLOR, P., CROW, I., IRVINE, D. and NICHOLS, G. (1999) *Demanding Physical Activity Programmes for Young Offenders Under Probation Supervision.* Home Office Information and Publications: London, 90p.

TUXWORTH, B. (1996) *Physical Activity, Health and Outdoor Education.* Proc. 4th Outdoor Forum. National Association for Outdoor Education: Cumbria, pp 11-14.

WHITFIELD, R. (1997) *Fairbridge - An Overview from a Probation Service Perspective.* Press release from the Chief Probation Officer, Kent, 1p.

WIGHTMAN, A. (1996) *Scotland's Mountains - An Agenda for Sustainable Development.* Scottish Wildlife and Countryside Link: Perth, 25p.

Correspondence Address

Dr Peter Higgins
Senior Lecturer (Outdoor and Environmental Education)
Moray House Institute
Faculty of Education
University of Edinburgh
Cramond Road North
Edinburgh
Scotland
EH4 6JD
Telephone: 0131 312 6001
Fax: 0130 312 6335
E-Mail: Pete.Higgins@ed.ac.uk.

University of Edinburgh
Moray House School of Education
Outdoor Education Department

We offer the following programmes:

Postgraduate Certificate in Outdoor Education

Postgraduate Certificate in Personal and Social Outdoor Education

Postgraduate Certificate in Environmental Education

Postgraduate Diploma in Outdoor Education

MSc in Outdoor Education

PhD by research

If you are interested in information on the courses of study we offer please take a look at our web page at
http://www.education.ed.ac.uk/outdoored/
You can also email us at:

Prof. Pete Higgins, pete.higgins@ed.ac.uk
Dr. Peter Allison, peter.allison@ed.ac.uk
Dr. Robbie Nicol, Robbie.nicol@ed.ac.uk
Dr. Simon Beames, simon.beames@ed.ac.uk

Further publications by the Outdoor Education faculty can be found in the Research section of the web page as well as in each faculty's biographical page under the heading publications.